Attachment B – Product Specifications

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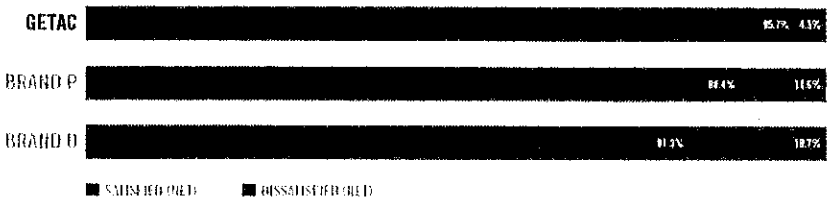

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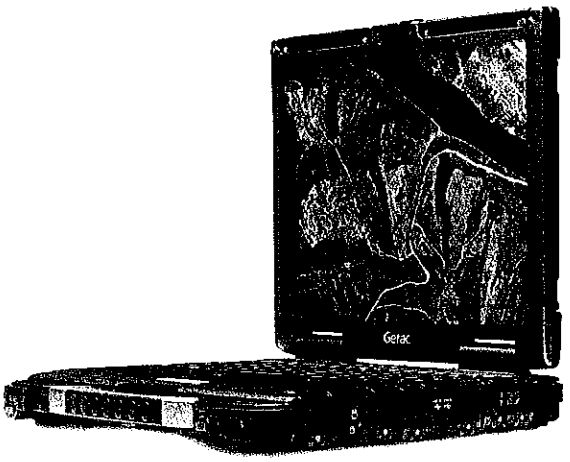
B300

ULTRA RUGGED 13" NOTEBOOK



1400 NITs QuadraClear® LED display option
Up to 30 hours of battery life with dual battery system
Intel® Core™ i7 2.6GHz processor
Optional 4G LTE mobile broadband
Fan-less design
MIL-STD 810G and IP65 certified
Backlight keyboard
Dual pass-thru RF antenna option
Customizable media bay
Industry's best 5 year bumper-to-bumper warranty

6th Gen Intel Core Processors.

With the latest Intel Core i5 or Intel Core i7 processors, the B300 rugged notebook was designed for speed and efficiency. Clocking in at up to 2.6GHz and with Turbo Boost speeds up to 3.4GHz, the B300 has the power needed for the most demanding tasks.

Multi-Level Security

B300 provides TPM 2.0 for powerful anti-tampering protection. Combined with fingerprint scanner, smart card reader, RFID, optional Absolute™ DDS and support for the latest Windows 10 security features, the B300 delivers industry-leading protection for your data and device.

Sunlight Readable Display.

The B300 features an advanced 1400 NITs QuadraClear display. Our QuadraClear solution combines proprietary technologies for both screen brightness and anti-reflectivity to reduce the sunlight's reflectivity and provide an effective contrast ratio seven times better than other displays.

Amazing Graphics.

Intel HD Graphics 520 delivers amazing graphics performance — ideal for mapping, video applications and multiple monitors. Integrated on a single chip and incorporating advanced 3D processing, the advanced GPU increases the B300 graphic performance over the previous generation.

Longer Battery Life.

One of the most efficient rugged notebooks ever made, the B300 offers a truly remarkable battery life of up to 15 hours on a single charge. With the dual battery configuration, the B300 has a battery life of up to 30 hours.

Industry's Best 5-Year Warranty.

The B300 ultra rugged notebook comes standard with the industry's best 5-Year bumper-to- bumper warranty. It's the peace-of-mind protection of knowing you're covered.

Learn more at **Getac.com**

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GETAC B300

Specifications

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Getac, Inc.
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Irvine, CA 92602

Ruggedness Ultra rugged
MIL-STD 810G and IP65 certified
MIL-STD 461F certified*
Optional ANSI/ISA 12.12.01
Optional salt fog compliant
Optional Night Vision

Operating System Windows® 10 Professional
(available Windows 7 Professional downgrade option)

CPU Intel® Core™ i7-6600U vPro™ 2.6GHz processor with Turbo Boost Technology up to 3.4GHz; 4MB Intel Smart Cache

Intel Core i7-6500U 2.5GHz processor with Turbo Boost Technology up to 3.1GHz; 4MB Intel Smart Cache

Intel Core i5-6300U vPro 2.4GHz processor with Turbo Boost Technology up to 3.0GHz; 3MB Intel Smart Cache

Intel Core i5-6200U 2.3GHz processor with Turbo Boost Technology up to 2.8GHz; 3MB Intel Smart Cache

Memory 4GB DDR4 expandable to 16GB

Storage SATA 500GB HDD
Optional SATA 1TB HDD;
Optional SATA OPAL 2.0 128GB / 256GB / 512GB / 1TB SSD

VGA Controller Intel HD Graphics 520**

Display 13.3" XGA (1024 x 768) TFT
700 NITs sunlight readable LCD
Optional 1400 NITs QuadraClear® sunlight readable display with touchscreen
Optional night vision (requires QuadraClear display)

Keyboard LED backlit membrane keyboard;
Optional LED backlit rubber keyboard

Media Bay Optional super multi DVD and integrated smart card reader;
Optional 2nd battery (10.8V, 8700mAh);
Optional 2nd storage: 500GB/1TB HDD, or OPAL 2.0 128GB / 256GB / 512GB / 1TB SSD

Expansion Slots SD card reader; PCMCIA Type II + ExpressCard/54

Communications 10/100/1000 base-T Ethernet; Intel Dual Band Wireless-AC 8260, 802.11ac; Bluetooth (v4.2);
Optional dedicated GPS; Optional 4G LTE multi-carrier mobile broadband; XLTE Ready[2]

Security Intel vPro™ Technology (per CPU options); TPM 2.0;
Cable lock slot; Fingerprint reader;
Optional smart card reader (only with super multi DVD); NIST BIOS compliant
Optional Absolute DDS software

Pointing Device Touchpad: Glide touchpad with scroll bar;
Optional Touchscreen: Pressure sensitive touchscreen

Power AC Adapter (90W, 100-240VAC, 50/60Hz); Li-Ion battery (10.8V, 8700mAh); Optional Media Bay 2nd battery (10.8V, 8700mAh)

Dimensions and Weight 11.9" x 10.35" x 2.36" (303.5 x 263 x 60mm)
7.7lbs (3.5kg)[3]

Temperature Operating Temp: -20° F to 140° F / -29°C to 60°C;
Storage Temp: -40°F to 160°F / -40°C to 71°C;
Humidity: 95% RH, non-condensing

I/O Interfaces DC in x 1;
USB 3.0 (9-pin) x 3;
Network (RJ-45) x 1;
Microphone (Mini-jack) x 1;
Audio output (Mini-jack) x 1;
HDMI x 1;
Serial port (RS-232: 9-pin, D-sub) x 2;
VGA port (15-pin, D-sub) x 1;
Docking connector (80-pin) x 1;
Optional RF antenna pass-through for GPS and WWAN;
Optional external GPS antenna port (only with optional GPS) x 1

Warranty 5 Year bumper-to-bumper warranty standard[4]

Specification subject to change without notice

[1] Computers configured with a 32-bit operating system can address up to 3GB of system memory. Only computers configured with a 64-bit operating system can address 4 GB or more of system memory
[2] Data plan required. Cellular data is available in the US on Verizon Wireless and AT&T networks. LTE is available in select markets. Check with your carrier for details. 4G LTE configuration must be ordered at time of purchase
* Requires MIL-STD 461F 90W AC Adapter sold separately
** Shared memory size may vary based on operating system and system configuration
[3] For storage: 1GB = 1 billion bytes; actual formatted capacity less
[3] Weight vary by configuration and manufacturing process
[4] 5 year bumper-to-bumper warranty standard. For warranty terms and conditions visit www.getac.com

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F110

FULLY RUGGED 11.6" TABLET

Large 11.6" IPS LumiBond® 2.0 sunlight display
6th generation Intel® Core™ processor
Intel HD Graphics 520
Dual hot-swappable battery design
Optional integrated 4G LTE broadband wireless
802.11ac next generation WiFi
Optional 1D/2D imager barcode reader
MIL-STD 810G and IP65 certified
Industry-leading bumper-to-bumper warranty

6th Gen Intel Core Processor.

With the latest Intel Core i5 or Intel Core i7 processor, the F110 rugged tablet was designed for speed and efficiency. Clocking in at up to 2.6GHz and with Turbo Boost speeds up to 3.4GHz, the F110 has the power needed for the most demanding tasks.

Multi-Level Security

F110 provides TPM 2.0 for powerful anti-tampering protection. Combined with fingerprint scanner, smart card reader, RFID, optional Absolute™ DDS and support for the latest Windows 10 security features, the F110 delivers industry-leading protection for your data and device.

Large 11.6" IPS Display.

The F110 features a large 11.6" IPS display that utilizes our revolutionary LumiBond 2.0 technology to achieve a display that is more readable, and offers better contrast and more crisp colors than any other rugged laptop display. The 11.6" widescreen display is ideally suited providing plenty of real estate to run Windows and your apps on.

Dual Hot-Swappable Batteries.

The F110's unique, hot-swappable dual-battery design allows for potentially infinite, uninterrupted battery life. This enables you to remove one of the two rechargeable batteries and replace it with a fresh battery without ever shutting down apps or your Windows OS.

Designed to Capture.

With a built-in front FHD webcam, an optional rear 8MP auto focus camera and an optional top 1D/2D imager bar code reader, the F110 is the ideal solution for capturing data.

Bumper-to-Bumper Warranty.

Accidents happen. Only Getac offers bumper-to-bumper coverage standard on every F110 rugged tablet.

Learn more at **Getac.com**

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GETAC F110

Specifications

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Ruggedness	MIL-STD 810G and IP65 certified MIL-STD 461F ready[2] Optional ANSI/ISA 12.12.01 Vibration & drop resistant
Operating System	Windows® 10 Professional (available Windows 7 Professional downgrade option)
CPU	Intel Core i7-6600U vPro™ 2.6GHz processor with Turbo Boost Technology up to 3.4GHz; 4MB Intel Smart Cache Intel Core i7-6500U 2.5GHz processor with Turbo Boost Technology up to 3.1GHz 4MB Intel Smart Cache Intel Core i5-6300U vPro 2.4GHz processor with Turbo Boost Technology up to 3.0GHz 3MB Intel Smart Cache Intel Core i5-6200U 2.3GHz processor with Turbo Boost Technology up to 2.8GHz 3MB Intel Smart Cache
Memory	4GB DDR4 expandable to 16GB[3]
Storage	Solid State OPAL 2.0 128GB / 256GB / 512GB / 1TB[7]
VGA Controller	Intel HD Graphics 520
Display	11.6" IPS HD (1366x768) 800 NITs LumiBond® 2.0 sunlight readable display with multi-touch technology Optional digitizer
Expansion Slot Options[4]	Optional 1D/2D imager barcode reader; or RS232 Port; or 10/100/1000 base-T Ethernet; or MicroSD slot; or USB 2.0 port
Add-on Modules	Optional magnetic stripe card reader
Security	Intel vPro™ Technology (per CPU options) TPM 2.0 Cable lock slot NIST BIOS compliant Optional 13.56MHz RFID/NFC Optional fingerprint reader Optional smart card reader Optional Absolute™ DDS software
Communications	Intel Dual Band Wireless-AC 8260, 802.11ac Bluetooth (v4.2) Optional dedicated GPS Optional 10/100/1000 base-T Ethernet (occupies expansion slot) Optional 4G LTE multi-carrier mobile broadband; XLTE Ready[1]
Keyboard	Six tablet buttons: Power, Windows, Programmable, Camera Capture/ Barcode Reader Trigger, Volume Up & Volume Down
Webcam	Optional FHD webcam x 1 Optional 8MP auto focus camera
Power	AC Adapter (65W, 100-240VAC, 50/60Hz) Hot swappable Dual Li-Ion battery (2160mAH) x 2 (up to 12 hours of battery life)[5]
Dimensions and Weight	12.4" x 8.15" x 0.96" (314 x 207 x 24.5mm) 3.08lbs (1.39kg)[10]
Temperature	Operating Temp: -5.8° F to 140° F / -21°C to 60°C Storage Temp: -40°F to 160°F / -40°C to 71°C Humidity: 95% RH, non-condensing
I/O Interfaces	DC in x 1 USB 3.0 x 1 Docking port x 1 Headphone out/Mic-in Combo x 1 HDMI x 1 Optional RF antenna pass-through for GPS, WLAN and WWAN
Warranty	3 Year bumper-to-bumper warranty standard[11]

Specification subject to change without notice
[1] Data plan required. Cellular data is available in the US on Verizon Wireless and AT&T networks. LTE is available in select markets. Check with your carrier for details. 4G LTE configuration must be ordered at time of purchase
[2] Requires MIL-STD 461F 90W AC Adapter sold separately
[3] Computers configured with a 32 bit operating system can address up to 3GB of system memory. Only computers configured with a 64-bit operating system can address 4 GB or more of system memory
[4] Expansion slot factory installed and limited to one option. Subject to minimum purchase requirements
[5] Battery life testing conducted under BatteryMark 4.0.1. Battery performance will vary based on software applications, wireless settings, power management settings, LCD brightness, customized modules and environmental conditions. As with all batteries, maximum capacity decreases with time and use and may eventually need to be replaced by a Getac service provider. Battery life and charge cycles vary by use and settings
[7] For storage: 1GB = 1 billion bytes, actual formatted capacity less
[10] Weight varies by configuration and manufacturing process
[11] 3 year bumper-to-bumper limited warranty standard. For warranty terms and conditions visit www.getac.com

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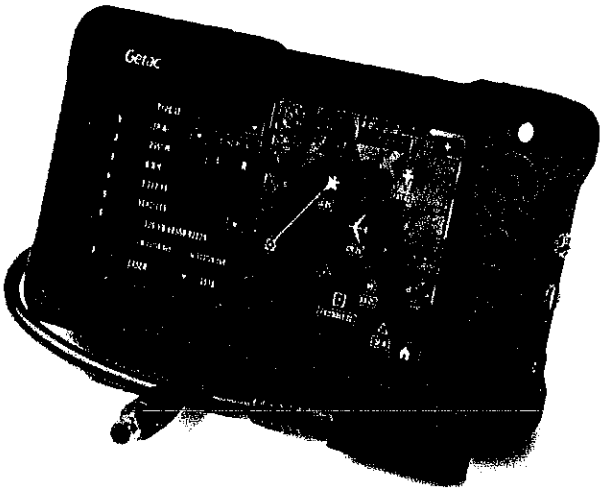
MX50

WEARABLE TACTICAL TABLET



- 5.7" LumiBond® display with sunlight readable technology
- Android 5.1 OS
- MIL-STD 810G and IP67 certified
- Dedicated GPS
- 8MP auto-focus camera
- HD web camera
- MIL-STD 461G certified
- NIAP CSfC certified

Secure Tactical Solution

Getac has collaborated with industry-leading partners to develop an ideal solution for tactical operators, including power, communications, device management and NSA-approved file security.

Field Rugged & Reliable

The MX50 was designed from the inside out to be compact, light and tough. It is waterproof and specifically engineered to survive drops, impact, rain, dirt and more.

Designed for Defense

MX50's military ecosystem-friendly design, which features a customizable military connector and a MOLLE chest mount, integrates easily with existing systems and applications.

Mission Critical Secure

MX50 is designed to help protect against known and emerging security threats across the spectrum of attack vectors.

Long Product Life Cycle

MX50 is purpose-built and supported for long life cycles vs. a consumer-grade device, retrofitted for commercial applications.

Bumper-to-Bumper Warranty

Accidents happen. Only Getac offers bumper-to-bumper coverage standard on every MX50 rugged tablet.

Learn more at **Getac.com**

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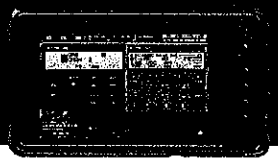
GETAC MX50

Specifications



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Ruggedness	MIL-STD-810G and IP67 certified Vibration resistant Drop resistant (26 drops from 5ft / 1.52m) MIL-STD 461G certified
Operating System	Android 5.1
Microprocessor	Intel® Atom™ x5-Z8350 Processor 1.44GHz, burst up to 1.92 GHz 2MB Cache
Memory	2GB LPDDR3
Storage*	64GB / 128GB eMMc
Display	5.7" IPS TFT LCD HD (1280 x 720) 480 nits LumiBond® display with sunlight readable technology Glove-friendly capacitive touchscreen
Communications	WiFi 802.11 a/b/g/n Bluetooth (v4.0) Dedicated GPS
Cameras	HD Web camera 8M pixels auto focus camera
Keyboard	10 buttons (Power, Restart, Screen Brightness, Directional Keypad, Back, Home, Menu, Function Key, Programmable Key 1, Programmable Key 2)
Expansion Slots	MicroSD x1
Security Features	NIAP CSfC certified

Power	Li-Ion battery (3.7V, 4200mAh) Optional MIL-STD 461G AC adapter**
Dimensions and Weight	7.40" x 4.13" x 0.71" (188 x 105 x 18mm) 0.88 lbs (400g)†
Temperature	Operating: -6F to 140F / -21C to 60C Storage: -40F to 160F / -40C to 71C Humidity: 95% RH , non-condensing
I/O Interfaces	Micro USB OTG x 1 Headphone out/Mic-in Combo x 1 Optional Rugged GlenAir Connector x 1, or Optional Rugged AB Connector x 1
Software	Getac File Manager GPS Utility Getac Utilities Google GMS
Warranty	3 Year bumper-to-bumper warranty standard††

Accessories	
MX50 MIL-STD-461G AC Adapter (Glen air connector) (24W) w/ US Power Cord	GAAGU1
MX50 SnapBack Battery (17WH)	GBS1X1
MX50 SnapBack Battery (17WH) with Extended Tactical Vest Mount For SnapBack Battery)	GBS1X2
MX50 SnapBack Battery Charger (5-Bay) (w/ 90W AC Adapter)	GC5CU1
MX50 Tactical Vest Mount (For MX50 w/o SnapBack Battery)	GCCMX1
MX50 Extended Tactical Vest Mount (For SnapBack Battery)	GCCMX2
MX50 Multi-Bay Dock (10-Bay) (w/ 90W AC Adapter)	GDMDU1
MX50 Hard Tip Stylus	GMPSXH

Specification subject to change without notice
* For storage, 1GB = 1 billion bytes, actual formatted capacity less
** Battery performance will vary based on software applications, wireless settings, power management settings, LCD brightness, customized modules and environmental conditions. As with all batteries, maximum capacity decreases with time and use and may eventually need to be replaced by a Getac service provider. Battery life and charge cycles vary by use and settings
† Weight varies by configuration and manufacturing process
†† 3 year bumper-to-bumper warranty standard. For warranty terms and conditions visit www.getac.com

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RX10

FULLY RUGGED 10.1" TABLET

Large 10.1" IPS FHD LumiBond® 2.0 sunlight display
Intel® Core™ M processor
802.11ac next generation WiFi
Optional 1D/2D imager barcode reader
Intel HD graphics 5300
MIL-STD 810G and IP65 certified
Industry-leading bumper-to-bumper warranty

Intel Core M Processor.

The RX10 is powered by Intel's Core M Processor, allowing for unparalleled mobility combined with functionality. You can work confidently in or out of the office with the convenience of a tablet and the power of a notebook.

Designed for Mobility.

Size matters when it comes to mobility. That's why we built the RX10 with a 10.1 inch display at only 2.65lbs and a razor thin 0.74in. It's not only lightweight but also easy to carry with the integrated ergonomic handle and embedded barcode scanner for patient information.

Expanded Functionality.

We designed the RX10 for increased functionality with our unique SnapBack add-ons. Integrated as an extension, you can add on a detachable keyboard, SmartCard reader, kick stand / hand strap based on your requirements. They easily snap right on or off — no tools necessary.

Built to Survive™.

The RX10 was engineered to protect the tablet against 4 foot drops, shocks, spills, vibration, dust, liquid and is even able to be operated in temperatures from -5.8°F to 131°F. The RX10 has been independently tested and certified to MIL-STD 810G and IP65 standards.

Large 10.1" IPS Display.

The RX10 features a large 10.1" IPS FHD display utilizes our revolutionary LumiBond 2.0 technology to achieve a display that is more readable, and offers better contrast and more crisp colors than other rugged tablet displays.

Bumper-to-Bumper Warranty.

Accidents happen. Only Getac offers bumper-to-bumper coverage standard on every RX10 rugged tablet

Learn more at **Getac.com**

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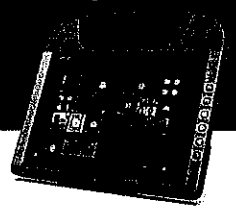
GETAC RX10

Specifications



Getac

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Ruggedness	MIL-STD 810G and IP65 certified Optional ANSI/ISA 12.12.01 Vibration & drop resistant
Operating System	Windows® 10 Professional (available Windows 7 Professional downgrade option)
CPU	Intel® Core™ M-5Y10c 0.8GHz processor with Turbo Boost Technology up to 2.0GHz 4MB Intel Smart Cache Intel Core M-5Y71 vPro™ 1.2GHz processor with Turbo Boost Technology up to 2.9GHz 4MB Intel Smart Cache
Memory	4GB LPDDR3 expandable to 8GB[1]
Storage	OPAL 2.0 128GB / 256GB SSD[2]
VGA Controller	Intel HD Graphics 5300
Display	10.1" IPS TFT LCD FHD (1920x1200) 800 NITs LumiBond® 2.0 sunlight readable LED display with multi-touch technology Optional digitizer
Expansion Slot	Optional 1D/2D imager barcode reader
SnapBack Add-on Options	Hand Strap & Kick Stand Hand Strap, Kick Stand & Smart Card Reader Hand Strap, Kick Stand, Smart Card Reader and Detachable Keyboard
Security	TPM 2.0 Optional Intel® vPro™ Technology (per CPU option) Optional fingerprint scanner or RFID reader Optional Absolute™ DDS software
Communications	Intel Dual Band Wireless-AC 7265, 802.11ac Bluetooth (v4.0) Optional dedicated GPS Optional 4G LTE mobile broadband; XLTE Ready[3]
Webcam	HD webcam x 1 8MP auto focus rear camera
Power	AC Adapter (65W, 100-240VAC, 50/60Hz) Li-Ion battery (15.2V, 2160mAH) LifeSupport™ hot-swappable battery technology
Dimensions and Weight	11" x 9.65" x 0.74" (280 x 245 x 18.8mm) 2.65lbs (1.2kg)[4]
Temperature	Operating Temp: -5.8°F to 131°F / -21°C to 55°C Storage Temp: -40°F to 160°F / -40°C to 71°C Humidity: 95% RH, non-condensing
I/O Interfaces	DC in x 1 USB 3.0 (9-pin) x 1 USB 2.0 (4-pin) x 1 Docking port (16-pin) x 1 Headphone out/Mic-in Combo x 1 Micro HDMI x 1 Optional RF antenna pass-through for GPS, WLAN and WWAN
Warranty	3 Year bumper-to-bumper warranty standard[5]

Specification subject to change without notice
[1] Computers configured with a 32-bit operating system can address up to 3GB of system memory. Only computers configured with a 64-bit operating system can address 4 GB or more of system memory
[2] For storage: 1GB = 1 billion bytes, actual formatted capacity less
[3] Data plan required. Cellular data is available in the US on Verizon Wireless and AT&T networks. LTE is available in select markets. Check with your carrier for details. 4G LTE configuration must be ordered at time of purchase
[4] Weight varies by configuration and manufacturing process
[5] 3-year bumper-to-bumper limited warranty standard. For warranty terms and conditions visit www.getac.com

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S410

SEMI RUGGED 14" LAPTOP

14 inch HD or FHD display
Optional Intel® Core™ i7 2.6GHz processor
Optional 1000 NIT Lumibond 2.0™ sunlight readable touchscreen
MIL-STD 810G and IP52 certified[1]
Optional NVIDIA® GeForce® 4GB graphics card
Certified to withstand a 3 foot drop
Certified for -5.8°F low temperature

Speed for Multi-Tasking

Intel Skylake Core i7, i5, & i3 processors give the S410 best-in-class performance for data-intensive multi-tasking. This latest generation offers faster boot up and faster performance while using less power.

Purpose Built Configuration

The S410's no-compromise set of integrated features, configurable options and complete accessory ecosystem provide you with a truly "purpose-built" tool for more successful implementations. This includes second battery, second LAN, PowerShare USB 2.0, discrete GPS and vehicle mounting capability.

Multi-Level Security

S410 was the first to use Intel's TPM 2.0 for powerful anti-tampering protection. Combined with fingerprint scanner, smart card reader, optional Absolute™ DDS and additional Microsoft security features, the S410 offers extensive protection for your data and device.

Sunlight Readable Display.

The S410 semi-rugged laptop offers an advanced, Lumibond 2.0 multi-touch display with up to 1000 NITs of brightness. By bonding Gorilla® Glass with the touch panel and LCD, we've created a single pane with amazing durability, readability and responsiveness.

Amazing Graphics.

The S410 offers FHD display along with an optional NVIDIA® GeForce® GTX 950M 4GB graphics card. Combined, these features produce extreme clarity and contrast for amazing graphics performance.

Extreme Temperature Range

Being able to work in any environment is critical, even freezing cold or extreme heat. The S410 is certified to perform when you need it, even in temperatures as cold as -5.8°F and as hot as 140°F.

Learn more at **Getac.com**

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GETAC S410

Specifications

Getac

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Getac, Inc.
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Irvine, CA 92602

Ruggedness
Semi-Rugged
MIL-STD 810G certified (vibration, temperature, shock, altitude and humidity)
IP52 certified
3 foot drop - 26 faces (non-operational)
Covered ports

Operating System
Windows® 10 Professional
(available Windows 7 Professional downgrade option)

CPU
Intel® Core™ i7-6600U vPro™ 2.6GHz processor with Turbo Boost Technology up to 3.4GHz
4MB Intel® Smart Cache

Intel Core i7-6500U 2.5GHz processor with Turbo Boost Technology up to 3.1GHz; 4MB Intel Smart Cache

Intel Core i5-6300U vPro 2.4GHz processor with Turbo Boost Technology up to 3.0GHz
3MB Intel® Smart Cache

Intel Core i5-6200U 2.3GHz processor with Turbo Boost Technology up to 2.8GHz
3MB Intel® Smart Cache

Intel Core i3-6100U 2.3GHz processor
3MB Intel® Smart Cache

Memory
4GB DDR3L expandable to 16GB

Storage
SATA 500GB HDD†; Optional SATA 1TB HDD; Optional SATA OPAL 2.0 128GB / 256GB / 512GB / 1TB SSD
Optional 2nd Storage (onboard) 128GB OPAL 2.0 SSD

VGA Controller
Intel HD Graphics 520
Optional NVIDIA® GeForce® GTX 950M 4GB discrete graphics

Display
14" HD widescreen (1366 x 768) TFT LCD
Optional 1000 NITS LumiBond® sunlight readable display with multi-touch technology

Optional Full HD 14" IPS TFT LCD (1920 x 1080)
800 NITs LumiBond sunlight readable display with multi-touch technology

Webcam
Optional integrated FHD webcam (1920x1080)

Keyboard
Splash-resistant membrane keyboard
Optional splash-resistant LED backlit keyboard

Customizable Bay (One option only)
Optional PCMCIA Type II
Optional ExpressCard34/54
Optional DVD super multi drive
Optional 2nd battery

Expansion Slot
SD Card Reader
Optional smart card reader

Security
Intel vPro™ Technology (per CPU options)
TPM 2.0
Cable lock slot
Optional smart card reader
Optional contactless Smart card reader (RFID)
NIST BIOS compliant
Optional fingerprint reader
Optional Absolute™ DDS software

Communications
10/100/1000 base-T Ethernet
Intel Dual Band Wireless-AC 8260, 802.11ac
Bluetooth (v4.2)
Optional dedicated GPS
Optional 4G Gobi LTE mobile broadband
XLTE Ready

Power
AC adapter (65W, 100-240VAC, 50/60Hz or 120W, 100-240VAC, 50/60Hz with NVIDIA configs.)
Li-Ion battery (11.1V, 4200mAh)
Optional Media Bay 2nd battery (11.1V, 4200mAh)
Optional bridge battery

Dimensions and Weight
13.8" x 11.5" x 1.4" (350 x 293 x 34.9 mm)††
4.9 lbs (2.2kg)

Temperature
Operating: -5.8°F to 140°F / -21°C to 60°C /
Storage: -60°F to 160°F / -51°C to 71°C
Humidity: 95% RH , non-condensing

I/O Interfaces
DC in x 1
USB 3.0 (9-pin) x 3
USB 2.0 (4-pin) x 1
Network (RJ-45) x 1
Headphone-out / microphone-in combo x 1
HDMI x 1
Optional Serial port (RS-232: 9-pin, D-sub) x 1
Optional VGA port (15-pin, D-sub) x 1
Docking connector (16-pin) x 1
Optional RF antenna pass-through for GPS, WLAN and WWAN
Optional rugged USB 2.0, rugged LAN, PowerShare USB 2.0, or LAN (RJ-45) x 1

Warranty
3 Year limited warranty standard‡*

Standard and optional features vary depending on purchased configuration. Specifications subject to change without notice.
* MIL-STD 810G certified for vibration, temperature, shock, altitude, humidity and 3 ft drop
- Data plan required. Cellular data is available in the US on Verizon Wireless and AT&T networks. LTE is available in select markets. Check with your carrier for details. 4G LTE configuration must be ordered at time of purchase.
Computers configured with a 32-bit operating system can address up to 3GB of system memory. Only computers configured with a 64-bit operating system can address 4 GB or more of system memory.
† For storage: 1GB = 1 billion bytes; actual formatted capacity less.
†† Dimensions and Weight vary by configuration and manufacturing process.
‡ 3 year limited warranty standard. For warranty terms and conditions visit www.getac.com

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V1M01Y17

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T800

FULLY RUGGED 8.1" TABLET

- Large 8.1" IPS LumiBond® 2.0 sunlight readable display
- Intel® Atom Processor x7-Z8750 1.6GHz processor
- MIL-STD 810G and IP65 certified
- 802.11ac next generation WiFi
- Unique SnapBack add-ons
- Optional FHD camera / rear 8MP auto focus camera
- Industry-leading bumper-to-bumper warranty
- Optional integrated 4G LTE broadband wireless[1]

Large 8.1" IPS Display.

The T800 features a large 8.1" IPS display that utilizes our revolutionary LumiBond 2.0 technology to achieve a display that is more readable, and offers better contrast and more crisp colors than any other rugged tablet display. By bonding the display glass with the touch panel and LCD, we've created a single pane that is both more durable and readable.

Lasting Power

The T800 fully rugged tablet delivers up to 10 hours of battery life on a single charge. Additionally, you can have endless SnapBack battery add-ons (each providing an additional 10 hours) at the ready for potentially infinite battery life. This allows you to keep working without ever shutting down your apps or the Windows OS.

SnapBack Add-ons.

We designed the T800 for expandability with our unique SnapBack add-ons. Integrated as an extension to the T800, you can add an extended battery or 2-in-1 SmartCard and RFID reader, or 2-in-1 SmartCard and Magnetic Stripe reader. They easily snap right on or off, no tools necessary.

Powerful, Yet Efficient

Inside the T800, we packed an incredible amount of power and technology. Built with the latest Quad-core Intel® Atom™ x7-Z8750 1.6 GHz processor, the T800 provides all of the performance you need to get things done, with no compromise to battery life.

Vehicle Ready.

For vehicle deployments, the T800 can be configured with triple pass-through antenna ports allowing you to simultaneously connect high-gain GPS, WWAN and WLAN roof mounted antennas.

Bumper-to-Bumper Warranty.

Accidents happen. Only Getac offers bumper-to-bumper coverage standard on every T800 rugged tablet.

Learn more at **Getac.com**

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GETAC T800

Specifications

Getac

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949.681.2900

Getac, Inc.
400 Exchange, Ste 100
Irvine, CA 92602

Ruggedness	MIL-STD 810G and IP65 certified Vibration, drop, temperature & humidity resistant Optional ANSI/ISA 12.12.01
Operating System	Windows® 10 Professional
CPU	Intel® Atom Processor x7-Z8750 1.6GHz (up to 2.56GHz); 2MB Cache
Memory	4GB LPDDR3 expandable to 8GB[2]
Storage	eMMC 64GB / 128GB[1]
VGA Controller	Intel HD Graphics
Display	8.1" IPS TFT LCD HD (1280 x 800) 600 NITs LumiBond® 2.0 sunlight readable display with multi-touch technology; Optional digitizer
Expansion Slot[3]	Optional 1D/2D imager barcode reader; or RS232 Port; or 10/100/1000 base-T Ethernet; or MicroSD
SnapBack Add-ons	Optional 2nd battery (2100mAh); or SmartCard & UHF RFID reader; or SmartCard & contactless RFID/NFC reader; or SmartCard & Magnetic Stripe Card reader
Security	TPM 2.0; NIST BIOS compliant; Optional SnapBack SmartCard Add-ons Optional Absolute™ DDS software
Communications	Optional 10/100/1000 base-T Ethernet (occupies expansion slot), Intel Dual Band Wireless-AC 7265, 802.11ac, Bluetooth (v4.0); Optional dedicated GPS; Optional 4G LTE multi-carrier mobile broadband; XLTE Ready[1]
Keyboard	Six tablet buttons: Power, Windows, Programmable, Camera Capture/ Barcode Reader Trigger, Volume Up & Volume Down
Camera	Optional FHD webcam x 1, Optional 8MP auto focus camera
Power	AC Adapter (65W, 100-240VAC, 50/60Hz); Li-Ion battery (7.4V, 4200mAH); Optional SnapBack 2nd battery (14.4V, 2100mAh)
Dimensions and Weight	8.93" x 5.94" x 0.94" (227 x 151 x 24mm) 1.94lbs (0.88kg)[4]
Temperature	Operating Temp: -5.8° F to 122° F / -21°C to 50°C; Storage Temp: -40°F to 160°F / -40°C to 71°C; Humidity: 95% RH, non-condensing
I/O Interfaces	DC in x 1; USB 3.0 x 1; Docking port x 1; Headphone out/Mic-in Combo x 1; Micro HDMI x 1; Optional RF antenna pass-through for GPS, WLAN and WWAN
Warranty	3 Year bumper-to-bumper warranty standard[5]

Specification subject to change without notice.
[1]Data plan required. Cellular data is available in the US on Verizon Wireless and AT&T networks. LTE is available in select markets. Check with your carrier for details. 4G LTE configuration must be ordered at time of purchase.
[2]Computers configured with a 32-bit operating system can address up to 3GB of system memory. Only computers configured with a 64 bit operating system can address 4 GB or more of system memory.
[3]Expansion slot factory installed and limited to one option. Subject to minimum purchase requirements.
[4]For storage, 1GB = 1 billion bytes; actual formatted capacity less.
[4]Weight varies by configuration and manufacturing process.
[5] 3 year bumper-to-bumper limited warranty standard. For warranty terms and conditions visit www.getac.com

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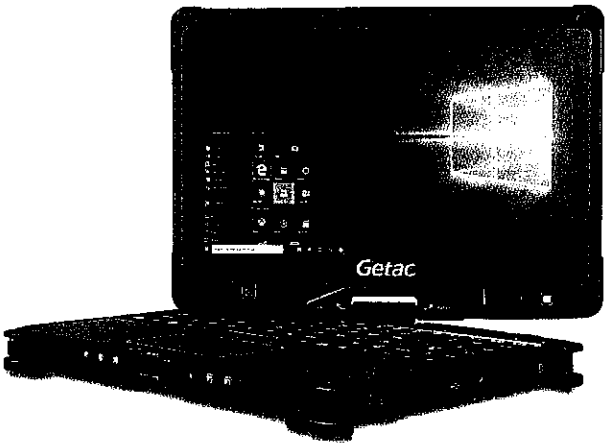
V110

FULLY RUGGED 11.6" CONVERTIBLE

Large 11.6" IPS LumiBond® 2.0 sunlight display
6th generation Intel® Core™ processor
Dual hot-swappable battery design
Intel HD graphics 520
Full-size 88 key backlit keyboard
Optional integrated 4G LTE broadband wireless
802.11ac next generation WiFi
MIL-STD 810G and IP65 certified
Industry-leading bumper-to-bumper warranty



6th Gen Intel Core Processor.

With the latest Intel Core i5 or Intel Core i7 processor, the V110 rugged convertible was designed for speed and efficiency. Clocking in at up to 2.6GHz and with Turbo Boost speeds up to 3.4GHz, the V110 has the power needed for the most demanding tasks.

Multi-Level Security

V110 provides TPM 2.0 for powerful anti-tampering protection. Combined with fingerprint scanner, smart card reader, RFID, optional Absolute™ DDS and support for the latest Windows 10 security features, the F110 delivers industry-leading protection for your data and device.

Large 11.6" IPS Display.

The V110 features a large 11.6" IPS display that utilizes our revolutionary LumiBond 2.0 technology to achieve a display that is more readable, and offers better contrast and more crisp colors than any other rugged laptop display. The 11.6" widescreen display is ideally suited providing plenty of real estate to run Windows and your apps on.

Dual Hot-Swappable Batteries.

The V110's unique, hot-swappable dual-battery design allows for potentially infinite, uninterrupted battery life. This enables you to remove one of the two rechargeable batteries and replace it with a fresh battery without ever shutting down apps or your Windows OS.

Full-Size 88 Key Backlit Keyboard.

Unlike our competitors' products that have small keyboards with small keys, the V110 features a full-sized 88-key waterproof membrane backlit keyboard with standard-sized keys. The V110 lets you type the way you're used to typing.

Bumper-to-Bumper Warranty.

Accidents happen. Only Getac offers bumper-to-bumper coverage standard on every V110 rugged convertible.

Learn more at **Getac.com**

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GETAC V110

Specifications

Getac

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Getac, Inc.
400 Exchange, Ste 100
Irvine, CA 92602

Ruggedness
MIL-STD 810G and IP65 certified
MIL-STD 461F ready[2]
Optional ANSI/ISA 12.12.01
Vibration, drop, temperature & humidity resistant
Optional salt fog feature

Operating System
Windows® 10 Professional
(available Windows 7 Professional downgrade option)

CPU
Intel® Core™ i7-6600U vPro™ 2.6GHz processor with Turbo Boost Technology up to 3.4GHz
4MB Intel Smart Cache

Intel Core i7-6500U 2.5GHz processor with Turbo Boost Technology up to 3.1GHz
4MB Intel Smart Cache

Intel Core i5-6300U vPro™ 2.4GHz processor with Turbo Boost Technology up to 3.0GHz
3MB Intel Smart Cache

Intel Core i5-6200U 2.3GHz processor with Turbo Boost Technology up to 2.8GHz
3MB Intel Smart Cache

Memory
4GB DDR4 expandable to 16GB

Storage
Solid State OPAL 2.0 128GB / 256GB / 512GB / 1TB[3]

VGA Controller
Intel HD Graphics 520

Display
11.6" IPS HD (1366x768) 800 NITs
LumiBond® 2.0 sunlight readable display with multi-touch technology
Optional digitizer

Keyboard
Waterproof backlit mechanical membrane keyboard
Optional waterproof rubber keyboard

Expansion
Smart card reader x 1
Express Card 54 x 1

Communications
Intel Dual Band Wireless-AC 8260, 802.11ac
10/100/1000 base-T Ethernet
Bluetooth (v4.2)
Optional discrete GPS
Optional 4G LTE multi-carrier mobile broadband; XLTE Ready[1]

Security
Intel vPro™ Technology (per CPU options)
TPM 2.0
Cable lock slot
NIST BIOS compliant
Optional 13.56MHz RFID/NFC contactless smart card reader
Optional fingerprint reader
Optional Absolute™ DDS software

Pointing Device
Touchscreen:
Capacitive multi-touch screen
Optional dual mode touchscreen (multi-touch and digitizer)
Touchpad:
Glide touchpad with scroll bar

Webcam
FHD webcam x 1
Optional 8MP rear camera x1

Power
AC Adapter (65W, 100-240VAC, 50/60Hz)
Hot swappable Dual Li-Ion battery (2100mAh) x 2 (up to 13 hours of battery life)[5]

Dimensions and Weight
11.77" x 8.78" x 1.34" (299 x 223 x 34mm)
4.36lbs (1.98Kg)[7]

Temperature
Operating Temp:
-5.8° F to 140° F / -21°C to 60°C
Storage Temp:
-40°F to 160°F / -40°C to 71°C
Humidity: 95% RH, non-condensing

I/O Interfaces
DC in x 1
USB 3.0 x 2
USB 2.0 x 1
Network (RJ-45) x 1
Headphone out/Mic-in Combo x 1
HDMI x 1
Serial port (RS-232) x 1
Docking connector (24-pin) x 1
Optional RF antenna pass-through for GPS, WLAN and WWAN

Warranty
3 Year bumper-to-bumper warranty standard[8]

Specification subject to change without notice
[1] Data plan required. Cellular data is available in the US on Verizon Wireless and AT&T networks. LTE is available in select markets. Check with your carrier for details. 4G LTE configuration must be ordered at time of purchase.
[2] Requires MIL-STD 461F 90W AC Adapter sold separately
[3] Computers configured with a 32-bit operating system can address up to 3GB of system memory. Only computers configured with a 64-bit operating system can address 4 GB or more of system memory
[4] Battery life testing conducted under BatteryMark 4.0.1. Battery performance will vary based on software applications, wireless settings, power management settings, LCD brightness, customized modules and environmental conditions. As with all batteries, maximum capacity decreases with time and use and may eventually need to be replaced by a Getac service provider. Battery life and charge cycles vary by use and settings
[5] For storage, 1GB = 1 billion bytes; actual formatted capacity less
[6] Weight varies by configuration and manufacturing process
[8] 3 year bumper-to-bumper limited warranty standard. For warranty terms and conditions visit www.getac.com

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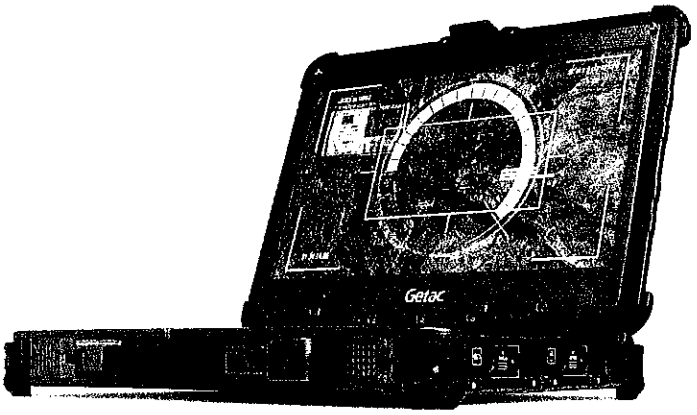
X500

ULTRA RUGGED 15.6" NOTEBOOK

15.6" Widescreen full HD display
800 NITs QuadraClear® LED display
Intel® Core™ i7 3.0GHz / i5 2.7GHz processors
Glove-friendly multi-touch LCD option
MIL-STD-810G and IP65 certified
MIL-STD-461F certified*
Expansion Unit (PCI or PCIe) option
Industry's best 5 year
bumper-to-bumper warranty



Large FHD Display.

The X500 features a massive 15.6 inch full HD 1080p widescreen display delivering crystal-clear high def. Configure yours with the NVIDIA® GeForce® 745M discrete graphics with 2GB of dedicated memory and you will get faster speeds (frames per second) with incredible responsiveness.

Next Generation Processors.

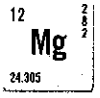
With a state-of-the-art 3.0GHz Intel Core i7 dual core processor option, the X500 is the most powerful rugged computer ever made. The dual-core processor is ideally suited to handle the multi-tasking necessary in today's complex work environments.

Expansion Unit.

The X500 offers an expansion unit that truly distinguishes itself from other rugged notebooks. With two slots for either PCI or PCI Express, the X500 with expansion unit combines the expandability of a desktop computer with the portability of a rugged notebook.

Sunlight Readable Display.

Standard on every X500 is the advanced QuadraClear® display. Getac's QuadraClear solution combines proprietary technologies for both screen brightness and anti-reflectivity to reduce the sunlight's reflectivity and provide a more effective contrast ratio than other displays.



Built to Survive.

Built from high quality magnesium alloy, the X500 features a casings that is specifically engineered to protect the computer against drops, shocks, spills, vibration and more. The sealed design of the X500 protects it against dust and moisture. The X500 has been independently tested and certified to MIL-STD 810G, IP65 and MIL-STD 461F standards.

Industry's Best 5-Year Warranty.

The X500 ultra rugged notebook comes standard with the industry's best 5-Year bumper-to- bumper warranty. It's the peace-of-mind protection of knowing you're covered.

Learn more at **Getac.com**

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GETAC X500

Specifications

Getac

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www.getac.com
949.681.2900

Getac, Inc.
400 Exchange, Ste 100
Irvine, CA 92602

Ruggedness	Ultra rugged MIL-STD 810G and IP65 certified MIL-STD 461F certified* Optional ANSI/ISA 12.12.01
Operating System	Windows® 10 Professional (available Windows 7 Professional downgrade option)
CPU	Intel® Core™ i7-4610M vPro 3.0GHz processor with Intel® Turbo Boost Technology up to 3.7GHz 4MB Intel Smart Cache Intel Core i5-4310M vPro 2.7GHz processor with Intel Turbo Boost Technology up to 3.4GHz 3MB Intel Smart Cache
Memory	8GB DDR3 expandable to 16GB**
Storage	SATA 500GB HDD*** Optional SATA 1TB HDD Optional SATA OPAL 2.0 128GB / 256GB / 512GB / 1TB SSD
VGA Controller	Intel HD Graphics 4600 Optional NVIDIA® GeForce GTX950M 4GB GDDR5 discrete graphic controller
Display	15.6" TFT LCD FHD (1920 x 1080) 800 NITs QuadraClear® sunlight readable display Optional touchscreen
Keyboard	Waterproof LED backlit membrane keyboard Optional waterproof LED backlit rubber keyboard
Media Bay Options	Super multi-DVD Optional 2nd battery Optional 2nd 500GB or 1TB HDD; OPAL 2.0 128GB, 256GB, 512GB, or 1TB SSD***
Expansion Slots	ExpressCard/54 SmartCard reader SD card reader Optional PCMCIA Type II
Expansion Unit	Optional PCI or PCI-Express (x2 slots)
Security	Intel vPro™ Technology (per CPU options) TPM 1.2 Smartcard reader Cable lock slot Fingerprint scanner NIST BIOS compliant Optional Absolute DDS software
Communications	10/100/1000 base-T Ethernet Intel Dual Band Wireless-AC 7260; 802.11ac Bluetooth (v4.0) Optional SiRFstarIV™ GPS Optional 3G mobile broadband
Power	AC adapter (90W, 100-240V, 50/60Hz) Li-Ion smart battery (8700mAh) Optional media bay 2nd Li-Ion battery (8700mAh)
Dimensions and	16.1" x 11.4" x 2.5" (410 x 290 x 65 mm)
Weight	11.4 lbs (5.2 kg)†
Temperature	Operating temp: -4°F to 131°F / -20°C to 55°C Storage temp: -40°F to 160°F / -40°C to 71°C Humidity: 95% RH, non-condensing
I/O Interfaces	DC in x 1 USB 3.0 x 2 USB 2.0 x 1 USB 2.0/eSATA Combo x 1 Docking port x 1 Serial port (RS-232) x 2 Network (RJ-45) x 2 VGA x 1 Microphone (Mini-jack) x 1 Audio output (Mini-jack) x 1 HDMI x 1 Optional IEEE 1394a x 1 Optional RF Antenna pass-through for WWAN, WLAN and GPS
Warranty	5 Year bumper-to-bumper warranty standard ††

Specification subject to change without notice
* Requires MIL-STD 461F 90W AC Adapter sold separately
** Computers configured with a 32-bit operating system can address up to 3GB of system memory. Only computers configured with a 64-bit operating system can address 4 GB or more of system memory
*** For storage, 1GB = 1 billion bytes; actual formatted capacity less
† Weight varies by configuration and manufacturing process
†† Industry's best 5 year bumper-to-bumper limited warranty standard. For warranty terms and conditions visit www.getac.com

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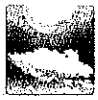
ZX70

FULLY RUGGED 7" TABLET

7" LumiBond® display with sunlight readable technology
Android 5.1 OS
MIL-STD 810G and IP67 certified
High Sensitivity GPS
8MP auto-focus camera
FHD web camera
Optional 4G LTE WWAN radio
Optional 1D/2D barcode reader



Strong Sunlight Viewable Display.

To increase the screen durability and provide greater sunlight readability, the ZX70 features an IPS display with LumiBond optical bonding and also uses special damage-resistant Gorilla® Glass. Making the ZX70 both tough and scratch resistant to withstand the abuses of working in extreme conditions.

Built to Survive.

The ZX70 was designed from the inside out to be sleek, thin and tough. Only Getac manufacturers rugged tablets down to the chassis. The ZX70 is specifically engineered to be protected against drops, shocks, spills, vibration and more.

Dual Camera

They say a picture is worth a thousand words and the ZX70 provides two features to insure you capture the necessary video or images while you're in the field. With it's FHD web-cam and 8MP auto-focus camera, you can be sure your data is documented accurately.

Design to Capture.

With both barcode scanning and RFID reading capabilities, the ZX70 is the ultimate device for capturing data

Fast and Accurate GPS.

The dedicated U-blox GPS chipset in the ZX70 provides fast and accurate location information. The ZX70 is the perfect device for anyone using GPS data in the field.

Bumper-to-Bumper Warranty.

Accidents happen. Only Getac offers bumper-to-bumper coverage standard on every ZX70 rugged tablet.

Learn more at **Getac.com**

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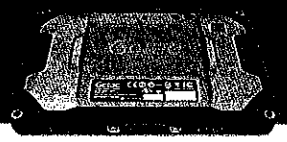
GETAC ZX70

Specifications



Getac

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Ruggedness	MIL-STD-810G and IP67 certified Vibration resistant Drop resistant (26 drops from 6ft / 1.82m) Optional ANSI/ISA 12.12.01 Optional ATEX & IECEx Explosive Atmosphere Certified
Operating System	Android 5.1
Microprocessor	Intel® Atom™ x5-Z8350 Processor 1.44GHz, burst up to 1.92 GHz 2MB Cache
Memory	2GB LPDDR3 expandable to 4GB
Storage*	32GB eMMc
Display	7" IPS TFT LCD HD (1280 x 720) LumiBond® display with sunlight readable technology Glove-friendly capacitive touchscreen
Communications	WiFi 802.11 a/b/g/n Bluetooth (v4.0) Dedicated GPS Optional 4G LTE mobile broadband
Cameras	FHD Web camera 8M pixels auto focus camera
Special Features	Optional contactless RFID/NFC combo reader Optional 1D/2D Imager barcode reader Optional UHF RFID reader
Power	AC adapter (24W; 100-240VAC, 50/60 Hz) Li-ion battery (3.8V, 8400mAh)**
Dimensions and Weight	8.58" x 5.6" x 1.06" (21.8 x 14.2 x 2.7 cm) 1.7 lbs (780g)†
Temperature	Operating: -6F to 140F / -21C to 60C Storage: -40F to 160F / -40C to 71C Humidity: 95% RH , non-condensing
I/O Interfaces	MicroUSB 2.0 (Client) x 1 USB 2.0 (Host) x1 DC in Jack x 1 Docking connector (Pogo) x 1 Speaker x 1 Microphone x 1 Optional RF antenna pass-through for GPS and WWAN
Warranty	3 Year bumper-to-bumper warranty standard††

Accessories	
Optional AC Adapter Set	**GAA251**
Optional Vehicle charger	**GAD2X2**
Optional Office dock (Pogo pin connector)	**GDOF5G**
Optional Getac Vehicle Dock (Pogo pin connector)	**GDVPX1**
Optional Carry bag	**GMBCX3**
Optional USB to RS232 converter cable	**GMCRX1**
Optional Rotating Hand Strap w/Kick Stand & Stylus Holder	**GMHRX7**
Optional Screen Protection Film (AG)	**GMPFXD**
Optional Spare Capacitive Stylus	**GMPSXI**
Optional Wrist strap	**GMRSX2**
Optional Shoulder strap	**GMS2X3**

Specification subject to change without notice
* For storage, 1GB = 1 billion bytes, actual formatted capacity less
** Battery performance will vary based on software applications, wireless settings, power management settings, LCD brightness, customized modules and environmental conditions. As with all batteries, maximum capacity decreases with time and use and may eventually need to be replaced by a Getac service provider. Battery life and charge cycles vary by use and settings
† Weight varies by configuration and manufacturing process
†† 3 year bumper-to-bumper warranty standard. For warranty terms and conditions visit www.getac.com

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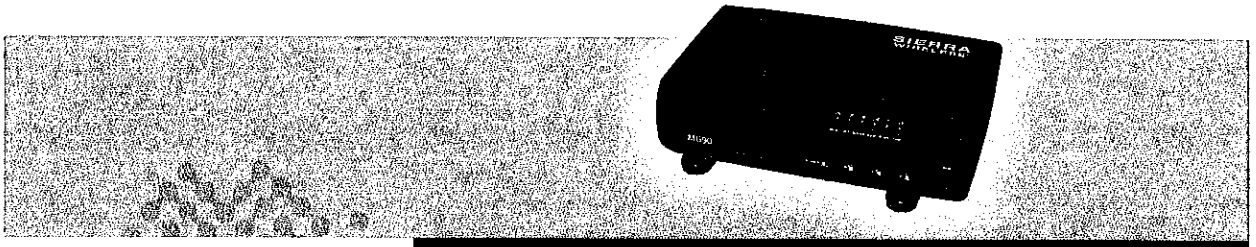
SIERRA WIRELESS

AirLink MG90 Datasheet



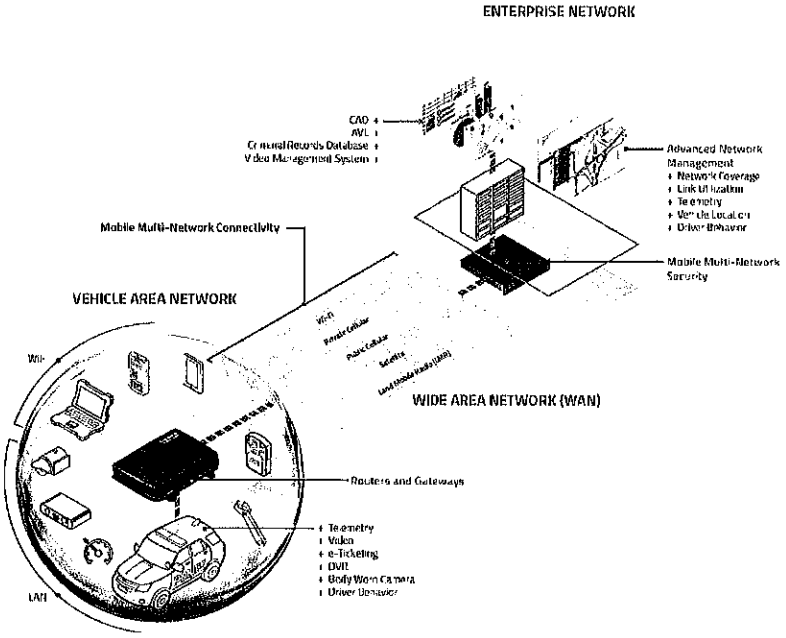
AirLink® MG90 High Performance Multi-Network Vehicle Router

Multi-Network Platform, Vehicle Grade, Dual Concurrent Gigabit Wi-Fi

The AirLink® MG90 is a high performance LTE-Advanced vehicle networking platform, purpose built to provide secure, always-on connectivity for mission critical applications in public safety, transit and field services.

With extensible multi-network connectivity, the MG90 offers dual LTE-Advanced with Band 14 option, Gigabit Wi-Fi WAN and Gigabit Ethernet, with extensions to Land Mobile Radio (LMR) and satellite systems.

The MG90 dynamically selects the best available network, based on user-customized scoring systems, using its intelligent policy defined link management, and is able to effortlessly switch between WAN connections to provide uninterrupted communications and prevent downtime, performance issues or dead zones. Together with the AirLink® Connection Manager (ACM), the MG90 consolidates the security for all connected technologies in the vehicle area network (VAN), vastly simplifying deployment and enabling the enterprise to retain management control over network access and connected mobile assets.



The MG90 seamlessly integrates with the AirLink® Mobility Manager (AMM)—a powerful, end-to-end network management solution—to enable simplified, remote and real-time insight and control of connected mobile assets and mission critical applications, and supports vehicle tracking, telemetry and asset management applications. Purpose built for the vehicle with its ruggedized form factor, the MG90 delivers best-in-class reliability and ensures continual operation in harsh mobile environments.

sierrawireless.com/MG90

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High Performance Vehicle Networking Platform

EXTENSIBLE MULTI-NETWORK CONNECTIVITY

Built for first responders and in-field personnel, the AirLink MG90 offers up to 300 Mbps downlink speed over LTE Advanced, 1.3 Gbps over dual radio, dual concurrent 3x3 MIMO 802.11ac Wi-Fi, and 5-port Gigabit Ethernet. The AirLink MG90 can host up to 128 clients at any one time, and concurrently connect multiple mission critical applications in and around the vehicle including laptops, MVRs and tablets, in addition to providing live video streaming, and rapid secure access to remote databases.

The AirLink MG90 supports up to 21 LTE frequency bands, enabling operation on emerging LTE networks worldwide. It has a single variant for LTE networks in North America, Europe, Middle East and Africa, which allows international customers to use the same AirLink MG90 router in many geographical areas, vastly simplifying large deployments across multiple carriers. With dual-SIM functionality for automatic failover between SIMs, the MG90 offers superior connectivity and cost optimization when roaming.

PURPOSE BUILT VEHICLE-READY DESIGN

Purpose built for vehicle power environments, the AirLink MG90 does not require any external power conditioning, is optimized to survive extreme transient surges, and maintains continuous power through cold cranking as low as 5V.

The MG90 was developed with industrial grade components to accommodate extreme temperatures, such as a customized die cast aluminum housing to manage thermodynamics. It is sealed to meet IP64 for resistance to dust and water ingress, and has been tested to meet and exceed the MIL-STD-810G specifications for shock, vibration, temperature and humidity.

CONNECTED VEHICLE AWARENESS

Offering built-in vehicle-ready I/O, Bluetooth and Vehicle Telemetry interface, the MG90 enables remote monitoring of auxiliary devices, such as light bars, sirens and gun racks, and can collect OBD-II vehicle telemetry data for engine diagnostic and performance data to monitor vehicle health.

Utilizing next generation GNSS location technology that supports 48 satellites from 4 different satellite constellations, the MG90 provides fast, reliable and precise vehicle location information, even in the most challenging environments. The MG90 contains an Inertial Navigation System[1] that allows it to track without satellites, using dead reckoning algorithms integrated with the GNSS. The Inertial Navigation System continues to provide positioning information when the GNSS is unable to acquire satellites, enabling tracking through urban canyons, tunnels and underground parking.

[1] Activated in an upcoming software release

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Network Agility

POLICY-DEFINED LINK MANAGEMENT

With its built-in policy engine, the MG90 dynamically selects the best available network, based on a customized user-defined scoring system, including variables such as time, location and vehicle speed. Utilizing traffic segmentation and quality of service (QoS) rules, the MG90 reserves bandwidth for mission critical applications, to ensure they maintain priority.

Providing seamless network handover and millisecond network switching with its cognitive wireless system, the MG90 is able to automatically sense, assess and select the best available WAN connection to provide "always-on," uninterrupted connectivity in any circumstance, preventing downtime, performance issues or dead zones.

MOBILE MULTI-NETWORK SECURITY

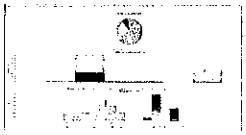
Together with the AirLink® Connection Manager (ACM)—an advanced mobile-optimized VPN server—the MG90 provides secure data connections and retains a static IP address across multiple WAN networks, without interruption or rebuilding VPN tunnels, and consolidates the security for all connected technologies in the vehicle area network (VAN) into a single, centralized platform. This vastly simplifies deployment and enables the enterprise to retain management control over network access and connected mobile assets.

The ACM meets industry standard security and uses standards-based protocols.

For more information on the AirLink® Connection Manager (ACM), click here.

Advanced Network Management

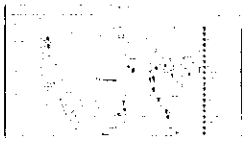
PERFORMANCE STATS



LOCATION MANAGEMENT

COVERAGE MAP/ TRAILS REPORT

AMM MAP VIEW



NETWORK INSIGHT & CONTROL

Coupled with the AirLink® Mobility Manager (AMM), the MG90 supports a leading-edge, end-to-end network management solution to enable simplified, remote and real-time mass configuration, control and troubleshooting of all routers, connected mobile assets and mission critical applications.

Available in the enterprise datacenter or in the cloud, the AMM seamlessly integrates with the MG90, displaying a dashboard with an up-to-date view of the entire fleet, and delivers a continuous stream of rich, real-time network data, allowing users to observe, track and examine the behaviour of hundreds of devices, networks, and connected vehicle parameters as it occurs. The AMM enables users to create custom alerts and event triggers, and offers on-demand or pre-scheduled historical reports for in-depth analysis and diagnostics including; Network Performance; Link Scoring; Coverage Maps; Trails; Vehicle Heath; Link Utilization; Availability Reports; Router Power Status.

OPERATIONS MANAGEMENT

The AMM provides fleet operations personnel with real-time visibility into vehicle location, network coverage and tracking of mobile assets.

For more information on the AirLink® Management System (AMM), click here.

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AirLink® MG90 High Performance Multi-Network Vehicle Router

FEATURE	BENEFIT
Extensible, multi-network connectivity with support for LTE-Advanced, dual radio dual concurrent 3x3 MIMO 802.11ac Wi-Fi, and 5-port Gigabit Ethernet, and FirstNet Band 14	• **Flexible:** modular radio design allows users to upgrade, add or switch to their choice of supported WAN and service provider • **Reduces costs:** minimizes operating and capital costs for infrastructure and communications costs by consolidating traffic over single/preferred network connections • **Scalable:** simplifies management and maintenance of field IT equipment
Single or Dual LTE-Advanced (Carrier Aggregation) Wide Area Network (WAN) supporting up to 300 Mbps downlink speed	High speed, concurrent connectivity for multiple wired and wireless devices and applications in and around the vehicle
Commercially available FirstNet Band 14 option	Future proof solution with the capacity to operate both on today's networks, and migrate to FirstNet Band 14 LTE
State-of-the-art LTE coverage spanning 21 LTE frequency bands worldwide	Connectivity to LTE networks worldwide
Dual concurrent Gigabit Wi-Fi supports up to 1.3 Gbps, up to 128 clients, WPA2 Enterprise	High speed, concurrent connectivity for all devices and applications in the VAN, and data offload over enterprise Wi-Fi networks
Dual-SIM functionality to enable automatic failover between SIMs	Superior network connectivity and cost optimization when roaming
Serial and USB connectivity	Compatible with legacy and wired applications
One product variant for all major North American and European network operators, and one product variant for all major Asia Pacific network operators	Simplified inventory management by reducing requirements to carry multiple product variants in inventory
Automatic radio configuration based on the SIM	Increases flexibility and simplifies inventory management
Support for vehicle telemetry to collect OBD-II vehicle telemetry data and monitor engine diagnostics	Access to critical vehicle health data
Built-in vehicle ready I/O and Bluetooth for remote monitoring of auxiliary devices, such as light bars, sirens and gun racks	Advanced awareness of fleet operations
Precision Geo-location with GNSS[2] supporting 48 satellites from 4 different satellite constellations (GPS, GLONASS, Galileo, Beidou), streaming data locally over the serial port and remotely over NMEA, TAIP, RAP protocols	Superior vehicle location accuracy available to in-field personnel and dispatch staff, and via 3rd party platforms
Sealed to meet IP64 for resistance to dust and water ingress, and exceeds the MIL-STD-810G specification for shock, vibration, temperature and humidity, with built-in surge protection and an aluminum chassis for heat dissipation	Superior reliability and uninterrupted operation in harsh vehicle environments
Leading class power supply that exceeds E-Mark, ISO 7637-2 and SAEJ1455 requirements, surviving 5V brownouts and spikes from -600 VDC to 200 VDC	Designed to perform with unpredictable and "noisy" power sources
Configurable, millisecond network switching and seamless handover across multiple network with policy defined link management	Guarantees always-on, assured connectivity to minimize downtime, increase productivity and reduce costs
Patented cognitive wireless system to sense, assess and select the best available network	
Retains a static IP address across multiple WAN networks, without interruption or rebuilding VPN tunnels, consolidating the security for all connected technologies in the vehicle area network (VAN) into a single, centralized platform using the AirLink® Connection Manager (ACM)	• **Simplified deployment:** eliminates the need for VPN software clients for individual devices and applications • **Secure:** securely connects multiple high bandwidth in-field applications and mobile assets in and around the vehicle • **Control:** enables the enterprise to retain management control over network access and connected mobile assets
End-to-end network management with remote mass-configuration, and real-time monitoring, control, and troubleshooting of all routers, connected mobile assets and mission critical applications using the AirLink® Mobility Manager (AMM)—available in the cloud or in the enterprise data center	Increases efficiency, reduces costs and supports effective maintenance and long term network performance
Advanced precision reporting for detailed analysis and diagnostics including; Network Performance; Link Scoring; Coverage Maps; Trails; Vehicle Heath; Link Utilization; Availability Reports; Router Power Status	Instant, rich network insight to enable real-time troubleshooting and network maintenance
Real-time vehicle location and mobile asset tracking	Complete visibility of entire mobile network
NA	Proven reliability and over 1.5 million AirLink gateways deployed
NA	Industry leading warranty includes, software updates and advance replacement (through participating channel partners

[2] Activated in an upcoming software release

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AirLink® MG90 High Performance Multi-Network Vehicle Router

	Specification
CELLULAR WAN	North America and EMEA Model (Dual or Single Radio: Sierra Wireless MC7455) • Supports LTE-Advanced (Carrier Aggregation) and LTE-MIMO, Fall back to 3G-HSPA+ • Cat 6 device (Peak Data Rate DL:300 Mbps, UL:50 Mbps) • Carrier Approvals: Verizon, AT&T, T-Mobile USA • Other major carriers pending. • Supported Frequency Bands LTE: B1 (2100), B2 (1900), B3 (1800), B4 (1700), B5 (850), B7 (2600), B8 (900), B12 (700), B13 (700), B20 (800), B25 (1900), B26 (850), B29 (700), B41 (2500/TDD) WCDMA: B1 (2100), B2 (1900), B3 (1800), B4 (1700), B5 (850), B8 (900) • Industry Approvals: FCC, IC, PTCRB, R&TTE, GCF, CE • Automatic Network Operator Switching based upon SIM • Dual SIM Functionality (2FF SIM) Optional Support: First Net LTE B14(700) for Public Safety.
SATELLITE NAVIGATION (GNSS)	Dedicated 48 channel GNSS Receiver supporting GPS, GLONASS, BeiDou, Galileo Tracking Sensitivity: -162 dBm Reports (Update Rate 1Hz): NMEA, TAIP Reliable Store and Forward via serial, TCP or UDP Inertial Navigation Sensors (Accelerometer and Gyro)
WI-FI	Dual Radio, dual concurrent 3x3 MIMO 802.11 b/g/n/ac Dual Band 2.4/5 GHz (each radio) Support for 128 clients Default mode: WiFi as WAN and WiFi built-in vehicle AP High output power 21 dBm (per channel)
HOST INTERFACES	5 Gigabit RJ-45 Ethernet ports 2 USB 3.0 type-A ports 1 RS-232 serial port (DB-9 connector) 1 Auxiliary RJ-45 Input/Output port 4 SIM Slots (Dual SIM per radio) 5 SMA antenna connectors (2 cellular, 2 diversity, 1 GNSS) 7 RP-SMA antenna connectors (3x3 Wi-Fi WAN, 3x3 Wi-Fi AP, 1 Bluetooth)
INPUT/OUTPUT	Configurable I/O GPIOs (5 pins total – 4 DB9 & 1 Power connector) Digital input: 0-36 VDC with optional pullup (Dry contact sense input) Digital Open Collector Output > sinking 500 mA
LAN (ETHERNET/USB/ WI-FI/BLUETOOTH/SERIAL)	DHCP Server VLAN Virtual BSSIDs PPPoE AP Isolation
NETWORK AND ROUTING	Network Address Translation (NAT) LAN Segmentation WAN/LAN Connection Policy Management QoS: Application/ Traffic Priority Queuing Load Balancing Over Multiple WAN Links WAN Monitors: Connection Failure Recovery Configurable MTU size Multiple LAN Support Customize transmission buffer size Static Routing WAN Ethernet

	Specification
VPN	Integrated with ACM VPN Server IPsec protocol with IKEv1/IKEv2 Encryption: 3DES/AES128/AES256 Hashing: MD5/SHA1/SHA256/SHA512 Key Exchange: DHGroup2/5/14/15/16/17 Support LAN to LAN and Host to LAN Up to 10 concurrent tunnels per link MOBIKE protocol IP compression Full/Split Tunnel Dead Peer Detection (DPD)
SECURITY	AAA: 802.1x/Radius authentication with Wi-Fi and Ethernet Firewall: Port forwarding and filtering WLAN Encryption: WPA2 Personal/Enterprise WLAN MAC Address filtering
NETWORK MANAGEMENT	Airlink Mobility Manager (AMM): available as cloud based service or as licensed enterprise application • Status dashboard showing at-a-glance fleet health • Remote management, configuration and software updates • Location-based analytics and diagnostics: Network Coverage Maps and Trails; Link Utilization; Bandwidth Consumption • Configurable geo-zone based event monitoring and alerting • Live vehicle location tracking • Optional fleet operations pack: vehicle diagnostics reporting and mobile asset tracking
VEHICLE TELEMETRY	OBD II/ J1939/ J1708 interface over serial Diagnostic real time alerts/reports (via AMM)
POWER	Input/Operating Voltage: 7 to 36 VDC Power modes: ON 30W (2.5A @12V); Standby 135mW (11mA@12V) Built-in protection against voltage transients including 5 VDC engine cranking Ignition Sense with time delay shutdown
ENVIRONMENTAL	Operating Temperature: -30°C to +70°C / -22°F to +158°F Storage Temperature: -40°C to +85°C / -40°F to +185°F Humidity: 95% RH @ 60C IP64 rated Ingress protection MIL-STD-810G conformance to shock, vibration, thermal shock, and humidity
INDUSTRY CERTIFICATIONS	Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950 Vehicle Usage: E-Mark (72/245/EEC, 2009/19/EC), ISO7637-2, SAE J1455 (Shock & Vibration) Environmental: RoHS2, REACH, WEEE
RELIABILITY	MTBF: 23.22 years (Telcordia SR-332 Issue3 Method1)
SUPPORT AND WARRANTY	3-year standard warranty; Optional 2-year warranty Extension Unrestricted device software upgrades
DIMENSIONS	272mm x 220mm x 60mm (10.71in x 8.66in x 2.36in) Weight: 2.4kg / 5.3 lb
PART NUMBERS	NA & EMEA: LTE-A/ Dual LTE-A/ LTE-A+B14 FirstNet In the box: DC Power cable, Quick Start Guide and SMA wrench

About Sierra Wireless

Sierra Wireless is building the Internet of Things with intelligent wireless solutions that empower organizations to innovate in the connected world. We offer the industry's most comprehensive portfolio of 2G, 3G, and 4G embedded modules and gateways, seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster. Sierra Wireless has more than 950 employees globally and operates R&D centers in North America, Europe, and Asia.

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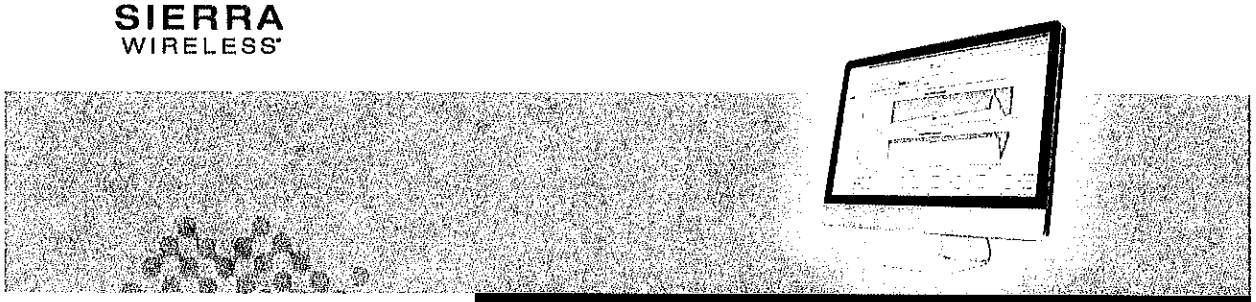
AirLink® Manager (AM) Datasheet



AirLink Manager (AM)

FEATURES

- Deploy, configure and remotely manage any AirLink® router or gateway
- Troubleshoot and manage configurations remotely
- Customize views, segment assets and infrastructure, and manage multi-level user privileges
- Display geographic view of entire network of AirLink routers and gateways
- Advanced reporting capabilities

BENEFITS

- Enables organizations with AirLink gateways and routers to host their own management servers in-house, behind firewalls
- Increases efficiency, reduces costs and supports effective maintenance and long term network performance
- Provides complete visibility and awareness of an entire mobile network

On-Premises Network Management

Designed for applications where cloud-based management is not an option, the AirLink® Manager (AM) is a leading-edge, end-to-end on-premises network management solution that enables simplified, remote and real-time mass configuration, control and troubleshooting of AirLink® routers and gateways, connected infrastructure and mission critical applications.

AM displays a virtual dashboard with an up-to-date view of all connected AirLink routers and gateways, and delivers a continuous stream of rich, real-time network data, allowing users to analyze the behavior of hundreds of devices, networks, and device parameters as it occurs.

The AM enables users to create custom alerts and event triggers and offers on-demand or pre-scheduled historical reports for in-depth analysis and diagnostics.

DASHBOARD

The AM dashboard provides a configurable, color-coded view of device health, enabling administrators to monitor a fleet of routers and gateways, and associated operating parameters. Each parameter has a configurable multi-level threshold that can be programmed to change the color of display icons as thresholds are exceeded. Display filters are provided to allow users to quickly focus on a subset of information, and devices can be partitioned into groups with different user access levels. Many dashboard display parameters permit immediate 'drill down' for further detail.

REMOTE MANAGEMENT, CONFIGURATION AND SOFTWARE UPDATES

The AM supports remote and centralized management of the operating configuration of each Sierra Wireless router or gateway in a network. AM users with administrative access can remotely reconfigure AirLink® routers and gateways individually over-the-air, or can use the mass configuration capability to apply new operating parameters to the entire fleet. These powerful features are crucial to effective maintenance and long term performance of any large-scale enterprise communications solution. The AM also supports self-service software updates, allowing users with administrative access to remotely upgrade the firmware on their gateways or routers.

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Sierra Wireless
AIRLINK MANAGER

CORE REPORTS

To augment the fleet status snapshot provided by the AM dashboard, pre-scheduled or on-demand historical reports enable deeper analysis and troubleshooting of AirLink routers and gateways, using accumulated management information.

All report results are saved to the server and can be emailed to multiple recipients. Report data may be exported in Excel format for further analysis or integration with other systems.

EXAMPLE CORE REPORTS[1]

CORE REPORT	DESCRIPTION
BANDWIDTH CONSUMPTION	Shows data received and transmitted on each network for an individual device or groups of AirLink routers and gateways
LINK UTILIZATION	A time-based depiction of network connection status for individual routers and gateways
COVERAGE MAPS	Maps the wireless service accessed by individual routers and gateways

LOCATION-BASED REPORTING

The AM uses GPS data supplied by AirLink routers and gateways[2] to provide a location-based view of fleet information.

[1] Available in an upcoming software release.
[2] For AirLink routers and gateways with GPS capability.

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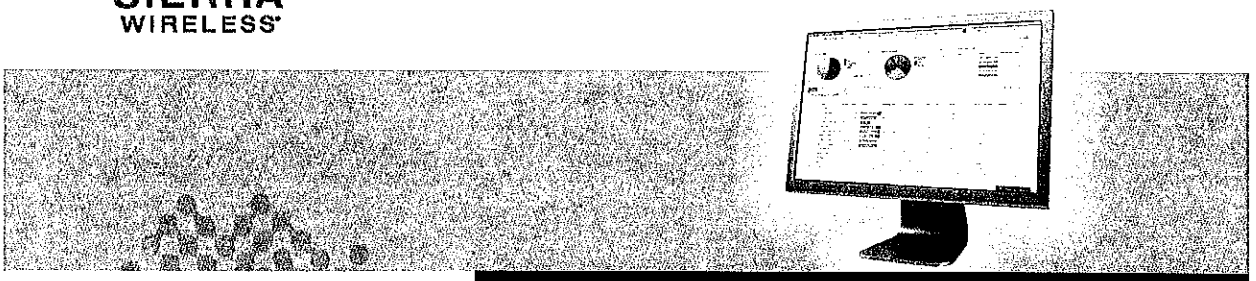
AirLink Management Service Datasheet



Sierra Wireless® AirLink® Management Service

Configure, Deploy and Remotely Manage your fleet of AirLink Gateways and Routers

AirLink® Management Service (ALMS) powered by AirVantage® is an application that makes managing thousands of gateways and routers as easy as ten. Users can remotely configure, deploy, and monitor their AirLink gateways and routers over-the-air.

CONFIGURABLE OPTIONS

- Customize reporting for low or high bandwidth environments
- Schedule periodic reports on any software parameter
- Configure security/networking settings for VPN tunneling, port forwarding and routing
- Setup alerts for mission critical applications and export historical data
- Initiate GPS/Automatic Vehicle Location (AVL) tracking protocols
- Configure I/O settings for communicating with attached assets including legacy industrial equipment
- Activate and deactivate airtime with select network carriers

POWERFUL MONITORING

Configurable monitoring dashboards display the actionable information required to keep your fleet of AirLink gateways and routers up and running at maximum efficiency. Alerts notify you of mission critical events so that preventative maintenance can be applied to prevent downtime.

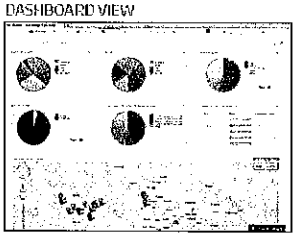
SOFTWARE UPDATES

Application software, gateway router firmware and radio module firmware can be updated across the fleet with automatic retry and detailed results reporting. Delta patch mechanism reduces airtime costs.

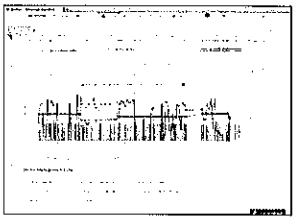
SCALABLE DEPLOYMENTS

ALMS enables rapid deployment of AirLink gateways and routers by applying a configuration template to a group of gateways. Configuration templates can be created or modified based on the software parameters of an existing gateway or from scratch.

DASHBOARD VIEW



HISTORICAL DEVICE VIEW



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Sierra Wireless
AIRLINK MANAGEMENT SERVICE

A simple, scalable, and secure approach to managing AirLink gateways and routers

Users can start managing their gateways immediately and automatically receive regular updates and new features without having to manage any software. AirLink Management Service is designed to:

SIMPLIFY OPERATIONS

- Remotely manage AirLink gateways and routers from one central web application accessible anytime, anywhere
- Receive software updates automatically and deploy them over-the-air with one click

SCALE DEPLOYMENTS

- Rapidly deploy or update any number of gateways and routers using configuration templates
- Access summary dashboards that at-a-glance monitoring of entire deployments with drill down capability for quick troubleshooting

SECURE YOUR DATA AND COMMUNICATION

- Safeguard AirLink gateways from intrusion with device initiated communication
- Operates seamlessly with operator private networks
- Access service from globally distributed, independently audited, Tier 4 data centers hosted by Amazon Web Services

LEVERAGING THE SECURITY OF AMAZON WEB SERVICES

ALMS is now hosted on Amazon Web Services, providing the highest level of security and availability. ALMS provides data residency in the US and the EU, allowing customers a choice of where their data is securely hosted.

AirLink®
Management Service

AirLink Network Management in the Enterprise Data Center

For customers that are not able to leverage cloud-based solutions, Sierra Wireless provides a network management solution similar to ALMS —oMM Management System (oMM)—that can manage any Sierra Wireless gateway and can be hosted in the enterprise data center. The oMM Management System provides the ability to deploy, configure and remotely manage any Sierra Wireless gateway or router.

Click here for more information on the oMM

About Sierra Wireless

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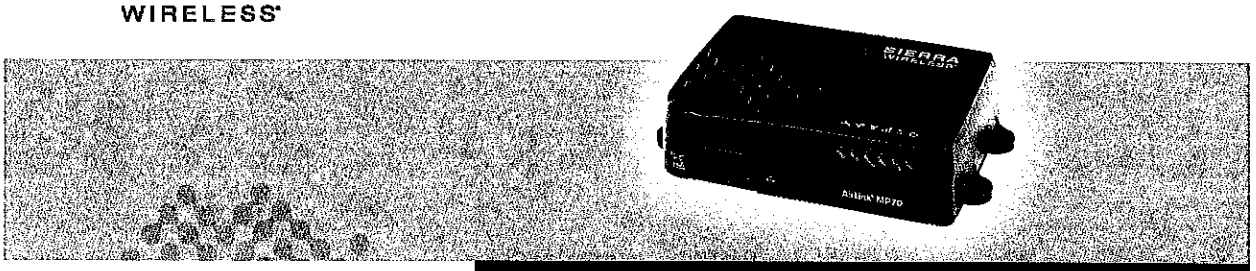
AirLink MP70 Datasheet



AirLink® MP70 High Performance Vehicle Router

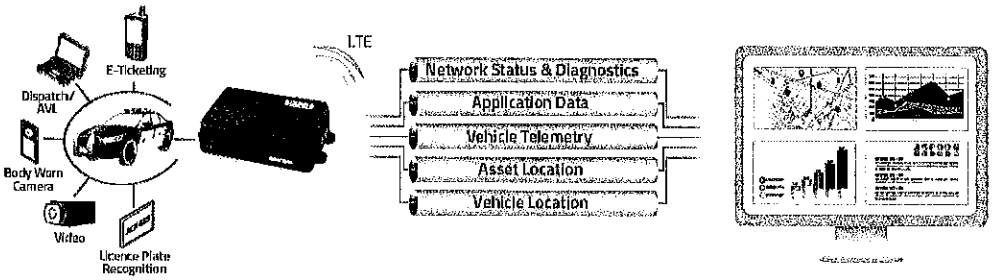
Vehicle Grade, LTE-Advanced, Gigabit Wi-Fi

The AirLink® MP70 is a high performance, LTE-Advanced vehicle router developed specifically for mission critical applications in public safety, transit and field services.

Offering high power, long range Gigabit Wi-Fi and Gigabit Ethernet, and up to 300 Mbps downlink speeds over LTE-Advanced, the AirLink MP70 unites the fleet with the enterprise network and enables multiple field applications to work simultaneously, further and faster from the vehicle than ever before.

The MP70 supports advanced remote visibility and instant insight into the vehicle area network (VAN), field applications and assets, and the mobile workforce. Purpose built for the vehicle, the MP70 delivers superior reliability and uninterrupted operation in harsh mobile environments.

Secure, managed LTE networking for mission critical applications



Vehicle Routers and Gateways | Secure, Intelligent Communications | Network Management

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AirLink MP70 High Performance Vehicle Router

HIGH PERFORMANCE VEHICLE AREA NETWORK (VAN)

With dual-band Gigabit Wi-Fi and Gigabit Ethernet, the AirLink MP70 enables a complete portfolio of broadband mission critical applications to work simultaneously, further and faster from the vehicle than ever before.

Built for first responders and field personnel, the MP70 offers up to 300 Mbps downlink speeds over LTE-Advanced, and up to 1.3 Gbps over 802.11ac Wi-Fi (with 3x3 MIMO) and Gigabit 4-port Ethernet. The AirLink MP70 can host up to 128 simultaneous Wi-Fi clients, and concurrently connect multiple mission critical applications in and around the vehicle including laptops, DVRs and tablets, in addition to providing live video streaming, and rapid and secure access to remote databases, such as record management systems.

The AirLink MP70 supports 21 LTE frequency bands, enabling superior coverage on LTE networks worldwide. With automatic configuration of the radio based on the SIM, the AirLink MP70 has two product variants—one for LTE networks in North America, Europe, Middle East and Africa, and another variant to support all major LTE networks in Asia Pacific.

Outside of the US, the AirLink MP70 offers dual-SIM functionality to enable automatic failover between SIMs, providing superior connectivity and cost optimization when roaming.

CONNECTED VEHICLE AWARENESS

The AirLink MP70 increases efficiency, streamlines operations and reduces costs by supporting advanced remote visibility and instant insight into the vehicle area network (VAN), field applications and assets, and the workforce.

Offering built-in vehicle-ready I/O, with the capacity to support AirLink Vehicle Telemetry, the MP70 enables remote monitoring of auxiliary devices such as light bars, sirens and gun racks, and can collect OBD-II vehicle telemetry data for engine diagnostics and performance data to monitor vehicle health.

The MP70 offers an integrated mobile events engine to monitor hundreds of router, network, and connected vehicle parameters in real time, and create custom alerts, event triggers and reports. Reports and alerts are synchronized with third party server platforms or AirLink network management software to enable centralized and remote management of critical events.

Utilizing next generation GNSS location technology that supports 48 satellites from 4 different satellite constellations (GPS, GLONASS, Galileo, Beidou), the MP70 provides fast, reliable and precise vehicle location, even in the most challenging environments. The MP70 contains an Inertial Navigation System[1] that allows it to track without satellites, using dead reckoning algorithms integrated with the GNSS. The Inertial Navigation System continues to provide positioning information when the GNSS is unable to acquire satellites. This enables tracking through urban canyons, tunnels and underground parking.

Location information can be streamed from the GNSS locally over the serial port to connected in-vehicle driver navigation and dispatch systems, and remotely over NMEA, TAIP, RAP and XORA protocols for integration with 3rd party applications.

1 activated in an upcoming software release

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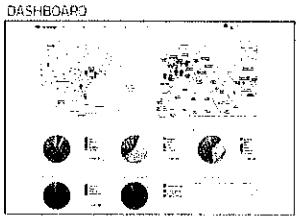
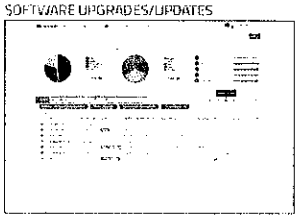
AirLink MP70 High Performance Vehicle Router

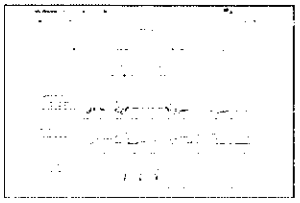
DASHBOARD



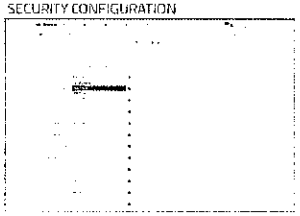
SOFTWARE UPGRADES/UPDATES



MONITOR CONNECTIVITY



SECURITY CONFIGURATION



PURPOSE BUILT FOR VEHICLES

The MP70 provides superior reliability and continuous operation in harsh environments. It will survive extreme transient surges, and maintain continuous power during 5V brownouts and spikes from -600 VDC to 200 VDC.

The AirLink MP70 safeguards vehicle operation by using built-in battery charge protection to monitor ignition state and battery voltage and, with a class leading power supply which meets and exceeds the requirements for E-Mark, ISO 7637-2 and SAEJ1455, the MP70 requires no additional power conditioning.

Developed with industrial grade components, the AirLink MP70 has a customized die cast aluminum housing to manage the thermal output from its high performance LTE-Advanced and Wi-Fi radios. The MP70 is designed to meet IP64 for resistance to dust and water ingress, and is tested to meet and exceed the MIL-STD-810G specifications for shock, vibration, temperature and humidity.

SECURE, INTELLIGENT COMMUNICATIONS

The AirLink MP70 provides consolidated data security for all field applications and mobile assets in the vehicle area network (VAN).

Offering up to 5 concurrent VPN sessions, the AirLink MP70 enables secure communications to multiple back-end systems, and provides remote authentication management to allow the implementation of enterprise-grade systems to control access to devices in the field. Secure signing and authentication of software images offers end-to-end protection of the software upgrade process, protecting the MP70 against unwanted malware.

NETWORK MANAGEMENT

Network Management solutions for the MP70 allow over-the-air registration, configuration and software updates for all AirLink gateways and routers, and can be deployed either as a hosted cloud-based service, or as a licensed software platform in the enterprise data center. Both options provide a centralized and remote view of an entire vehicle fleet and enable simplified management, control and monitoring of connected MP70s, field applications and mobile assets.

AirLink Management Service (ALMS) is a secure, centralized cloud-based service that remotely monitors and manages signal strength, network technology and location. ALMS provides dashboards with up-to-date views of an entire deployment, and custom alerts to monitor and report critical events, to increase efficiency and prevent downtime.

oMM Management System (oMM) is a licensed, unified software platform which can be deployed in the enterprise data center, and provides a consolidated network view of an entire fleet, using a virtual dashboard to monitor, report, manage, and troubleshoot all mobile resources as required.

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AirLink MP70 High Performance Vehicle Router

FEATURE	BENEFIT
LTE-Advanced (Carrier Aggregation) Wide Area Network (WAN) supporting up to 300 Mbps downlink speed	High speed, concurrent connectivity for multiple wired and wireless devices and applications in and around the vehicle
State-of-the-art LTE coverage spanning 21 LTE frequency bands worldwide	Connectivity to LTE networks worldwide
Two product variants: one product variant for all major North American and European network operators, and one product variant for all major Asia Pacific network operators	Reduces requirements to carry multiple product variants in inventory
Automatic radio configuration based on the SIM	Increases flexibility and simplifies inventory management
Dual-SIM functionality to enable automatic failover between SIMs (Canada/EMEA/APAC)	Superior network connectivity and cost optimization when roaming
4-port Gigabit Ethernet and next generation 802.11ac Gigabit Wi-Fi (3 x 3 MIMO) to support up to 1.3 Gbps, up to 128 clients, WPA2 Enterprise	Securely connects and consolidates data from multiple high bandwidth field applications and mobile assets in and around the vehicle
High power Wi-Fi provides long range Vehicle Area Network (VAN) and simultaneous AP/Client Mode	Enables all devices to connect to router in and around the vehicle, and data to be transmitted over depot Wi-Fi networks
Support for AirLink Vehicle Telemetry to collect OBD-II vehicle telemetry data and monitor engine diagnostics	Access to critical vehicle health data
Built-in vehicle ready I/O for remote monitoring of auxiliary devices, such as light bars, sirens and gun racks	Advanced awareness of fleet operations
Precision Geo-location via GNSS and Inertial Navigation System[2], allow local data streaming over the serial port and remotely over NMEA, TAIP, RAP, XORA protocols	Superior vehicle location accuracy, even when out of satellite coverage, available to field personnel and dispatch staff, and via 3rd party platforms
Integrated Mobile Events Engine for real time monitoring and alert reporting of multiple devices, networks, and connected vehicle parameters	Remote, real time visibility and insight into the vehicle, connected equipment and mobile workforce
Designed to meet IP64 for resistance to dust and water ingress, and exceeds the MIL-STD-810G specification for shock, vibration, temperature and humidity, and an aluminum chassis for heat dissipation	Superior reliability and uninterrupted operation in harsh vehicle environments
Class-leading power supply with built-in surge protection that exceeds E-Mark, ISO 7637-2 and SAEJ1455 requirements, surviving 5V brownouts and spikes from -600 VDC to 200 VDC	Designed to perform with unpredictable and "noisy" power sources, no external power conditioning is required
Remote monitoring, management and control with Sierra Wireless's Network Management Solutions—deployable in the cloud or in the enterprise data center	Simplified and centralized network and mobile asset management to increase efficiency, prevent downtime and reduce costs
Over twenty years' experience in cellular networking, and over 1.5 million AirLink gateways deployed	Proven track record of providing reliable communications for mission critical applications
Industry leading warranty, support, software updates and advance replacement	Reduces ongoing support costs and total cost of ownership

2 activated in an upcoming software release

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AIRLINK MP70 HIGH PERFORMANCE VEHICLE ROUTER

	Specification
CELLULAR WAN	North America and EMEA Model (Sierra Wireless MC7455) • Carrier Approvals: Verizon, AT&T, Sprint, T-Mobile USA, Rogers Other major carriers pending • Supported Frequency Bands* - LTE: 2100(B1), 1900(B2), 1800(B3), AWS(B4), 850(B5), 2600(B7), 900(B8), 700(B12), 700(B13), 800(B20), 1900(B25), 850(B26), 700(B29), TDD B41 - WCDMA: 2100(B1), 1900(B2), 1800(B3), AWS(B4), 850(B5), 900(B8) • Industry Approvals: FCC, IC, PTCRB, R&TTE, GCF, CE • Automatic Network Operator Switching based upon SIM • Dual SIM Functionality (2FF SIM) APAC Model (Sierra Wireless MC7430) • Carrier Approvals: Telstra • Supported Frequency Bands* - LTE: 2100(B1), 1800(B3), 850(B5), 2600(B7), 900(B8), 850(B18), 850(B19), 1500(B21), 700(B28), TDD Bands 38, 39, 40, 41 - WCDMA: 2100(B1), 850(B5), 800(B6), 900(B8), 1700(B9), 850(B19), TD-SCDMA B39 • Industry Approvals: RCM • Automatic Network Operator Switching based upon SIM • Dual SIM Functionality (2FF SIM)
HOST INTERFACES	Gigabit 4-Port Ethernet RS-232 serial port (DB-9) USB 2.0 Micro-B Connector 6 SMA antenna connectors (cellular, diversity, GNSS, 3x3 Wi-Fi) Active GNSS antenna support
Wi-Fi (Optional)	Dual Band 2.4/5GHz Wi-Fi 802.11 b/g/n/ac with support for 128 clients WPA2 Enterprise High output power 21 dBm (per chan) 3x3 MIMO (Reverse Polarity SMA Connectors) Simultaneous AP/Client Mode (2.4 GHz) WiFi as WAN Mode
INPUT/OUTPUT	Configurable I/O (5 pins total) • 5 Digital Inputs: ON Voltage: 2.7 to 36 VDC • 1 Digital Open Collector Output > sinking 500 mA • 3 Analog Inputs: 0.5-36 VDC • Configurable Pull-ups for dry contact input
LAN (ETHERNET/USB)	DHCP Server IP Passthrough VLAN Host Interface Watchdog PPPoE
SERIAL	TCP/UDP PAD Mode Modbus (ASCII, RTU, Variable) PPP DNP3 Interoperability
NETWORK AND ROUTING	Network Address Translation (NAT) Port Forwarding Host Port Routing NEMO/DMNR VRRP Reliable Static Route Dynamic DNS
VPN	IPsec, GRE, and OpenVPN Client Up to 5 concurrent tunnels Split Tunnel Dead Peer Detection (DPD) Remote Subnets
DIMENSIONS	190mm x 49mm x 105mm (112mm including connectors) 7.5in x 1.75 in x 4.1 in (4.4 in including connectors) Weight: 0.76kg / 1.68 lb

*For carrier specific band support please refer to the hardware user guide.

	Specification
SECURITY	Remote Authentication (LDAP, RADIUS, TACACS+) DMZ Inbound and Outbound Port filtering Inbound and Outbound Trusted IP MAC Address Filtering PCI compatible Secure Firmware Update
SATELLITE NAVIGATION (GNSS)	Dedicated GNSS Receiver supporting GPS, GLONASS, BeiDou, Galileo Tracking Sensitivity: -162 dBm Reports: NMEA 0183 V3.0, TAIP, RAP, XORA Multiple Redundant Servers Reliable Store and Forward Inertial Navigation Sensors (Accelerometer and Gyro)
NETWORK MANAGEMENT	Secure mobile network & asset management application available in the cloud or licensed platform in the enterprise data center Fleet wide firmware upgrade delivery Router configuration and template management Router staging over the air and local Ethernet connection Over-the-air software and radio module firmware updates Device Configuration Templates Configurable monitoring and alerting Remote provisioning and airtime activation (where applicable)
EVENTS ENGINE	Custom event triggers and reports Configurable interface, no programming Event Types: Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature and Voltage Report Types: RAP, SMS, Email, SNMP Trap, TCP (Binary, XML, CSV) Event Actions: Drive Relay Output
ROUTER MANAGEMENT INTERFACES	Local web user interface AT Command Line Interface (Telnet/SSH/Serial) SNMP SMS Commands
APPLICATION FRAMEWORK	ALEOS Application Framework (AAF) LUA Scripting Language
POWER	Input Voltage: 7 to 36 VDC Low voltage disconnect to prevent battery drain Built-in protection against voltage transients including 5 VDC engine cranking and +200 VDC load dump Ignition Sense with time delay shutdown
ENVIRONMENTAL	Operating Temperature: -30°C to +70°C / -22°F to +158°F Storage Temperature: -40°C to +85°C / -40°F to +185°F Humidity: 95% RH @ 60°C Military Spec MIL-STD-810G conformance to shock, vibration, thermal shock, and humidity IP64 rated ingress protection
INDUSTRY CERTIFICATIONS	Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950 Vehicle Usage: E-Mark (UN ECE Regulation 10.04), ISO7637-2, SAE J1455 (Shock, Vibration, Electrical) Environmental: RoHS2, REACH, WEEE
SUPPORT AND WARRANTY	3-year standard warranty; Optional 2-year warranty extension Unrestricted device software upgrades 1-day Accelerated Hardware Replacement available through participating resellers
PART NUMBERS	NA & EMEA: 1102709 Non Wi-Fi / 1102743 Wi-Fi APAC: 1102713 Non Wi-Fi / 1102745 Wi-Fi In the box: DC Power Cable and Quick Start Guide

About Sierra Wireless

Sierra Wireless is building the Internet of Things with intelligent wireless solutions that empower organizations to innovate in the connected world. We offer the industry's most comprehensive portfolio of 2G, 3G, and 4G embedded modules and gateways, seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster. Sierra Wireless has more than 950 employees globally and operates R&D centers in North America, Europe, and Asia.

For more information, visit www.sierrawireless.com.

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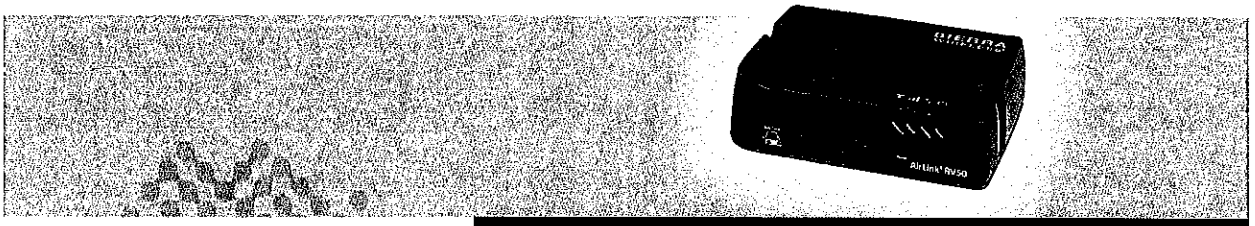
AirLink RV50 Datasheet



AirLink® RV50 Industrial LTE Gateway

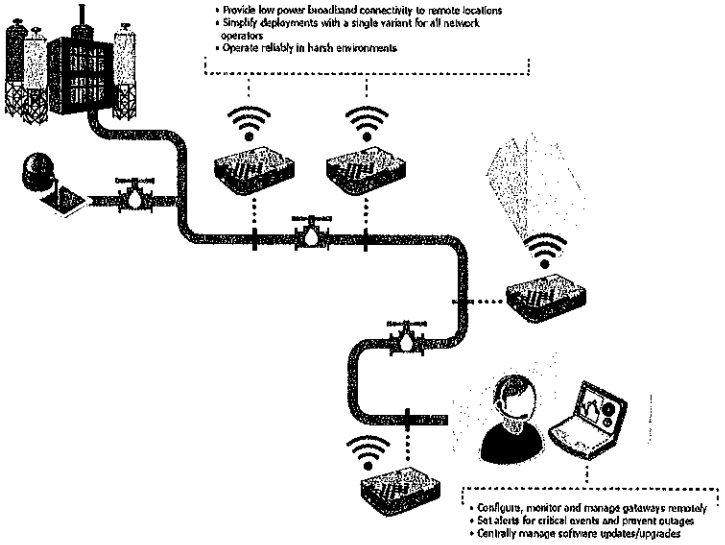
FEATURES

- LTE performance at 2G power consumption (less than 1W in idle mode)
- State-of-the-art LTE coverage spanning 21 LTE frequency bands worldwide
- Two product variants cover the globe
- Fully automatic network operator switching: just insert the SIM
- Provides network connectivity via Ethernet, Serial and USB
- Remote configuration, software update, and monitoring with cloud-based AirLink Management Service (ALMS) or on-premises with AirLink Mobility Manager (AMM)
- Dual-SIM functionality to enable automatic failover between SIMs (CANADA/EMEA/APAC)
- Meets industrial-grade certifications including Class 1 Div 2, MIL-STD-810G, IP64 ingress protection
- Supports up to 5 VPN tunnels for secure cellular communications
- Events Engine for alert reporting to third party server platforms
- Application Framework (AAF) offers real-time onboard data processing; RV50X's dual-core processor provides added performance for advanced edge computing applications.
- GPS for tracking equipment

Industrial Grade, LTE-Advanced Performance, Low Power

The AirLink RV50 is the industry's lowest power and most rugged LTE gateway. Simple to install and easy to manage, this industrial-grade gateway is designed to connect critical assets and infrastructure. Ideal for energy, utilities and smart-city applications, the RV50 provides real-time remote connectivity for SCADA, distribution management systems and metering.

With the lowest power consumption available on the market, the RV50 dramatically reduces infrastructure costs when running on battery or solar power. The RV50X variant supports an extensive range of LTE bands worldwide, and its LTE-Advanced capabilities deliver up to 300 Mbps downlink speeds. For deployments in areas with limited LTE coverage, the RV50 provides fallback to 2G and 3G networks. Furthermore, the RV50 provides programmability to enable edge computing applications, using the ALEOS Application Framework (AAF).



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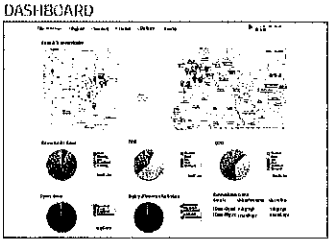
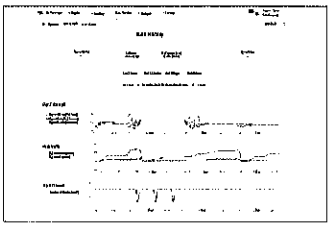
AirLink Raven RV50 Industrial LTE Gateway Datasheet

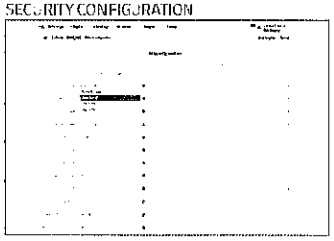
DASHBOARD



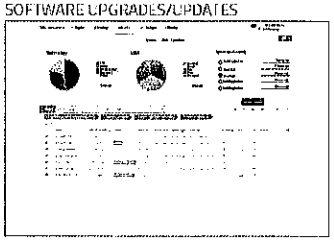
MONITOR CONNECTIVITY



SECURITY CONFIGURATION



SOFTWARE UPGRADES/UPDATES



RUGGED DESIGN FOR DEMANDING ENVIRONMENTS

The RV50 is designed to withstand harsh industrial conditions, and is capable of surviving 5 V brownouts and spikes from -600 VDC to 200 VDC.

Certified as Class I Div 2, it is ideal for hazardous environments. The die cast aluminum housing is sealed to meet IP64 for resistance to dust and water ingress.

The RV50 is tested to meet and exceed the MIL-STD-810G specification for shock, vibration, temperature and humidity. The built-in power supply protection make it suitable for harsh electrical environments such as compressors, generators, and excavators.

ULTRA-LOW POWER CONSUMPTION

The RV50 offers best-in-class power consumption combined with LTE performance, and is optimized for battery and solar applications. It is the industry's only LTE gateway with 2G power consumption, operating at 900 mW in idle mode. For 2G and 3G deployments migrating to LTE, the RV50 will work with existing power infrastructure, eliminating the need to invest in replacement solar panels or batteries. Standby Mode provides additional protection for batteries by dropping power consumption to 53 mW, and can be triggered by timers, low voltage detection or I/O.

SIMPLIFIED DEPLOYMENT

The RV50 automatically configures the radio based on the SIM, which provides versatility and simplicity when changing operator networks.

Ideal for global deployments, the RV50X provides worldwide LTE coverage with just two product variants; one for North America and EMEA, and one for Asia-Pacific.

BEST-IN-CLASS REMOTE MANAGEMENT

Network Management solutions for the RV50 allow over-the-air registration, configuration and software updates, and can be deployed either as a cloud-based service, or as a licensed software platform in the enterprise data center. Both options provide a centralized and remote view of an entire fleet and enable simplified management, control and monitoring of connected RV50s and critical infrastructure.

AirLink Management Service (ALMS) is a secure, centralized cloud-based service that remotely monitors and manages signal strength, network technology and location. ALMS provides dashboards with up-to-date views of an entire deployment, and custom alerts to monitor and report critical events, to increase efficiency and prevent downtime.

AirLink Mobility Manager (AMM) is a licensed, unified software platform which can

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AirLink RV50 Industrial LTE Gateway Datasheet

BENEFITS

- Provides LTE broadband connectivity to remote locations and in harsh environments
- Ultra-low power consumption, ideal for solar or battery powered installations
- Maximizes longevity of deployed equipment and protects investments with LTE
- Improves ROI by supporting multiple network operators without additional hardware costs
- Powerful remote management solutions
- Built-in, class-leading voltage transient protection provides superior reliability and continuous operation
- Proven reliability and over 2 million AirLink routers and gateways deployed
- Industry leading warranty includes support, software updates and advance replacement

be deployed in the enterprise data center, and provides a consolidated network view of an entire fleet, using a virtual dashboard to monitor, report, manage, and troubleshoot all mobile resources as required.

INSTANT INTEGRATION

The RV50 is designed to install directly into existing infrastructure. Offering both serial and Ethernet connectivity, it can be used to connect devices like PLCs and RTUs, and transmit a wide variety of protocols like Modbus/DNP3 with ease. RV50 can also be integrated directly into existing management systems via SNMP.

INTELLIGENCE AT THE EDGE

The RV50 provides an application framework which allows customers to apply intelligence at the edge of the network. The RV50X offers a dual core processor which enhances the performance of edge applications.

SECURE INDUSTRIAL COMMUNICATIONS

The RV50 supports secure communications to multiple back-end systems by providing up to five concurrent VPN sessions. Remote authentication management allows enterprise-grade systems to manage access to devices in the field. Port filtering and trusted IP protect the devices connected to RV50s from unwanted access. Secure signing and authentication of software images offers end-to-end protection of the software upgrade process, protecting the RV50 against unwanted malware.

	RV50		RV50X	
	North America	International	North America & EMEA	Asia Pacific
LTE CATEGORY	Cat 3		Cat 6	
Peak D/L	(Up to 100 Mbps DL)		(Up to 300 Mbps DL)	
Peak U/L	(Up to 50 Mbps UL)		(Up to 50 Mbps UL)	
4G LTE Frequency Bands*	1900(B2), AWS(B4), 850(B5), 700(B13), 700(B17), 1900(B25)	2100(B1), 1800(B3), 2600(B7), 900(B8), 800(B20)	2100(B1), 1900(B2), 1800(B3), AWS(B4), 850(B5), 2600(B7), 900(B8), 700(B12), 700(B13), 800(B20), 1900(B25), 850(B26), 700(B29), TDD B41	2100(B1), 1800(B3), 850(B5), 2600(B7), 900(B8), 850(B18), 850(B19), 1500(B21), 700(B28), TDD 38, TDD 39, TDD 40, TDD 41
3G HSPA/HSPA+ Frequency Bands*	2100(B1), 1900(B2), AWS(B4), 850(B5), 900(B8)	2100(B1), 1900(B2), 850(B5), 900(B8)	2100(B1), 1900(B2), 1800(B3), AWS(B4), 850(B5), 900(B8)	2100(B1), 850(B5), 800(B6), 900(B8), 1700(B9), 850(B19),
3G TD-SCDMA Frequency Bands*				B39
2G CDMA 1XRTT/EV-DO REV 1 Frequency Bands*	2100(B1), 1900(B2), AWS(B4), 850(B5), 900(B8)			
2G EDGE/GSM/GPRS Frequency Bands*	Quad-band	Quad-band		
APPROVALS				
Regulary	FCC, IC, PTCRB	CE, RCM, GCF, R&TTE	FCC, IC, PTCRB, R&TTE, GCF, CE	RCM, JRF/JPA
Carrier	Verizon, AT&T, Sprint, T-Mobile USA, US Cellular, Rogers, Bell, Telus		Verizon, AT&T, T-Mobile USA Other Major carriers pending	Telstra

For carrier specific band support please refer to the hardware user guide.

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Sierra Wireless
AIRLINK RV50

	Specification
HOST INTERFACES	10/100/1000 Ethernet (RJ45) RS-232 serial port (DB-9) USB 2.0 Micro-B Connector 3 SMA antenna connectors (primary, diversity, GPS) Active GPS antenna support
INPUT/OUTPUT	Configurable I/O pin on power connector • Digital Input ON Voltage: 2.7 to 36 VDC • Configurable Pull-up for dry contact input • Digital Open Collector Output > sinking 500 mA • Analog Input: 0.5-36 VDC
LAN (ETHERNET/USB)	DNS, DNS Proxy DHCP Server IP Passthrough VLAN Host Interface Watchdog PPPoE
SERIAL	TCP/UDP PAD Mode Modbus (ASCII, RTU, Variable) PPP DNP3 Interoperability
NETWORK AND ROUTING	Network Address Translation (NAT) Port Forwarding Host Port Routing NEMO/DMNR VRRP Reliable Static Route Dynamic DNS
VPN	IPsec, GRE, and OpenVPN Client Up to 5 concurrent tunnels Split Tunnel Dead Peer Detection (DPD) Multiple Subnets
EVENTS ENGINE	Custom event triggers and reports Configurable interface, no programming Event Types: Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature and Voltage Report Types: RAP, SMS, Email, SNMP Trap, TCP (Binary, XML, CSV) Event Actions: Drive Relay Output
DIMENSIONS	119 mm x 34 mm x 85 mm (94 mm including connectors) 4.69 in x 1.34 in x 3.35 in (3.70 in including connectors)
SECURITY	Remote Authentication (LDAP, RADIUS, TACACS+) DMZ Inbound and Outbound Port filtering Inbound and Outbound Trusted IP MAC Address Filtering PCI compatible
APPLICATION FRAMEWORK	ALEOS Application Framework (AAF) LUA Scripting Language Eclipse-based IDE Integrated with AirVantage® Dual-Core Processing (RV50X)

	Specification
SATELLITE NAVIGATION (GPS)	12 Channel GPS and GLONASS Receiver Acquisition Time: 1 s Hot Start Accuracy: <2 m (50%), <5 m (90%) Tracking Sensitivity: -145 dBm Reports: NMEA 0183 V3.0, TAIP, RAP, XORA Multiple Redundant Servers Reliable Store and Forward
NETWORK MANAGEMENT	Secure network management applications available in the cloud or licensed platform in the enterprise data center Fleet wide firmware upgrade delivery Router configuration and template management Router staging over the air and local Ethernet connection Over-the-air software and radio module firmware updates Device Configuration Templates Configurable monitoring and alerting Remote provisioning and airtime activation (where applicable)
GATEWAY MANAGEMENT INTERFACES	ALMS Local web user interface AT Command Line Interface (Telnet/SSH/Serial) SMS Commands SNMP
MANAGEMENT SYSTEM ACCESS/SECURITY	Remote authentication (LDAP, RADIUS and TACACS+)
POWER	Input Voltage: 7 to 36 VDC LTE Idle Power: 900mW (75 mA @ 12VDC) Standby Mode Power: 53 mW (4.4 mA @ 12 VDC) triggered on low voltage, I/O or periodic timer Low voltage disconnect to prevent battery drain Built-in protection against voltage transients including 5 VDC engine cranking and +200 VDC load dump Ignition Sense with time delay shutdown Configurable features and ports to optimize power consumption
ENVIRONMENTAL	Operating Temperature: -40°C to +70°C / -40°F to +158°F Storage Temperature: -40°C to +85°C / -40°F to +185°F Humidity: 90% RH @ 60°C Military Spec MIL-STD-810G conformance to shock, vibration, thermal shock, and humidity IP64 rated ingress protection
INDUSTRY CERTIFICATIONS	Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950 Vehicle Usage: E-Mark (UN ECE Regulation 10.04), ISO7637-2, SAE J1455 (Shock & Vibration) Hazardous Environments: Class 1 Div 2 Environmental: RoHS, REACH, WEEE
SUPPORT AND WARRANTY	3-year standard warranty Optional 2-year warranty extension Unrestricted device software upgrades 1-day Accelerated Hardware Replacement available through participating resellers

About Sierra Wireless
Sierra Wireless is building the Internet of Things with intelligent wireless solutions that empower organizations to innovate in the connected world. We offer the industry's most comprehensive portfolio of 2G, 3G, and 4G embedded modules and gateways, seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster.

For more information, visit www.sierrawireless.com.

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SIERRA WIRELESS

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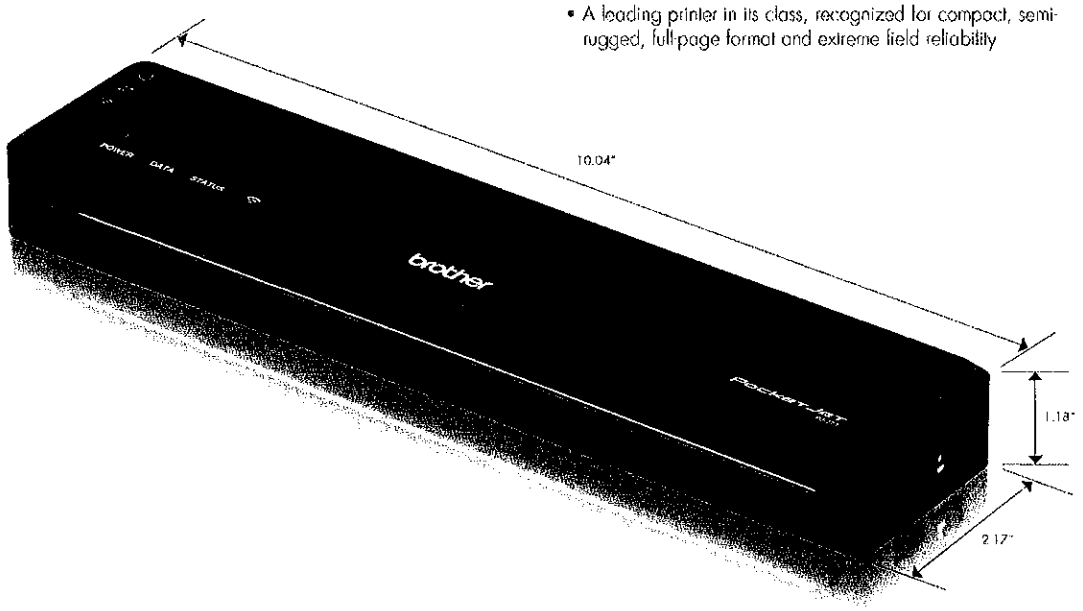
PocketJet® 7 Series

Full-Page Mobile Printing Solutions

Major new advances in printing performance, wireless connectivity, battery life, and OS compatibility.

- Out-of-the-box ready to support full-page mobile printing from the most popular computer and mobile devices
- Compact enough to fit into a briefcase or handbag, and versatile enough to mount nearly anywhere in a field service, transport or public safety vehicle
- Freedom Architecture™ design adapts to diverse range of in-field and mobile use scenarios and wide range of operating systems
- A leading printer in its class, recognized for compact, semi-rugged, full-page format and extreme field reliability

PC EDITORS' CHOICE



Public Safety
Transportation & Logistics
Pest Management
Mobile Professional
Home Healthcare
Route Accounting/DSD
Field Services Industries

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PocketJet 7 Series Technical Specifications

Models	PJ-722	PJ-723	PJ-762	PJ-763	PJ-763MFi	PJ-773
Maximum Paper Width	8.5" (215.9mm)					
Maximum Printing Speed	8 ppm (pages per minute)					
Printing Method	Direct Thermal Technology					
Printer Resolution	203 x 200	300 x 300	203 x 200	300 x 300	300 x 300	300 x 300
Media (Direct Thermal)	Cut Sheet, Continuous Roll, Perforated Roll					
Media Sizes	Letter, legal, A4, continuous, custom sizes and pre-printed media are available upon request					
Interfaces	USB 2.0	USB 2.0	USB 2.0; Bluetooth Ver.2.1+EDR SPP, BIP, OPP and HCRP supported	USB 2.0; Bluetooth Ver.2.1+EDR SPP, BIP, OPP and HCRP supported	USB 2.0; Bluetooth Ver.2.1+EDR SPP, BIP, OPP, HCRP and IAP(MFi) Supported	USB 2.0; Wi-Fi 802.11b/g/n (Infrastructure Mode) 802.11b/g/n (Adhoc Mode) 802.11g/n (Wireless direct)
Wi-Fi Security (Adhoc)	NA	NA	NA	NA	NA	Open System (None/WEP)
Wi-Fi Security	NA	NA	NA	NA	NA	Infrastructure <Personal Mode> Open System (None/WEP) Public Key Authentication (WEP) WPA-PSK/WPA2-PSK (TKIP/AES) <Enterprise Mode> LEAP (CKIP) EAP-FAST (TKIP/AES) PEAP (TKIP/AES) EAP-TTLS (TKIP/AES) EAP-TLS (TKIP/AES); Direct WPA2-PSK (AES)
External Dimensions	10.04" L x 2.17" W x 1.18" H					
Power Options*	Li-Ion Battery; AC Adapter; DC Vehicle Adapter					
Battery Yield: Li-ion	600 pages (from 100% charge)					

Compatibility

Operating Systems Supported	Windows® Vista® / 7/ 8/ 8.1/ 10; Windows® Server 2008/2008 R2; Windows® Server 2012/2012 R2; Mac OS® X v10.8/ 10.9/ 10.10; Linux Red Hat and Debian					
Windows® Mobile	No	No	Bluetooth	Bluetooth	Bluetooth	Wi-Fi
Android™			Bluetooth or USB	Bluetooth or USB	Bluetooth or USB	Wi-Fi or USB
iOS®	No	No	No	No	Bluetooth	Wi-Fi
Apple AirPrint™	No	No	No	No	No	Wi-Fi (iOS®/Mac®) or USB (Mac®)
Google Cloud Print™	No	No	No	No	No	Wi-Fi
Mopria™	No	No	No	No	No	Wi-Fi

Paper Supplies and Accessories

Standard, Synthetic, Premium, Fast Dry Paper and Custom paper for all your applications

Accessories, carrying cases, mounting and power options for multiple configurations

Preconfigured kits available

Workforce Kit

Ideal for mobile workers who use the printer on one charge and recharge daily upon return to home or office.

Vehicle Kit

For a vehicle operator who will be mounting the printer inside the vehicle, and powering it primarily from the vehicle.

Developer Kit

A specialized kit for developers, including a PocketJet® 7 printer, Brother™ SDKs, configuration software, and additional documentation is also available.

Basic Kit

Designed for the mobile professional who prints from a laptop or PC.

BROTHER MOBILE SOLUTIONS
For more information, call 1-800-543-6144,
www.PocketJet7.com

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RuggedJet™ 3

Label and Receipt

Mobile Printing Solutions

The RuggedJet™ 3 Series of mobile label and receipt printers are helping to simplify mobility by fast mobile printing of labels and receipts from 1" to 3" wide with the first model in its class to feature a color LCD display with intuitive, interactive menus and graphical instructions and icons. With both Wi-Fi® and Bluetooth® technology interfaces, and Apple AirPrint™ compatibility, it's easy to wirelessly print labels, tags, and receipts from popular devices based on iOS®, Android™ or Windows® Mobile operating systems. They are designed rugged with 6 ft. drop to concrete & IP54 certification, to deliver cost effective, high performance mobile printing with a reassuring two year "bumper-to-bumper" warranty▼

Color LCD
With interactive menus on the RJ-3150

*RJ-3150 only; RJ-3050 has a one-year warranty

IP54 Resistant to Dust and Water

Bluetooth® & Wi-Fi®

2 Year "Bumper to Bumper" Warranty▼

Color Display

RuggedJet™ 3 Series Data Sheet

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Technical Specifications

Model	RJ-3050	RJ-3150
Printing Technology	Direct thermal	
Print Resolution	203 dpi	
Maximum Printing Speed	5 ips (127mm/sec.)	
Dimensions (W x H x D)	4.4" x 3.10" x 7.32" (112mm x 80mm x 186mm)	4.5" x 3.23" x 7.44" (116mm x 82mm x 189mm)
Weight with Battery	1.34 lbs. (610 g.)	1.43 lbs. (650 g.)
User Interface	Large buttons and LEDs	Large color LCD with intuitive, interactive menus
Memory	RAM:32MB / Flash:32MB	
Print Width – Max	2.83" (72mm)	
Roll Width – Max/Min	3.14" (80 mm) / 1.0" (25.4 mm)	
Maximum Roll Diameter	2.6" (66 mm)	
Brother Genuine Media	Receipts, Labels & tags w/black mark	Labels, Tags & Receipts
Sealing Certification	IP54	
Drop Protection	1.2m (4ft.) (Under Brother™ standard environment)	1.8m (6ft.) (Under Brother™ standard environment)
Barcodes	Linear: CODE 39, ITF(I-2/5), EAN-8, EAN-13, 2 or 5 digit extensions, UPC-A, UPC-E, 2 or 5 digit extensions, CODABAR (NW-7), CODE 128, GS1-128 (UCC/EAN 128), CODE93, POSTNET, MSI, GS1 Databar (RSS14, RSS14 Stacked, RSS14 Truncation, RSS14 Stacked Omnidirectional, RSS Limited, RSS Expanded, RSS Expanded Stacked) 2-Dimensional: QR Code (model 1, model 2, micro QR), Maxicode, PDF417 (Standard, Truncate, MicroPDF417), Data Matrix (ECC200 Square, ECC200 Rectangular), Aztec	
OS Support	Windows® XP, Windows Vista®, Windows® 7, Windows® 8, 8.1, Windows® Server 2003, 2008/R2, 2012/R2, Apple AirPrint™, SDK's for Android™ 2.2 & higher, IOS® 5 and later, Windows Mobile	
Printer Languages	BPL (P-touch® Template 2.0), Raster, ESC/P	
Emulations	ZPL II®, CPCL	
Software/Utilities	P-touch® Editor 5.0, P-touch® Transfer Manager 2.1, BRAdmin Light, BRAdmin Pro	
Interface	Dual radio – Wi-Fi® (802.11b/g/n) and Bluetooth® technology interfaces	
WLAN Security	AdHoc mode: Open system (None/WEP) Infrastructure mode: Open system (None/WEP64/WEP128), Common key authentication (WEP), WPA/WPA2-PSK (TKIP+AES), LEAP (CKIP), EAP-FAST (TKIP/AES), PEAP (TKIP/AES) *3, EAP-TLS (TKIP/AES), EAP-TTLS (TKIP/AES) Wireless direct mode: WPA2-PSK (AES)	
Resident Fonts	5 BMP: Letter Gothic Bold 8 fonts (9,11,15,18,21,26,28,56dot), Helsinki: 3 fonts (15,21,28dot), Symbol: 1 font (24dot), OCR-A: 1font (21dot), OCR-B: 1font (28dot) & 3 Outline fonts: Letter Gothic Regular, Helsinki, Utah Condensed Bold	
Battery Life	500 charge cycles (50% battery capacity assurance)	
Charging Time	Less than 3 hours	
Media Sensors	Black Mark (Reflective)	Gap/Bar (Transmissive/Reflective)
Operating Temperature	-10°C to +50°C	
USB Host	Not Available	Type A
Options/Accessories*	Shoulder strap, rechargeable interchangeable Li-ion battery, printer charging cradle, battery charger, AC adapter, DC vehicle adaptor	
Warranty	1-year "bumper-to-bumper" warranty▼	2-year "bumper-to-bumper" warranty▼

*Requires additional purchase. ▼See limited warranty for details. For warranty information, ask your Brother Mobile Solutions, Inc. sales representative or visit www.brothermobilesolutions.com. RuggedJet™ Specifications subject to change without notice.

Ask us about our accessories*

Premium Brother™ Papers for the RuggedJet™ 3 Line

RuggedJet™ models accept a variety of premium Brother™ thermal media

Receipt Paper (3" wide)

- Standard (Uncoated) Receipt Paper
- Premium (Topcoated) Receipt Paper
- Weatherproof (Synthetic) Receipt Paper

Label Rolls (Die-cut media)

- 2.25" x 1.25" labels
- 3" x 1.75" labels
- 3" x 2" labels
- 3" x 4" labels
- 3" x 5" labels

BROTHER MOBILE SOLUTIONS, INC.

For more information, call 1-800-543-6144, or visit www.brothermobilesolutions.com

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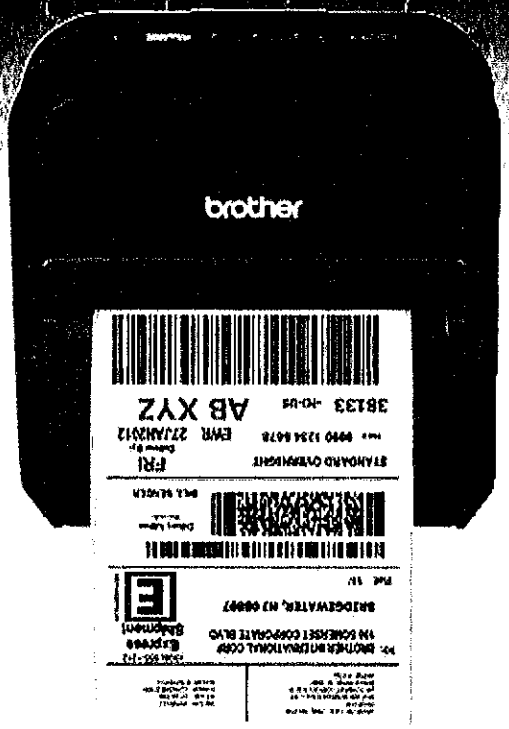
RuggedJet™

Mobile Printers

RECEIPT & LABEL
MOBILE PRINTING SOLUTIONS

Fast...Tough...Does More...
Compared to competitive mobile printers, the Brother™ RuggedJet™ 4" mobile printers offer fast print speeds for higher productivity, they're built tough to meet the needs of mobile professionals, and they provide a better total cost of ownership than non-ruggedized mobile printers.
The RuggedJet™ printer is also versatile – easily printing a wide range of receipts AND labels from 2 to 4 inches wide, and also includes a strong set of drivers and control languages, all to meet the demands of a variety of vertical market applications.



IP54 Resistant to Dust and Water

2 Year "Bumper to Bumper" Warranty*

Carry

Bluetooth and Wi-Fi Options

RuggedJet RJ-4030 (Bluetooth)
RuggedJet RJ-4040 (Wi-Fi)

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RuggedJet™ Series
Data Sheet

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Technical Specifications		
	RJ-4030	RJ-4040
Printing Technology	Direct Thermal	
Print Resolution	203 dpi	
Maximum Printing Speed	5 ips	
Dimensions (W x H x D)	6.88" x 6.98" x 8.06" (162 mm x 176 mm x 77 mm)	
Weight with Battery	1.87 lbs (850 g.)	
User Interface	Three buttons, Four LEDs	
Memory	RAM 32MB / Flash 16MB	
Print Width – Max	4.09" (104 mm)	
Roll Width – Max/Min	4.64" (118 mm) / 2.0" (51 mm)	
Maximum Roll Diameter	2.28" (58 mm)	
Brother Genuine Media	Receipts: Non-coated, Top-coated; Weatherproof / Labels: Top-coated	
Sealing Certification	IP54	
Drop Protection	1.8m (6ft.) (Under Brother™ standard environment)	
Barcodes	Linear: CODE 39, Intlv 2 of 5, EAN-8, EAN-13, UPC-A, UPC-E, UPC and EAN 2 or 5 digit extensions, CODABAR, CODE128, GS1-128 (UCC/EAN 128), Postnet, GS1 Databar (RSS14, RSS14 Stacked, RSS14 Truncation, RSS14 Stacked Omnidirection), GS1 Databar (RSS Limited), GS1 Databar (RSS Expanded, RSS Expanded Stacked) 2-Dimensional: QR Code (model 1, model 2, micro QR), Maxi code, PDF417 (Standard, Truncate) Micro PDF417, Data Matrix (Square, Rectangular)	
OS Support	Drivers: Windows® XP, Windows Vista®, Windows® 7 (RJ-4030/4040) Windows® Server 2003, 2008, 2008 R2 (RJ-4040 only); Apple AirPrint (RJ-4040 only) SDKs: Windows® CE 5.0 & higher, Windows® Mobile 5.0 & higher, Android™ 2.2 & higher; iOS® 4.3 or later PDF printing SDKs for Windows® Mobile 5.0 & higher, and Android™ 2.2 & higher; iOS® 4.3 or later	
Printer Languages	BPL (P-touch® Template 2.0), ESC/P, Raster	
Emulations	ZPL II®, CPCL	
Software/Utilities	Label Design/Database: P-touch® Editor 5.0, Updated P-touch® Transfer Manager 2.1, Network Administration: BRAdmin Light, BRAdmin Pro, Network setting tool	
Interface	USB, Serial (RS-232C), Bluetooth (Ver. 2.0+EDR, Class2)	USB, Serial (RS-232C) Wi-Fi (IEEE 802.11 b/g/n)
WLAN Security	Not Applicable	WEP (64/128), TKIP, AES, WPA-PSK, WPA2-PSK, EAP-FAST, EAP-LEAP
Resident Fonts	14 BMP & 8 Outline fonts	
Battery Life	500 charge cycles (50% battery capacity assurance)	
Charging Time	6 Hours	
Power Options	Rechargeable Li-Ion Battery, AC Adapter, DC Vehicle Adapter	
Options/Accessories*	Rechargeable Li-Ion Battery, Shoulder Strap, Protective Case, Vehicle Mount, 4-Bay Battery Charger, DC Vehicle Adapter, AC Adapter, Serial Cable, Magnetic Card Reader	
Warranty	2-year "bumper-to-bumper" warranty**	

*Requires additional purchase. **See limited warranty for details. For warranty information, ask your Brother Mobile Solutions, Inc. sales representative or visit www.brothermobilesolutions.com
RuggedJet™ Specifications subject to change without notice.

ASK US ABOUT OUR ACCESSORIES*

Premium Brother™ Papers for the RuggedJet™ Line

RuggedJet™ models accept a variety of premium Brother™ thermal media

Receipt Paper (4" wide)

- *Standard Receipt Paper*
- *Premium Receipt Paper*
- *Weatherproof Receipt Paper*

Label Rolls (Die-cut media)

- *4" x 1" Labels*
- *4" x 2" Labels*
- *4" x 3" Labels*
- *4" x 4" Labels*
- *4" x 6" Labels*

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PRODUCT SPEC SHEET
IMZ SERIES MOBILE PRINTERS

ZEBRA

iMZ Series Mobile Printers

A CHOICE OF MOBILE PLATFORMS TO TAKE BUSINESS WHERE IT NEEDS TO GO!

Get the benefits and value associated with using today's smartphone and tablet devices. Zebra's IMZ printers now support Bluetooth® connectivity to Apple® IOS, as well as Android™, Windows® Mobile and BlackBerry® platforms. Print Touch™ simplifies Bluetooth pairing and launches web-based help pages with Near Field Communication (NFC)-enabled devices to provide a trouble-free user experience. Regardless of your choice — a smartphone, tablet or handheld — Zebra's iMZ220™ and iMZ320™ printers are there to support your 2-inch and 3-inch receipt and label* printing business needs.

IMZ220

IMZ320

In addition to supporting the most popular operating systems of today's smartphones and tablets, the IMZ printers' Link-OS® software solutions rapidly configure, monitor and integrate Zebra® printers with your system. Using Profile Manager with AirWatch Connector, you can quickly connect your printer with the AirWatch device-management system via WLAN. Utilize your current infrastructure with one tool for management of your mobile devices.

Building on this experience, you can create printing applications for Apple, Windows®, Android, WinCE®, Windows Mobile and BlackBerry platforms with the Link-OS Software Development Kit (SDK). Backed by a full range of Zebra software, it has never been easier to produce crisp, clear receipts and labels* — whatever the setting.

*Please consult Zebra for type of labels supported.

Meet the iMZ Series

Each small IMZ printer can be a smart assistant for any mobile receipt or label* printing application where quick, simple receipts or labels* are needed on demand. These unobtrusive printers can be worn comfortably for a full shift without interfering with the user's tasks. Easy to operate, they are a great first step for users looking to replace pen-and-paper documentation, preprinted receipts or unreliable mobile printers. Mobile workforces all over the world can benefit from the IMZ Series' compact convenience in business applications — and because it's a Zebra printer, there's no compromise on reliability.

A Sidekick That Won't Weigh You Down

- At ¾ of a pound (0.34 kg) or less, these lightweight printers can be worn a full shift without any burden or bother
- Comfortably wear the printer via belt clip or shoulder strap for unobtrusive and convenient printing

Simple to Operate

- Single push-button media access for simple reloading
- Intuitive LEDs indicate on / off, error and connectivity status

An Economical Alternative

- A simple, reliable and affordable printer alternative
- Each iMZ printer comes standard with USB and Bluetooth connectivity, allowing you to communicate with mobile devices running on IOS, Windows Mobile, Android and BlackBerry operating systems

Palm-sized Printing Power

- High-speed processor and extensive memory for printing complex barcodes, fonts and graphics
- iMZ printers now come with an 802.11n option with dual-band support (2.4 GHz–802.11b/g/n and 5 GHz–802.11a/n) for those overcrowded wireless networks in retail environments where business operations need communication at the less-crowded 5 GHz band
- Secure Bluetooth 2.0, 802.11a/b/g/n (optional) or USB (client) connectivity; Wi-Fi®-certified connectivity

For more information about iMZ Series Mobile Printers, visit www.zebra.com/imz or access our global contact directory at www.zebra.com/contact

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PRODUCT SPEC SHEET
IMZ SERIES MOBILE PRINTERS

Print Receipts on Demand for a Variety of Applications

Retail
Reduce checkout time and lines at the register. Before customers reach the register, scan all their shopping-cart items; then use an IMZ printer to print a barcode receipt with the customer's purchase total for presentation at checkout.

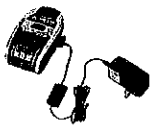
Field Service
With the IMZ printer, offer customers documentation of the quoted estimate for service, parts and warranty. When the work is finished, print a payment receipt to complete the service transaction.

Hospitality
Reduce lines and capture more sales. Accept mobile payment for concessions in the theme park, in the arena, at the tableside, or at other hospitality venues.

Direct Store Delivery
Use an IMZ Series printer at the point of transaction to print a delivery receipt that confirms the actual quantities that transferred possession. Also, print sales order confirmations for future deliveries.

IMZ Series Accessories

AC Adapter



This easy-to-use power adapter comes with each IMZ Series printer. Simply plug the AC adapter into the printer and charge between uses!

Protective Silicone Skins

These optional silicone skins add a layer of protection and improve the handling of your IMZ Series printer.

4-Bay Power Station

Ideal for users who prefer to "dock and go." At the end of your shift, simply slide the IMZ220 or IMZ320 printer into this power station to recharge it.

Durability-enhancing Case

By adding an extra layer of protection with this nylon carrying case, your IMZ Series printer will be well prepared for harsh conditions.

Vehicle Adapter

This lighter adapter allows you to charge your IMZ Series mobile printer from your vehicle.

Shoulder Strap

To add hands-free mobility, an optional shoulder strap is available as an alternative to the belt clip.

Genuine Zebra Supplies
Ensure high-quality, crisp images and text — and that your receipt, label* and documents remain readable and intact for their entire life — by choosing genuine Zebra supplies.

Zebra offers
Both in-stock and custom-made receipt paper and labels*.

Materials that:

- Are tested and approved by the Zebra Supplies Research and Development Department.
- Meet your application's durability, image quality and archival requirements, as well as your budget.
- Can be custom pre-printed with your company logo, instructions, terms and conditions and other information, allowing you to maximize the functionality of your receipts and documents.

*Please consult Zebra for type of labels supported.

Zebra OneCare Services
Reduce the cost of printer downtime due to lost productivity and unbudgeted repair costs by selecting a Zebra OneCare service agreement.

Zebra OneCare service agreements allow you to:

- Plan and budget annual service needs.
- Reduce the soft costs associated with printers that are down and need repair, and increase uptime.
- Choose the service option that is right for your organization.

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PRODUCT SPEC SHEET
IMZ SERIES MOBILE PRINTERS

iMZ Series Specifications

PRINTER NAME

IMZ220
IMZ320

STANDARD FEATURES

- Direct thermal printing of barcodes, text and graphics
- 203 dpi/8 dots per mm resolution
- Print speed: Up to 4"/102 mm per second
- CPCL and ZPL® programming languages
- Resident fixed and scalable fonts
- 400MHz 32-bit ARM® processor with 128 MB RAM
- 128 MB Flash (16 MB user available) supports downloadable programs, receipt formats, fonts and graphics
- USB port
- 1600 mAhr Li-Ion battery
- Built-in battery charger
- Optical out-of-media sensing using fixed center-position sensor
- Tear bar for easy receipt or label* dispensing
- Supports vertical and horizontal printing
- Printer can be used in any orientation
- Fixed media-roll width
- Clamshell design for easy media loading
- Printer Management: Mirror, SNMP, Web server (with customizable HTML pages), Wavelink Avalanche®
- Four LEDs as user interface indicators
- 4'/1.2 m drop to concrete (multiple times)
- Label odometer
- Bluetooth 2.1
- Security modes 1 – 4
- Bluetooth printing from Apple devices (iOS 5, IOS 6, IOS 7)
- IP42-rated for dust and water resistance (IP54 with durability-enhancing case)
- Print Touch via NFC—One touch to pair and print via Bluetooth
- NTP (Network Time Protocol) support via WI-FI

PRINTER SPECIFICATIONS

Resolution	203 dpi/8 dots per mm
Memory	128 MB RAM; 256 MB Flash (standard)
Maximum Print Width	IMZ220: 1.9"/48 mm IMZ320: 2.9"/72 mm
Maximum Print Speed	Up to 4"/102 mm per second
Media Sensors	Black mark, bar sensor is for top side marks only
Print Length	Maximum: Continuous

MEDIA CHARACTERISTICS

Maximum Media Width	IMZ220: 2.0" (± 0.03")/50.8 mm (± 0.76 mm) IMZ320: 3.0" (± 0.03")/76.2 mm (± 0.76 mm)
Maximum Media Roll Size	1.88"/47.8 mm O.D. on a 0.4"/10.2 mm to 0.75"/19 mm I.D. core
Thickness	2 mil/0.0508 mm to 4 mil/0.1016 mm
Media Types	Direct thermal receipt paper or UV-coated media.

OPERATING CHARACTERISTICS

Environment	Operating Temperature: 14°F to 122°F/-10°C to 50°C Operating Humidity: 10% to 90% non-condensing Storage Temperature: -4°F to 140°F/-20°C to 60°C

OPERATING CHARACTERISTICS (continued)

Agency Approvals	FCC Part 15 and EN 55022 Class B limits; FCC, IC, and European Standards for Bluetooth and 802.11a/b/g/n; TUV and IEC 60950 standard for Safety; NOM, C-Tick, VCCI, S-Mark, PSE, CCC, MII Bluetooth SIG-registered and WI-FI certified

PHYSICAL CHARACTERISTICS

	IMZ220	IMZ320
Length	2.26"/57.4 mm	2.26"/57.4 mm
Width	3.18"/80.77 mm	4.11"/104.4 mm
Height	5.34"/135.6 mm	5.34"/135.6 mm
Weight (w/battery)	0.70 lbs/0.32 kg	0.75 lbs/0.34 kg

COMMUNICATION AND INTERFACE CAPABILITIES

ZebraNet 802.11a/b/g/n radio with support for:

- WEP, TKIP and AES encryption
- WPA and WPA2
- 802.1x (with WEP, WPA or WPA2)
  – EAP-FAST, EAP-TTLS, EAP-TLS, PEAP, LEAP
- 802.11d and 802.11i
- Simultaneous Bluetooth 3.0 dual radio
- WI-FI Certification
- Fast roaming using Pairwise Master Key (PMK) caching, Opportunistic Key Caching (OKC), or EAP Fast Session resumption
- Support for Ad Hoc mode

USB 2.0

Bluetooth 2.1 (includes Bluetooth support for iOS devices)

Windows compatibility: (CE .NET, Pocket PC, Windows Mobile 2002, Windows Mobile 2003 SE, Windows XP, 2000 and NT via Zebra Windows printer driver and/or our Mobile SDK controls and other applications)

Android 2.3, 4.0, 4.1

iOS 5, iOS 6, IOS 7

Dual radio — 802.11a/b/g/n & Bluetooth 3.0

VALIDATION TESTING

The iMZ series printers have been tested with industry-leading applications to verify interoperability and improve overall optimization when with validated terminals. Zebra Independent Software Vendor (ISV) Partners create industry-leading software solutions to solve business problems. Zebra works closely with these ISVs to integrate printing and other capabilities of Zebra products. Zebra-validated applications can be found at www.zebra.com/validation.

SOFTWARE TOOLS

Link-OS Solutions

Document Design — Quickly design a customized print solution using your business data and Zebra's intuitive, plug-and-print design tools.

Device Integration — Zebra offers apps and products designed to help you integrate Zebra devices into your existing systems.

Device Management — Manage your print operations locally and globally with Zebra's suite of device management tools.

Developer Tools — Provides you the tools you need to create your own apps, including documentation, source code, programming languages, templates and more.

FIRMWARE

IMZ printers support CPCL and ZPL programming languages. The ZPL programming language ensures full compatibility with many other Zebra printers. See Technical Specification for more details.

*Please consult Zebra for type of labels supported.

Ideal for These Applications

Manufacturing

- Field sales
- Field service
- Direct store delivery
- Proof of delivery

Retail

- Quick and efficient checkout
- Customer experience

Transportation and Logistics

- Direct store delivery
- Fleet management and maintenance
- Proof of pickup and delivery
- Ticketing
- In-cabin services

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PRODUCT SPEC SHEET
IMZ SERIES MOBILE PRINTERS

iMZ Series Specifications

BARCODE SYMBOLOGIES

Barcode Ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1

Linear Barcodes: Codabar (NW-7), Code 39, Code 93, Code 128, EAN-8, EAN-13, 2 and 5 digit add-on, Interleaved 2-of-5, UCC/EAN 128, UPC-A, UPC-E, 2 and 5 digit add-on

2D Barcodes: Aztec Code, Data Matrix, GS1/DataBar™ (RSS) family, MaxiCode, MicroPDF417, PDF417, QR Code, TLC 39

FONTS AND GRAPHICS

Standard fonts: 25 bitmapped, 1 smooth-scalable (CG Triumvirate™ Bold Condensed)

Optional fonts: Downloadable bitmapped and scalable fonts

International character sets/code pages supported: USA, Germany, France, Sweden, Spain, Norway, Italy, CP850, UK, (Latin 9), Chinese GB18030, BIG 5 (Traditional), Japanese and Korean supported in 16 x 16 and 24 x 24. Thai and others upon request

Supports user-defined fonts and graphics — including custom logos

*Contains UFST® from Agfa Monotype Corporation.

OPTIONS AND ACCESSORIES

Bluetooth 2.1

802.11a/b/g/n

Protective silicone skin

Durability-enhancing case (IP54 rating when using the case)

Shoulder strap

IMZ series 4-bay power station

Vehicle adapter

Linerless printing (with silicone platen roller only) through a Development Services Group request

ZBI 2.x: Powerful programming language that lets printers run standalone applications, connect to peripherals, and much more

PRODUCT WARRANTY

The IMZ Series is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit: www.zebra.com/warranty.

RECOMMENDED SERVICES

The Zebra OneCare Service portfolio of Essential, Select and Premier maximizes the availability and productivity of your devices. Key features include 24/7 technical support, comprehensive coverage, advance replacement and software updates. Optional Visibility Services are available. For more information go to www.zebra.com/zebraonecare.

For optimum print quality and printer performance, use genuine Zebra supplies.

Specifications subject to change without notice.

ZEBRA

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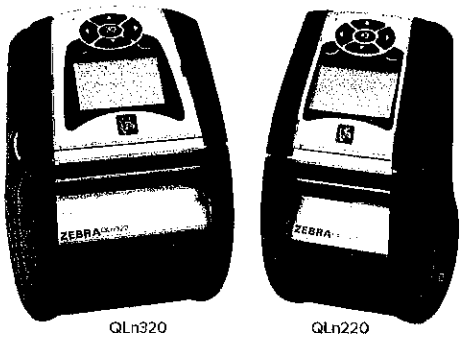
PRODUCT SPEC SHEET
QLN SERIES MOBILE PRINTERS

ZEBRA

QLn Series Mobile Printers

ZEBRA'S QLN FAMILY OF DIRECT THERMAL MOBILE LABEL AND RECEIPT PRINTERS

Zebra's popular QL™ family of direct thermal mobile label and receipt printers has built a highly satisfied following based upon its proven drop-resistant durability; user-friendly, productivity-boosting features; and easy integration. As Zebra's third generation of QL printers, the QLn™ series extends these QL-platform benefits to the "nth" power — whether you choose the QLn220™ for print widths up to 2 inches or the QLn320™ for 3-inch-wide printing.



QLn320 QLn220

The printers' over-molding and tempered-glass display — coupled with their seamless, one-piece design — make them more durable than ever before. These printers can boost your operation's productivity through their larger, sharper, easier-to-navigate display; faster, higher-quality printing; a variety of proactive alerts that help keep working printers in employees' hands; and many convenient charging accessories. And, your IT department will find the QLn printers more intuitive to integrate into existing platforms thanks to Zebra's Link-OS® environment. Other features such as Zebra® Global Printing and improved network performance — including 802.11n wireless LAN capability for more robust and reliable connectivity and throughput — also make integration easier.

With Zebra's Link-OS environment — an innovative operating system combining a powerful Multiplatform Software Development Kit (SDK) and software applications — the QLn printers are easy to integrate, manage and maintain from any location around the globe. Enabled with Print Touch™, these Link-OS printers offer web page launching features using Near Field Communication (NFC), making it easy to access Zebra's extensive knowledge base of how-to videos and product support.

Easier to Integrate, Manage, and Maintain

New features make it easier to integrate the QLn printer into your existing network and manage it from anywhere in the world — saving you IT time and costs.

Easier to Integrate

Move your business forward without the cost or stress of upgrades. Backwards compatibility with QL and QL Plus™ models lets you upgrade to the QLn printer without changing media or label formats. The inclusion of the legacy CPCL programming language also allows mixed networks of QL / QL Plus and QLn products.

Be assured of full compatibility with many other Zebra printers thanks to Zebra's ZPL® programming language. And with ZBI 2.x™, directly connect your printers with legacy host systems and peripheral devices, such as scanners and scales.

Maintain robust and reliable connectivity, even for your largest data transfers, with Wi-Fi®-certified connectivity. Zebra's 802.11n solution has dual-band support (5 GHz and 2.4 GHZ) and is fully compatible with 802.11a and 802.11b/g standards, so you can easily move business operations to the less-crowded 5 GHz band.

The Link-OS tools include:

- Software Development Kit — create printing applications for Windows®, Apple®, Android™, Windows® CE, Windows® Mobile and BlackBerry® platforms.
- Cloud Connect — connect to the Cloud directly and securely, forwarding data from any port.
- Virtual Devices — support multiple programming languages on one printer and integrate Zebra Link-OS printers into existing legacy systems.
- Print Touch — simplify Bluetooth® pairing and launch Web-based help pages with NearField Communication-enabled devices.

Quickly configure single printers with the Zebra Setup Utility and enable global printer management with ZebraNet® Bridge Enterprises.

For more information about the QLn Series Mobile Printers, visit www.zebra.com/qln or access our global contact directory at www.zebra.com/contact

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PRODUCT SPEC SHEET
QLN SERIES MOBILE PRINTERS

Efficiently print and optimize your labels with ZebraDesigner™ Pro for label design and ZebraDesigner drivers for Windows. Print multiple languages on a single label using Zebra's Unicode™ UTF-16-compliant Global Printing Solution.

Work with the confidence that comes with industry-leading solutions. The QLn420 features improved communication with leading handheld terminals that have been tested and verified for maximum interoperability when using the printer with validated terminals. Zebra Independent Software Vendor (ISV) Partners create industry-leading software solutions to solve business problems, and Zebra works closely with these ISVs to integrate printing and other capabilities of Zebra products. Zebra-validated applications can be found at www.zebra.com/validation.

Easier to Manage

Manage all aspects of your networked Link-OS printers from just one screen with Profile Manager. There's no need to switch between applications to get the job done, and you can manage the simple admin console remotely on your PC, tablet or smartphone.

Keep printers in service longer by managing specific, local printer and battery issues remotely over a wired IP network, including Serial and Bluetooth, via a Zebra Ethernet cradle. And with AirWatch™ Connector, you can quickly connect your printer with the AirWatch device-management system via WLAN and Ethernet.

Automatically update printer firmware and configuration from a file server over 802.11 or Ethernet interfaces with the mirror function.

Manage QLn printers using most of the popular third-party management software solutions. The printers also fully support Simple Network Management Protocol (SNMP).

Easier to Maintain

Reduce wasted time and lost productivity with the PowerPrecision+ battery, which indicates the power and health of a printer's battery.

Effortlessly manage your printers and firmware by connecting your devices to your wired Ethernet network and / or cradle.

Easier and More Efficient to Use

Multiple enhancements deliver significant operational advantages over the previous-generation QL and QL Plus series mobile printers.

Easier to Use

The QLn family of printers were designed to optimize business processes through easy operation and mobility — reducing training requirements and increasing worker productivity.

Meet the increasing demand for mobile printing across different operating systems. QLn printers are "Made for iPod® / iPhone® / iPad®" certified and also support Android and Windows devices via Multiplatform SDK apps.

Easily operate the printer using simple-to-navigate controls and a user-friendly interface, which includes a help menu and alert messages.

Quickly access Zebra's extensive knowledge base of how-to videos and product support with Print Touch-enabled Web page launching features.

Conveniently carry and store the printer thanks to a smaller design.

Achieve faster, higher-quality printing with lower power use through Power Smart Print Technology™.

Experience higher performance:

- Faster processing and throughput.
- Increased memory that handles printer's advanced functions and future firmware improvements, and stores more complex fonts, graphics and images.

Increase user and operational efficiencies with convenient charging accessories.

Longer Printer Uptime

Improve operational productivity and reduce costs associated with downtime through fewer printing interruptions.

Monitor and manage the printer remotely using the Windows PC-based AirWatch Connector.

Prevent associates from being stuck printerless in the middle of their work. The printer enables proactive maintenance by displaying printer alert messages, battery charge and health status.

Avoid the downtime and costs of unnecessarily sending the printer away for servicing. Many issues can be remotely diagnosed and resolved (including firmware updates, configuration changes, and adding new fonts or graphics) over an Ethernet connection.

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PRODUCT SPEC SHEET
QLN SERIES MOBILE PRINTERS

Mobile A to Z

From Accessories, to Supplies, to Zebra OneCare Service

Lithium-Ion Charging Accessories

Ethernet Cradle

Single-bay QLn Ethernet Cradle

4-bay QLn Ethernet Cradle

Connect QLn printers to your wired Ethernet network via the QLn Ethernet cradle to enable easy remote management by your IT or operations staff — helping to ensure each printer is operating optimally and ready for use. The Ethernet cradle can communicate over 10 mbps or 100 mbps networks using auto-sense.

The single-bay QLn Ethernet cradle also charges the battery while it is in the printer, while the 4-bay version (with optional wall mount kit) charges four printers at a time. The 4-bay version includes an internal Ethernet switch and second Ethernet port, so you can link and manage four 4-bay QLn Ethernet cradles (a total of 16 printers) from one port.

The printer remains fully functional so you can print while it is in either cradle. The cradle's LED lights indicate DC power and Ethernet-link status.

Remote printer management over your Ethernet allows:

- Battery management for monitoring battery health. Knowing each battery's lifespan stage simplifies central management of your spare-battery pool.
- Firmware management for updating printer firmware, eliminating the need for IT staff to travel to the local user site, or for the printer to be sent back to a central location for updating.
- Print management for updating templates, fonts and graphics in order to print new label formats.
- Device management for updating startup (e.g., config. sys), WML (front panel) or HTML (browser) files to enhance or change configuration and status collection.
- Network management for updating encryption keys or certificate files to maintain the highest level of security.
- Problem resolution and troubleshooting local printer issues that may otherwise require the printer to be sent in for repair.
- Ability to manage Bluetooth printers, which traditionally have been off-network.

What comes with the cradle?
Unit with AC Adapter: Cradle, AC adapter, power cord and document CD including cradle user manual and installation guide.

Cradle Unit: Cradle and document CD including cradle user manual and installation guide (AC adapter can be purchased separately).

AC Adapter

Connect the AC adapter to your QLn and wall outlet to charge the printer's PowerPrecision+ battery while in the printer. The printer can print labels and perform other functions during charging. Shown with printer for reference purposes; printer is not included.

Charger

The smart charger will fully charge a single standalone QLn PowerPrecision+ battery in less than four hours. In addition to indicating battery-charge status, it leverages the battery's PowerPrecision design to indicate battery health, allowing you to more accurately manage your spare battery pool. Specifically, LEDs show whether the battery is "good," has a "diminished capacity," is "past useful life" or is "unusable" and should be replaced. The charger comes with charging base and power cord. Shown with printer for reference purposes; printer is not included.

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PRODUCT SPEC SHEET
QLN SERIES MOBILE PRINTERS

Lithium-Ion Charging Accessories

Extended Capacity PowerPrecision+ Battery

The Extended Capacity PowerPrecision+ battery option provides twice the battery capacity over the standard PowerPrecision+ battery, providing double the power for increased uptime. No need to upgrade your existing QLn printer — you can purchase this as a standalone accessory to use with your current QLn220 or QLn320. Or, order it as a configurable printer option so your printer ships ready to go with this powerful accessory. The choice is yours.

Quad Battery Charger

The quad battery charger is designed to simultaneously charge up to four QLn PowerPrecision+ batteries (removed from the printer) in about three hours. Lights on the charger indicate when individual batteries are 80 percent charged and when fully charged. Note the quad battery charger does not indicate battery health, as provided with the smart charger. Comes with the charging unit, a power supply, and power cord.

Carrying Straps / Cases

Hand Strap: Allows the printer to be carried by hand.

Shoulder Strap: Allows the printer to be carried over the shoulder.

Soft Case: Add an extra layer of protection for harsh environments with a soft case. While in the case, the printer is IP54-rated for resistance to windblown water and dust. Case provides openings for changing the media and batteries and all connectors are accessible. Includes shoulder strap.

Genuine Zebra Supplies
Ensure consistent print quality, reduce downtime and increase productivity in your printing process with genuine Zebra supplies. We manufacture each supplies product with the exact same materials every time so you always get crisp, readable and scannable output without needing to adjust the printer darkness setting between rolls.

Zebra OneCare Service
Increase printer uptime and reduce lost productivity and unbudgeted repair costs by selecting a Zebra OneCare service agreement. A cost-effective means of planning and budgeting your annual maintenance expenditures, your agreement ensures that trained Zebra technicians will bring your printer back to factory specifications. Zebra offers a variety of plans to fit your budget and business needs.

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PRODUCT SPEC SHEET
QLN SERIES MOBILE PRINTERS

QLn Series Specifications

PRINTER NAME
QLn220
QLn320

STANDARD FEATURES

- Apple® IOS, Android, Windows Mobile and BlackBerry® connectivity
- Direct thermal printing of barcodes, text and graphics
- CPCL, EPL™ and ZPL® programming languages
- 256 MB Flash supports downloadable programs, receipt formats, fonts and graphics (64 MB available for user storage)
- 2450 mAh (nominal) 18.1 Wh removable, rechargeable PowerPrecision+ Li-Ion battery
- Built-in battery charger
- Serial and USB ports (both support strain relief)
- Belt clip for unobtrusive and convenient printing (not compatible with extended capacity battery)
- Black mark and gap media sensing using fixed center position sensors
- Easy-to-use peel and present mode
- Label present sensor for issuing labels one at a time
- Tear bar for easy media dispensing
- Center-loading media locking for variable roll widths
- "Clamshell" design for easy media loading
- Management: Mirror, SNMP, Web server, Profile Manager, AirWatch® and Wavelink Avalanche®
- Large, easy-to-read LCD control panel (240 x 128 pixels)
- LCD can be customized using WML (text and icons)
- 5-way navigation buttons, two software defined keys
- Printer alerts on the display, help menus
- Tolerance of multiple drops from 5'/1.52 m to concrete
- IP43 dust- and water-resistance rating (IP54 with soft case)
- 400 MHz 32-bit ARM processor
- XML support
- Supports vertical and horizontal printing
- Printers can be used in any orientation
- QR barcode links to web-based help pages
- Zebra Print Touch simplifies Bluetooth pairing and launches web-based help pages with Near Field Communication (NFC) enabled devices
- Label odometer
- NTP (Network Time Protocol) support via WIFI or Ethernet

PRINTER SPECIFICATIONS

Resolution	203 dpi/8 dots per mm
Memory	128 MB RAM; 256 MB Flash (standard)
Maximum Print Width	QLn220: 1.9"/48 mm QLn320: 2.8"/72 mm
Maximum Print Speed	Up to 4"/102 mm per second
Media Sensors	Black mark and gap media sensing using fixed center position sensors; label present sensor for issuing batch labels one at a time
Print Length	Minimum: 0.5"/12.7 mm Maximum: 32"/813 mm
Power	2450 mAh (nominal) 18.1 Wh removable, rechargeable PowerPrecision+ Li-Ion battery

MEDIA CHARACTERISTICS

Maximum Label and Liner Length	QLn220: 0.5"/12.7 mm to 32"/813 mm QLn320: 0.5"/12.7 mm to 32"/813 mm or continuous
Maximum Media Width	QLn220: 0.63"/16 mm to 2.18"/55.4 mm QLn320: 1.0"/25 mm to 3.125"/79 mm
Maximum Media Roll Size	QLn220: 2.2"/55.9 mm OD on a 0.75"/19 mm or 1.375"/34.9 mm QLn320: 2.6"/66 mm OD on a 0.75"/19 mm or 1.375"/34.9 mm
Thickness	2.3 mil to 5.5 mil tag stock and 6.5 mil label stock
Media Types	Die-cut labels and tags, linerless labels, receipt paper, black bar and gap sensing

OPERATING CHARACTERISTICS

Environment	Operating Temperature: 32°F to 122°F/0°C to 50°C Operating Humidity: 10% to 90% non-condensing Storage/Transportation Temperature: -13°F to 158°F/-25°C to 65°C Storage Humidity: 10% to 90% non-condensing
Agency Approvals	Emissions: FCC Part 15, Subpart B, EN55022 Class-B, EN60950, EN55024 and VCCI class B Susceptibility: EN55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, and EN61000-4-5 Safety: CE, UL, TUV, CSA

PHYSICAL CHARACTERISTICS

	QLn220	QLn320
Length	6.5"/165 mm	6.8"/173 mm
Width	3.5"/89 mm	4.6"/117 mm
Height	2.75"/70 mm	3.3"/84 mm
Weight (w/battery)	1.25 lbs/0.57 kg	1.6 lbs/0.73 kg

Note: The Extended Capacity Li-Ion smart battery option adds 0.20 lbs/0.09 kg to the weight and 0.6"/16 mm to the height of either QLn series printer.

COMMUNICATION AND INTERFACE CAPABILITIES

ZebraNet® 802.11n radio with support for:
- WEP, TKIP and AES encryption
- WPA and WPA2
- 802.1x (with WEP, WPA or WPA2)
- EAP-FAST, EAP-TTLS, EAP-TLS, PEAP, LEAP
- 802.11d and 802.11i
- Simultaneous Bluetooth 3.0 dual radio
- Wi-Fi Certification
- Fast roaming using Pairwise Master Key (PMK) caching, Opportunistic Key Caching (OKC), or EAP Fast Session resumption
- Support for Ad Hoc mode

Bluetooth 3.0 radio
- Security modes 1 – 4
- "Made for iPod/iPhone/iPad" certified
- Key Bonding

10/100 Ethernet support (via charging cradle)

Cabled Communications Specifications
- USB 2.0 full-speed interface (12 Mbps)
- Mini-B connector with optional strain relief
- Serial interface: 14-pin RS-232C port for communication to terminal or other host up to 115.2 Kbps

Ideal for These Applications

Retail
- Inventory / price display compliance
- Click and collect
- Inventory management, cycle count
- Receiving, put-away, reverse logistics
- Picking, staging, packing, shipping

Manufacturing
- Raw materials
- Finished goods

Transportation and Logistics
- Receiving, put-away, reverse logistics
- Inventory management, cycle count
- Cross-docking
- Picking, staging, packing, shipping

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PRODUCT SPEC SHEET
QLN SERIES MOBILE PRINTERS

QLn Series Specifications

SOFTWARE TOOLS

Link-OS Solutions

Document Design — Quickly design a customized print solution using your business data and Zebra's intuitive, plug-and-print design tools.

Device Integration — Zebra offers apps and products designed to help you integrate Zebra devices into your existing systems.

Device Management — Manage your print operations locally and globally with Zebra's suite of device management tools.

Developer Tools — Provides you the tools you need to create your own apps, including documentation, source code, programming languages, templates and more.

FIRMWARE

CPCL, EPL and ZPL programming languages

ZBI 2.x™ — powerful programming language that lets printers run standalone applications, connect to peripherals, and much more

BARCODE SYMBOLOGIES

Barcode Ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1

Linear Barcodes: Code 39, Code 93, UCC/EAN128, Code 128, Codabar (NW-7), Interleaved 2-of-5, UPC-A, UPC-E, 2 and 5 digit add-on, EAN-8, EAN-13, 2 and 5 digit add-on

2D Barcodes: PDF417, MicroPDF417, MaxiCode, QR Code, GS1/DataBar™ (RSS) family, Aztec, MSI/Plessey, FIM Postnet, Data Matrix, TLC39

FONTS AND GRAPHICS

Standard Fonts: 25 bitmapped, 1 smooth, scalable (CG Triumvirate Bold Condensed*)

Optional Fonts: downloadable bitmapped/scalable fonts

International Character Sets (optional): Chinese 16 x 16 (traditional), 16 x 16 (simplified); Japanese 16 x 16, 24 x 24; Korean Mincho

*Contains UFST® from Agfa Monotype Corporation.

OPTIONS AND ACCESSORIES

Charging Options — Inside the Printer
- AC adapter
- Single cradle: QLn-EC — single bay Ethernet and charging cradle (not compatible with extended capacity battery)
- Quad cradle : QLn-EC4 — quad bay Ethernet and charging cradle, with internal switch and stacking port (not compatible with extended capacity battery)

Charging Options — Outside the Printer
- SC2 single battery charger
- Quad battery charger

Vehicle charger with cigarette lighter adapter

Spare batteries

4900 mAh (nominal) removable extended capacity Li-Ion battery (4-cell bump out pack)

Carrying Options
- Shoulder strap
- Hand strap
- Soft case (IP54 rating when used) — not compatible with extended capacity battery

Linerless printing (with silicone platen roller only)

ZBI 2.x

Printer stand for tabletop mounting

Serial and USB cables with strain relief

PRODUCT WARRANTY

The QLn Series Printers are warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit: www.zebra.com/warranty.

RECOMMENDED SERVICES

The Zebra OneCare Service portfolio of Essential, Select and Premier maximizes the availability and productivity of your devices. Key features include 24/7 technical support, comprehensive coverage, advance replacement and software updates. Optional Visibility Services are available. For more information go to www.zebra.com/zebraonecare.

For optimum print quality and printer performance, use genuine Zebra supplies.
Specifications subject to change without notice.

ZEBRA

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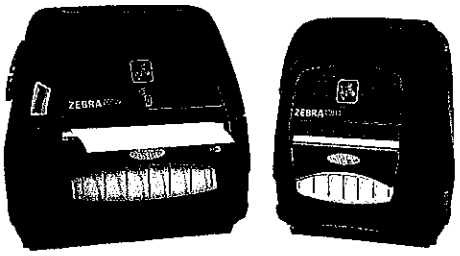
PRODUCT SPEC SHEET
ZQ500 SERIES MOBILE PRINTERS

ZEBRA

ZQ500 Series Mobile Printers

EXCEPTIONAL DURABILITY AND RELIABILITY IN THE TOUGHEST ENVIRONMENTS

Zebra's ZQ500™ Series offers best-in-class, rugged mobile printers for applications outside of a business's four walls. The premium 3" (72 mm) ZQ510™ and 4" (104 mm) ZQ520™ printers are Zebra's next-generation of high-performance mobile printers. The printers' patented, military-grade design provides exceptional durability and reliability in the toughest environments.



ZQ520 ZQ510

Optimized for on-demand receipt printing in transportation and logistics and government, the ZQ500 Series can also produce labels for a range of applications. These printers can withstand the drops, bangs, bumps, accidents and environmental extremes that are common in mobile workplaces — making them ideal for on-the-go employees whose productivity depends on maximum printer functionality.

With Zebra's ZQ500 Series, you gain the peace of mind knowing your mobile printers will not only withstand the elements, but also provide the power, connectivity and reliability your mobile employees need. Qualified by a third-party laboratory per MIL-STD 810g for drop and vibration test procedures, the ZQ500 Series printers feature a unique combination of an IP54-rated design for protection from dust ingress and water spray and engineering details — making these printers the most rugged mobile printers on the market.

In addition to offering easy setup, the printers are simple to manage and maintain with the Link-OS® environment, advanced Bluetooth® Smart Ready 4.0 (Low Energy) connectivity and Print Touch™ device pairing. ZQ500 printers are "Made for iPod® / iPhone® / iPad®" (MFi) and Wi-Fi Alliance certified to support connectivity to a range of Apple®, Android™ and Windows® Mobile devices. And, with best-in-class accessories that are compact and multi-purpose, the ZQ510 and ZQ520 printers can transform cars, trucks and vehicles into productive mobile offices.

Tough. Reliable. Powerful.

On-the-go productivity requires dependable solutions in every situation. The high-performing ZQ500 Series stands up to the test every time regardless of the environment.

Rugged Design

Mobile work environments can be abusive for hardware. The ZQ500 printers are lightweight, yet engineered to handle the bumps, drops and collisions that are part of the job. The ZQ510 and ZQ520 printers feature a patented military design that meets third-party-verified MIL-STD 810g military standards for shock, vibration and temperature exposure. The printers can withstand repeated drops to concrete from 6.6' on multiple sides — and when paired with the optional exoskeleton case can withstand drops from 10'. And for additional protection, the ZQ510 and ZQ520 printers are designed to guard media from being ejected when the printer is dropped, keeping your workforce productive and focused while on the move.

Environmental Endurance

Zebra® not only protects your hardware, but also your operational uptime. The ZQ500 printers meet IP54-rating for resistance to dust and liquids that are common in mobile environments — from dirt in the field to crumbs in a service vehicle. And with cold temperature compensation, the ZQ500 Series automatically optimizes and balances print speed and print quality in cold temperatures.

Optimized Printing Power

To keep your employees on task and on schedule, the ZQ500 Series are the first Zebra products to support a secondary Bluetooth communication channel, an innovative feature that allows one channel to send print jobs to the printer while a second channel performs additional functions such as device management. ZQ500 printers also feature "draft mode," which optimizes the printing speed (51 inches-per-minute) for text-only printing. And with Power Smart Print Technology™, the printers can anticipate what users will print, saving batter power yet delivering fast, high-quality receipts and labels.

Simple to Use

ZQ500 printers are designed for intuitive, simple use — from the first shift to the last. The simplified user interface reduces the amount of accidentally changed printer settings, and the large buttons increase accuracy for gloved hands and fingers. Intuitive media loading reduces time employees spend changing rolls, and with sleep mode the printer wakes up when a job is sent and conserves battery power when not in use.

For more information about the ZQ500 Series Mobile Printers, visit www.zebra.com/zq500 or access our global contact directory at www.zebra.com/contact

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PRODUCT SPEC SHEET
ZQ500 SERIES MOBILE PRINTERS

On-the-go Functionality for Premium Performance

The ZQ500 Series is not limited by typical office boundaries. With reliable connectivity options and space-saving, multi-functional accessories, the ZQ500 Series transforms every space into a productive work environment.

Reliable Connectivity

The ZQ500 Series comes standard with the latest in Bluetooth connectivity: Bluetooth 4.0. The printers also offer 802.11a/b/g/n WLAN connectivity that supports both 2.4GHz and 5GHz bands and roaming within and across bands. And, with the multiport radio, your employees can simultaneously operate 802.11a/b/g/n and Bluetooth 3.0 — meaning they can be constantly updated and connected. If users lose their Bluetooth connectivity while on the road, Print Touch™ via NFC technology serves as an alternate option, ensuring users are always connected. The ZQ500 Series is "Made for iPod / iPhone / iPad" (MFi certified) and Wi-Fi Alliance-certified, offering connectivity to a range of Apple, Android and Windows Mobile devices.

Mobile-Workspace Accessories

ZQ500 accessories are designed to optimize the tight spaces of mobile work environments — such as vehicles — through small footprints and multipurpose use. With easy and reliable vehicle charging options, employees can grab their device and go. The battery eliminator enables users to rely solely on vehicle power for fixed in-vehicle applications — erasing the need to replace the battery over the life of the printer. ZQ500 Series printers also offer adapters to attach vehicle cradles to existing e-charge and settlement room brackets.

Remote Management

The ZQ500 Series offers several device management options, including Profile Manager, which allows you to manage printers anywhere, anytime via a browser. Support for industry-standard MDM utilities makes it easy to communicate with all devices. ZQ500 printers are equipped with Syslog, an IT diagnostics tool that enables the printer to save and record error events that are written and can be retrieved from a file or, for remote troubleshooting, written to an IP port.

The ZQ500 offers several Link-OS environment software solutions and tools, including:

- PrintTouch NFC technology for fast pairing and easy access to essential data
- Profile Manager to monitor and control Link-OS printers anywhere in the world — all from one PC, tablet or smartphone screen
- Cloud Connect for direct and secure connection to the cloud
- Virtual Device Support — enabling printing using non-Zebra command languages

Power and Charging

4-Bay Power Station

Docks and charges up to four ZQ500 Series printers simultaneously. Supports printers in exoskeleton and with / without extended battery.

AC Adapter

Charges printer via wall outlet.

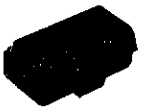
Battery Eliminator

Connects printer directly to vehicle power without using battery as consumable product. Available as open-ended or cigarette adaptor power supply. Dummy battery pack fits into printer. Can be used with vehicle mounting plate.

Battery Eliminator Vehicle Cradle

Enables printer to be powered with vehicle power only. Eliminates need to replace the battery over the life of the printer. Printer is still detachable from vehicle.

Extended Battery



Extends life of printer for high-duty cycle applications. Four-cell bump-out pack. Has LED on outside for visible indication when battery is due for replacement.

Quad Battery Charger

Docks and charges up to four ZQ500 Series batteries at a time. Supports both standard and extended batteries.

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PRODUCT SPEC SHEET
ZQ500 SERIES MOBILE PRINTERS

Power and Charging

PowerPrecision+ Battery

Powers printer. Can be polled and managed to monitor battery health and replacement. Compatible with ZQ510 and ZQ520 printers, single battery charger, vehicle charger, quad battery charger and 4-bay power station. Included in box with the printer.

Single Battery Charger

Docks and charges a single battery. Monitors and alerts on battery health. Supports both standard and extended battery.

Vehicle Charger

Charges printer via vehicle open-ended or lighter adapter power supply. May be used without vehicle cradle. Available as 12-24V or 15-60V.

Mounting

Vehicle Cradle

Docks and charges ZQ500 Series printers. Available with open-ended or cigarette adapter power supply. Compatible with ZQ510 / ZQ520 with or without extended battery and with or without exoskeleton. Can be mounted with RAM mounting arm. Meets IP43-rating for additional protection from liquids and splits. Requires specific driver for connecting via USB.

Mounting Plate

Allows the printer to be fix-mounted in a vehicle with or without battery eliminator. Attaches to RAM mounting arm.

RAM Mounting Arm

Attaches to the ZQ500 mounting plate or vehicle cradle for flexible mounting orientation.

Wiring and Adapters

D-Ring Adapter Kit

Attaches to ZQ500 vehicle cradle to enable use with installed Datamax O'Neil e-charge brackets. Plastic female half-moon part allows users to attach ZQ500 vehicle cradle to existing Datamax O'Neil brackets.

RW420 Vehicle Cradle Adapter

Enables attachment of ZQ500 Series cradle to existing RW cradles without rewiring. Measures 6 inches. Legacy RAM arms are compatible with ZQ500 via this adapter.

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PRODUCT SPEC SHEET
ZQ500 SERIES MOBILE PRINTERS

Carrying

2-Roll Spare Media Case

Carries two rolls of spare ZQ500 media. Attaches between the RAM arm and Vehicle Cradle.

Belt Clip

Allows printer to be clipped to user's belt. Included in box with the printer.

Hand Strap

Enables printer to be carried like a toolbox.

Rugged Shoulder Strap

Offers over-the-shoulder carrying option. Connects with metal attachment clips.

Standard Shoulder Strap

Offers over-the-shoulder carrying option. Connects with plastic attachment clips.

Swivel Belt Loop

Alternative to a standard belt clip. One piece connects to the user's belt and one piece (D-Ring Adapter Belt Attachment) attaches in lieu of the belt clip on the ZQ500, so you can easily attach and rotate the printer to the hip.

Protection

Exoskeleton Case

Increases drop specification, seals off ports and increases IP rating for extreme use environments. Can be used with extended battery pack, 4-bay power station and vehicle cradle. Cannot be used with linerless. Users must tear down when using exoskeleton. Not compatible with belt clip included with printer. AC adapter and vehicle cannot be used when printerls in exoskeleton case.

Soft Case

Canvas case adds layer of printer protection. Includes shoulder strap. Battery (including extended pack) and ports remain accessible via flaps. Cannot be used with printer belt clip.

Other

USB Cables with Strain Relief

Prevents USB cable breakage via hard plastic twist lock.

USB Cable (Micro A/B to USB A converter — 6")

Adapter cable for connecting USB memory sticks or other traditional USB A devices to the printer.

Encrypted Magnetic Stripe Reader Module

Attaches to printer to enable payment processing and reading of licenses, credit cards and badges. Encryption keys can be loaded via Zebra Custom Application Group.

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PRODUCT SPEC SHEET
ZQ500 SERIES MOBILE PRINTERS

ZQ500 Series Specifications

PRINTER NAME
ZQ510
ZQ520

STANDARD FEATURES

- Apple iOS, Android, Windows Mobile and BlackBerry® connectivity
- Direct thermal printing of barcodes, text and graphics
- 203 dpi resolution (8 dots per mm)
- Print speed up to 5"/127 mm per second (with Draft mode enabled)
- CPCL and ZPL® programming languages
- XML support
- Resident fixed and scalable fonts
- 400 MHz 32-bit ARM® processor with 256 MB RAM (8 MB available for user applications)
- 512 MB Flash supports downloadable programs, receipt formats, fonts and graphics (64 MB available for user storage)
- USB On-The-Go ports (with optional strain relief cable)
- 2450 mAh removable, rechargeable PowerPrecision+ Li-Ion battery
- Built-in battery charger
- Black mark and gap media sensing using fixed center position sensors
- Optional linerless platen
- Cold Temperature Compensation mode-optimizes / balances print speeds to allow for better print performance at lower temps
- Dual-sided tear bar which allows for clean tear in either direction (not available with linerless SKUs)
- Supports vertical and horizontal printing
- Printer can be used in any orientation
- Center-loading media locking for variable roll widths
- "Clamshell" design for easy media loading
- Management: Mirror, SNMP, Web server, Profile Manager, AirWatch® and Wavelink Avalanche®
- Bluetooth 4.0 Smart Ready Low Energy radio
- Simple easy-to-read LCD with large icons for battery and wireless status
- Tolerance of multiple drops from 6.6' (2 m) to concrete
- Label odometer
- NTP (Network Time Protocol) support via WiFi
- QR code links to web-based help pages; not displayed on LCD
- Semi-sleep / Instant on mode — which allows the printer to "wake" on touch (Wake on BT only supported in BT 4.0 radio), or on Bluetooth print job transmission
- Zebra® Print Touch simplifies Bluetooth pairing and launches web-based help pages with Near Field Communication (NFC) enabled devices
- Power Smart Print Technology — anticipates upcoming printing to optimize battery consumption and print speed

PRINTER SPECIFICATIONS

Resolution	203 dpi resolution (8 dots/mm)
Maximum Print Width	ZQ510: 2.83"/72mm ZQ520: 4.09"/104mm
Maximum Print Speed	Up to 5"/127mm per second
Media Sensors	Black mark and gap media sensing using fixed center-position sensors
Print Length	Maximum: 39"
Power	2450 mAh removable, rechargeable PowerPrecision+ Li-Ion battery, with optional extended battery

MEDIA CHARACTERISTICS

Maximum Media Width	ZQ510: 3.15"/80 mm +1mm ZQ520: 4.45"/113 mm +1 mm
Maximum Media Roll Size	ZQ510: 2.0"/51 mm ZQ520: 2.24"/57 mm
Thickness	0.0063" (0.1600 mm) for labels and 0.0055" (0.1397 mm) for tag/receipt
Media Types	Receipt, Gap/Black mark Label, Tag

OPERATING CHARACTERISTICS

Environmental	Operating Temperature: -4°F to 131°F/-20°C to 55°C Operating Humidity: 10% to 90% non-condensing Charging Temperature: 32°F to 104°F/0°C to 40°C Cradle Temperature: 32°F to 122°F/0°C to 50°C Storage Temperature: -22°F to 150°F/-30°C to 66° C Storage Humidity: 10% to 90% non-condensing
Agency Approvals	Emissions: FCC Part 15, Subpart B, EN55022 Class-B, EN60950, EN55024 and VCCI class B Susceptibility: EN55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, and EN61000-4-5 Safety: CE, UL, TUV, CSA

PHYSICAL CHARACTERISTICS

	ZQ510	ZQ520
Length	2.4"/62 mm	2.6"/67 mm
Width	4.7"/120 mm	6.1"/155 mm
Height	5.9"/150 mm	6.2"/158 mm
Weight (w/battery)	1.39lbs/0.63 kgs	1.73lbs/0.79 kgs

SOFTWARE TOOLS

Link-OS Solutions

Profile Manager — Advanced, server based device management for networked printers, operates via a web browser interface

Cloud Connect — Secure, direct, encrypted and authenticated connections to the web for printing and device management

Virtual Devices — Use legacy and non-Zebra command languages to print labels and tags

Zebra Utilities — Print from iOS, Android, Windows Mobile devices

Print Station — Driverless printing from Android devices

AirWatch Connector — Manage from within the AirWatch environment

Multiplatform Software Development Kit — Simplifies printing application development with support for Blackberry, Apple, Android, WinCE®, WinMobile®, Windows desktop and Linux/Unix platforms

BARCODE SYMBOLOGIES

CPCL Barcode Symbologies

- Barcode Ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1
- Linear Barcodes: Code 39, Code 93, UCC/EAN128, Code 128, Codabar (NW-7), Interleaved 2-of-5, UPC-A, UPC-E, 2 and 5 digit add-on, EAN-8, EAN-13, 2 and 5 digit add-on
- 2D Barcodes: PDF417, MicroPDF417, MaxiCode, QR Code, GS1/DataBar™ (RSS) family, Aztec, MSI/Plessey, FIM Postnet, Data Matrix, TLC39

ZPL Barcode Symbologies

- Barcode Ratios: 2:1, 3:1, 5:2, 7:3
- Linear Barcodes: Code 11, Code 39, Code 93, Code 128, ISBT-128, UPC-A, UPC-E, EAN-8, EAN-13, UPC-A and UPC-E with EAN 2 or 5 digit extensions, Planet Code, Plessey, POSTNET, Standard 2 of 5, Industrial 2 of 5, Interleaved 2 of 5, LOGMARS, MSI, Codabar, and GS1 DataBar (RSS)
- 2D Barcodes: PDF417, MicroPDF-417, Code 49, TLC39, Maxicode, Codablock, Data Matrix, QR code, Aztec

Ideal for These Applications

Manufacturing

- Field sales
- Field service
- Direct store delivery
- Proof of delivery

Retail

- Inventory management, cycle count
- Receiving, put-away, reverse logistics
- Picking, staging, packing, shipping
- Quick and efficient checkout
- Customer experience

Transportation and Logistics

- Receiving, put-away, reverse logistics
- Inventory management, cycle count
- Cross-docking
- Picking, staging, packing, shipping
- Direct store delivery
- Fleet management and maintenance
- Proof of pickup and delivery
- Ticketing
- In-cabin services

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PRODUCT SPEC SHEET
ZQ500 SERIES MOBILE PRINTERS

ZQ500 Series Specifications

FONTS AND GRAPHICS

CPCL Font Specifications
- Standard Fonts: 25 bitmapped, 1 smooth, scalable (CG Triumvirate Bold Condensed*)
- Optional Fonts: downloadable bitmapped/scalable fonts
- CPCL Asian Fonts are not supported

*Contains UFST® from Agfa Monotype Corporation

ZPL Font Specifications
- Character Fonts: Standard bitmapped Zebra fonts: A, B, C, D, E (OCR-B), F, G, H, (OCR-A), GS, P, Q, R, S, T, U, V and Ø Smooth font (CG Triumvirate Bold Condensed)
- Unicode Scalable Swiss 721 is preloaded on the printers E: memory location (supports Latin, Cyrillic, Arabic and Hebrew)
- Google/Adobe Hans (Asia SKUs only)
- Thai Angsana (Asia SKUs only)

OPTIONS AND ACCESSORIES

ZebraNet® 802.11a/b/g/n radio with support for: Wi-Fi® Certification

Bluetooth 3.0/802.11b/g Multiport Radio (can be used simultaneously)
- Security modes 1 – 4
- "Made for iPod/iPhone/iPad" (MFi) certified
- WEP, TKIP and AES encryption
- WPA and WPA2
- 802.1x (with WEP, WPA, or WPA2)
  – EAP-FAST, EAP-TTLS, EAP-TLS, PEAP, LEAP
- 802.11d and 802.11i
- Key Bonding

ZBI 2.x™ — powerful programming language that lets printers run standalone applications, connect to peripherals, and much more

ESC-POS available via post-sale download

PRODUCT WARRANTY

ZQ500 Series Printers are warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit: www.zebra.com/warranty.

RECOMMENDED SERVICES

The Zebra OneCare Service portfolio of Essential, Select and Premier maximizes the availability and productivity of your devices. Key features include 24/7 technical support, comprehensive coverage, advance replacement and software updates. Optional Visibility Services are available. For more information go to www.zebra.com/zebraonecare.

For optimum print quality and printer performance, use genuine Zebra supplies.
Specifications subject to change without notice.

ZEBRA

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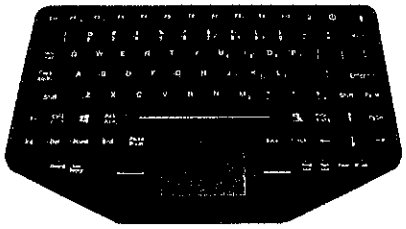
iKey



Product Code BT-870-TP-SLIM

BT-870-TP-SLIM

BT-870-TP-SLIM DUAL CONNECTIVITY

New February 2017! The BT-870-TP-SLIM keyboard by iKey is our new dual connectivity keyboard. Connect with USB or Bluetooth®. This keyboard has a built-in touchpad and is made of industrial silicone rubber. This keyboard is the thinner profile version of our new BT-870-TP keyboard. This fully-sealed keyboard is designed to meet IP67 and NEMA 4X specifications, meaning it is resistant to dirt, dust, water, ice and corrosives. Built with an industrial silicone rubber keypad and a rugged ABS polycarbonate case, the BT-870-TP-SLIM is easy to clean with disinfectants. The compact design and internal Bluetooth® module make the BT-870-TP-SLIM highly portable. In addition, its red LED backlighting is ideal for nighttime or ambient-light use.

- A MicroUSB cable is included to recharge the keyboard and turn it into a wired USB keyboard when necessary.
- Includes 75mm VESA and 1.188? x 1.5? AMPS mounting patterns
- Thin profile, ideal for easy storage

BT-870-TP-SLIM is an ideal fit for mobile, material handling, food and beverage processing, medical, and other environments where rugged flexibility is a necessity. It is rated IP67. The BT-870-TP-SLIM is available for immediate order.

OTHER MODELS: BT-870-TP REGULAR PROFILE

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Product Code	BT-870-TP-SLIM
Certifications	IP67
Shock	3 x 11 ms pulses of 50g on each of 3 axis
Key Switch	MATERIAL: Industrial Silicone Rubber LIFE: Greater than 10 Million Cycles Travel: 0.055in.
Vibration	POWER SPECTRAL DENSITY .04G/HZ FREQUENCY RANGE: 20Hz-2Khz DURATION OF TEST PER AXIS: 3 hours
Power	Rechargeable Lithium Ion Battery
Temperature Range	STORAGE: -40?F TO +149?F (-40?C to +65?C). OPERATING: 32?F to +140?F (0?C to +60?C)
Weight	1.56 lbs +/- 0.010 lbs
Warranty	One Year
Humidity	100% Humidity Resistant
Tapped Screw Inserts	8-32 x 1/4"
Dimensions	11.193" x 7.098" x 0.850" (lwh)
Model Numbers	BT-870-TP and BT-870-TP-SLIM

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iKey

BT-80-TP

BLUETOOTH-COMPATIBLE KEYBOARD WITH TOUCHPAD

iKey introduces the next innovation in Bluetooth®-

compatible, wireless industrial keyboard, the BT-80-TP.

This fully-sealed keyboard is designed to meet NEMA 4X and IP68 specifications, meaning it is resistant to dirt, dust, water, ice and corrosives. Built with an industrial silicone rubber keypad and a rugged ABS polycarbonate case, the BT-80-TP is easy to clean with disinfectants. The compact design and internal Bluetooth® module make the BT-80-TP highly portable. In addition, its red LED backlighting is ideal for nighttime or ambient-light use. It is an ideal fit for mobile, material handling, food and beverage processing, medical, and other environments where rugged flexibility is a necessity. Related: Dual connectivity keyboard with Bluetooth and USB connectivity, BT-870-TP

Product Code BT-80-TP

CERTIFICATIONS	IP68
SHOCK	3x11 ms pulses of 50g on each of 3 axis
KEY SWITCH	MATERIAL: Industrial Silicone Rubber LIFE: Greater than 10 million cycles TRAVEL: 0.055" ACTUATION FORCE: 7.05 oz +/- 1.06 oz (200g +/- 30g) FEEDBACK: Tactile with Mechanical Snap
VIBRATION	POWER SPECTRAL DENSITY: .04g/HZ FREQUENCY RANGE:20Hz-2Khz DURATION OS TESTS PER AXIS: 3 hours
POWER	BLUETOOTH USB Rechargeable Polymer lithium-ion Battery, 3450mAh
TEMPERATURE RANGE	STORAGE: -40F to +158F (-40C to +70C) OPERATING: -4F to +140F (-20C to +60C)
WEIGHT	1.2 +/- 0.10 lbs (0.54 +/- 0.05kg)
WARRANTY	1 Year Limited Warranty
HUMIDITY	100% Humidity Resistant
DIMENSIONS	10.04" x 7.41" x .71"
MODEL NUMBERS	BT-80-TP

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iKey

IK-TR-911-TP

IK-TR-911-TP FULL TRAVEL KEYBOARD WITH ATTACHMENT VERSATILITY

Designed to fit into existing mobile mounting systems, iKey's new Transformer Keyboard has built-in high-speed USB hubs and modular options to accommodate multiple custom configurations, making this the ideal all-in-one, on-the-go solution. These rugged keyboards are built for use in EMS, police and service vehicles. The Transformer Keyboard is also fully sealed and is resistant to dirt, dust and spills that can ruin most keyboards. Features: 12 Function Keys 88-Key Functionality Integrated Backlighting Integrated Touchpad Mobile Mounting Holes One-Touch Emergency Key

Product Code IK-TR-911-TP

SHOCK	3x11 ms pulses of 50g on each of 3 axes
VIBRATION	POWER SPECTRAL DENSITY: 0.04g/Hz FREQUENCY RANGE: 20Hz - 2kHz DURATION OF TEST PER AXIS: 3 hours
POWER	USB: 35mA@5V (from CPU port)
TEMPERATURE RANGE	STORAGE: -40C to 75C (-40F to 167F) OPERATING: -20C to 60C (-4F to 140F)
WEIGHT	2.0 lbs +/- 0.10 lbs (0.90 kg +/- 0.05 kg)
WARRANTY	1 Year Limited Warranty
HUMIDITY	100% Humidity Resistant
DIMENSIONS	302.77 x 194.3 x 31.24 mm (11.92 x 7.65 x 1.23 inches)
MODEL NUMBERS	IK-TR-911

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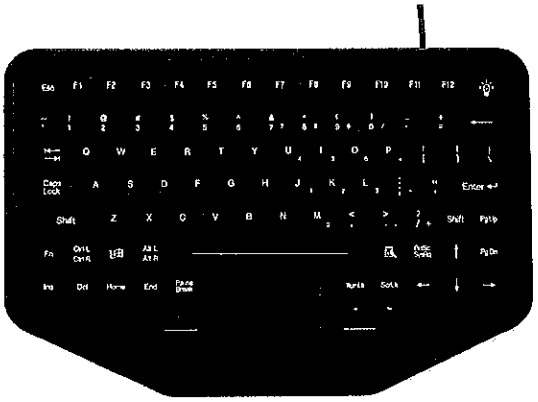

SB-87-TP

SKINNYBOARD™ MOBILE KEYBOARD WITH TOUCHPAD MEASURES ONLY 0.5" DEEP

The SkinnyBoard™ SB-87-TP is iKey's thinnest keyboard to date, measuring only half an inch deep. Its sealed, streamlined case and silicone rubber keys meet IP65 standards, making it fully resistant to spills, cleaning procedures and the elements. Built for convenience and versatility in mobile computing applications, the SB-87-TP features an integrated touchpad, eliminating the need for an external pointing device. In addition, its red LED backlighting is ideal for nighttime or ambient-light use. To learn more, visit our SB-87-TP video on YouTube's iKey Keyboard Channel: Click Here Features: 12 Function Keys Fully Sealed, IP65 Case Integrated Touchpad Silicone Rubber Red LED Backlit Keys USB Connectivity Ultra-Thin Design

Product Code SB-87-TP

CERTIFICATIONS	NEMA 4X UL60950, FCC Part 15 Class B, IP65
SHOCK	3x11 ms pulses of 50g on each of 3 axes
CABLE	LENGTH: 55" +/- 2" (straight USB)
KEY SWITCH	MATERIAL: Industrial Silicone rubber LIFE: Greater than 10 million cycles TRAVEL: 0.055? (1.4mm) ACTUATION FORCE: 7.05 oz +/- 1.06 oz (200g +/- 30g) FEEDBACK: Tactile with mechanical snap
VIBRATION	POWER SPECTRAL DENSITY: 0.04g/Hz FREQUENCY RANGE: 20Hz - 2kHz DURATION OF TEST PER AXIS: 3 hours
POWER	USB: 200mA@5V (from CPU port)
COMPATIBILITY	All Windows and Macintosh OS
TEMPERATURE RANGE	Storage -40C to +90C (-40F to +194F) Operating -40C to +70C (-40F to +158F)
WEIGHT	1.4 lbs +/- 0.10 lbs (0.64 kg +/- 0.05kg)
WARRANTY	1 Year Limited Warranty
DIMENSIONS	11.83" x 7.73" x 0.56" (w-h-d) 300.5mm x 196.3mm x 14.2mm
MODEL NUMBERS	SB-87-TP-USB: With USB cable. SB-87-TP-USB-WHT: With USB cable, white.

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iKey

SL-80-TP

COMPACT MOBILE KEYBOARD WITH TOUCHPAD

iKey introduces the SL-80-TP, a compact, lightweight, and fully-rugged mobile keyboard. This fully-sealed keyboard is designed to meet NEMA 4X specifications, meaning it is resistant to dirt, dust, water, ice and corrosives. Built with an industrial silicone rubber keypad and a rugged ABS polycarbonate case, the SL-80-TP is submersible and easy to clean with disinfectants. The SL-80-TP has an integrated touchpad and a small footprint design ideal for mobile application where space is a premium. In addition, its red LED backlighting is ideal for nighttime or ambient-light use. It is an ideal fit for public safety, mobile, material handling, food and beverage processing, medical, and other environments where rugged flexibility is a necessity. Features: Three levels of red LED backlight VESA mount pattern 12 function keys Integrated touchpad

Product Code SL-80-TP

CERTIFICATIONS	IP65
SHOCK	3x11 ms pulses of 50g on each of 3 axis
KEY SWITCH	MATERIAL: Industrial Silicone Rubber LIFE: Greater than 10 million cycles TRAVEL: 0.055" ACTUATION FORCE: 6.35 oz +/- 1.06 oz (180g +/- 30g) FEEDBACK: Tactile with Mechanical Snap
VIBRATION	OWER SPECTRAL DENSITY: .04g/HZ FREQUENCY RANGE:20Hz-2Khz DURATION OS TESTS PER AXIS: 3 hours
POWER	USB: 235mA@5V (from CPU port)
TEMPERATURE RANGE	STORAGE: -40F to +158F (-40C to +70C) OPERATING: -4F to +140F (-20C to +60C)
WEIGHT	1.0 +/- 0.10 lbs (0.45kg +/- 0.05kg)
WARRANTY	1 Year Limited Warranty
HUMIDITY	100% Humidity Resistant
DIMENSIONS	10.04" x 7.41" x .71"
MODEL NUMBERS	SL-80-TP

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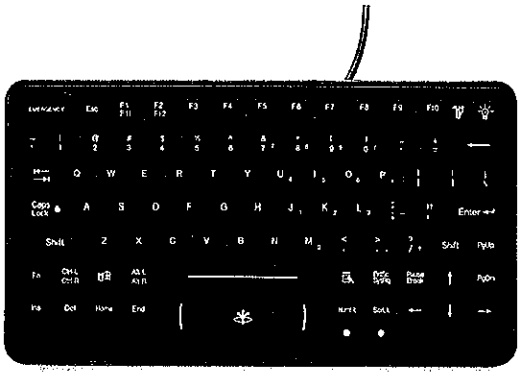
iKey



SL-86-911

INDUSTRIAL KEYBOARD WITH EMERGENCY KEY

The SL-86-911 offers a rugged keyboard and a rugged computer pointing device in one compact package. Ideal for public safety applications, it features a specially designed emergency key and red LED backlit keys. The SL-86-911 integrates a Force Sensing Resistor, an upgraded pointing device that offers improved sensitivity and increased durability. Featuring a compact design with mounting holes, the SL-86-911 fits securely in a vehicle's console to serve effectively as a mobile application. It boasts a completely sealed and ruggedized construction that allows it to meet NEMA 4X specifications, ensuring that this keyboard is sealed against the elements or unwanted spills. Features: 12 Function Keys 86-Key Functionality PS/2 and USB or configurations available Integrated Backlighting Integrated Force Sensing Resistor Pointing Device One-Touch Emergency Key

Product Code SL-86-911

CERTIFICATIONS	NEMA 4X, CE UL60950, FCC Part 15 Class B
SHOCK	3x11 ms pulses of 50g on each of 3 axes
CABLE	LENGTH: 4 ft coiled (1.2 meters) DESIGN: "Y" PS/2 (providing separate keyboard and mouse connections), or Single-Cable USB
KEY SWITCH	MATERIAL: Industrial silicone rubber LIFE: Greater Than 10 million Cycles TRAVEL: 0.055 in. (1.4mm) ACTUATION FORCE: 7.05 oz +/- 1.06 oz (200g +/- 30g) FEEDBACK: Tactile with mechanical snap
VIBRATION	POWER SPECTRAL DENSITY: 0.04g/Hz FREQUENCY RANGE: 20Hz - 2 kHz DURATION OF TEST PER AXIS: 3 hours
POWER	PS/2: KEYBOARD: 200mA@5V (from Keyboard port) POINTER: 35mA@5V (from Mouse port) USB: 235mA@5V (from CPU port)
COMPATABILITY	PS/2 KEYBOARD/POINTER: All Windows Operating Systems USB KEYBOARD/POINTER: All Windows and Macintosh OS
TEMPERATURE RANGE	STORAGE: -40C to +70C (-40F to +158F) OPERATING: -20C to +60C (-4F to +140F)
WEIGHT	2 lbs +/- 0.10 lbs (0.91 kg +/- 0.05 kg)
WARRANTY	1 year limited warranty
HUMIDITY	100% Humidity Resistant
DIMENSIONS	11.40" x 6.30" x 1.86" (w-h-d) 289.6mm x 160.0mm x 47.2mm
MODEL NUMBERS	SL-86-911-PS2: With PS/2 cable SL-86-911-USB: With USB cable

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