ALIEN

The Alien Technology® commercial class ALR-H450 "connected" **Android** handheld readers enables users to deploy manageable, robust, best-in-class EPC Gen 2 RFID solutions for supply chain, manufacturing, and asset management applications.

FEATURES

- QWERTY keyboard, rugged yet lightweight for ease of use
- **Ergonomic** design provides superior user comfort and use
- "**Connected**" via the full set of wireless networking
- IP64 sealing for dust and water resistance

- **Prolonged usage** capabilities provided by a 3,200 mAh main lithium polymer main battery pack and 5,200 mAh gun handle battery
- Android 4.4 (Kit Kat)

Benefit	Enabled By:	What does this mean to me?
Ease of Use	• **Full** QWERTY keyboard • **Dual** high-power lithium-polymer batteries • Open source Android software development	• Simplifies data input • All day usage without recharging • Easy to provide custom apps
High Performance	• **Unique high-performance, high gain antenna (unusual for a handheld)** • Quad-core 1.3GHz CPU's	• Reads tags further than most handheld RFID solutions • Reads and processes those tags faster • Runs Android apps faster
A fully "connected" handheld	• WiFi 802.11 **b/g/n** • 3G cellular built in • Bluetooth 4.0	• Wireless simplicity • Always connected • Allows connection to corporate networks

Robust Compact/Connected Android Based Handheld

This feature-rich reader is packaged in a compact ergonomic footprint, yet comes with a full QWERTY keyboard for on-the-go data-entry and while displaying results on the large 4" WVGA crisp touch panel display.

The solution provides an easy-to-integrate, easy-to-manage package in an open source Android environment.

A number of techniques including shock-resistance rubber seals are used to ensure durability resulting in an IP64 water/dust proof rating and a 1.0m/ 3ft drop qualification.

High Performance Antenna

The ALR-H450 delivers exceptional performance with best-in-class receive sensitivity and enhanced interference rejection enabled partly be an unusually high performance 4dBic antenna.

The ALR-H450 comes well featured including 2D bar code capability and WiFi connectivity to your corporate network. A memory expansion slot is standard for flexibility for additional local storage.

Standard features include:

- 1D and 2D bar code reader
- Bluetooth/WiFi
- GPS (for location aware applications)
- 3G cellular connectivity for use beyond corporate WiFi areas
- 1/2 Watt speaker
- Microphone
- Light sensors, proximity sensors and G-sensors
- Micro-SD expansion slot

All units are offered in regional frequency options including "US", "Europe", "China" and others

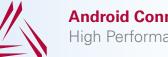| Baseline Specification	ALR-H450
RFID Reader	EPC C1 GEN2 / ISO18000-6C
RFID Power	1W (+5dBm to +30dBm)
Antenna	1diL / 4 dBic (Circular)
Scanner	2-D bar code (1280 x 960 pixels)
WLAN	Wireless WLAN 802.11 b/g/n
WWAN *	WCDMA/HSDPA/HSPA+ (850/1900/2100MHz), GSM/GPRS/EDGE (850/900/1800/1900MHz) 1 PSAM + 1 SIM
WPAN	Bluetooth v2.1+EDR, v3.0+HS and v4.0
Location Services	GPS (embedded A-GPS)
Communications	Micro USB
Operating System	Android 4.4.2 (Kitkat)
Display	4" TFT-LCD touch screen with backlight, 16.7M colors, 480 × 800 (WVGA)
CPU	Cortex-A7 1.3GHz quad-core
Memory	1GB RAM / 4GB Flash
Memory Expansion	MicroSD (32GB Max)
Battery (lithium polymer)	Main 3.7V, 3200 mAh Gun 3.7V, 5200 mAh
Expansion Slot	1 Micro SD slot, 1 SIM slot, 1 PSAM slot

* Due to country specific regulations the cellular modem (WWAN) is not present in units for Singapore or Brazil

Physical Characteristics	
Ingress Protection	IP64
ESD	Contact ± 4KV / ± Air 8KV
Humidity	0-95% at 40°C / 104°F
Operating Temp	-10°C to 50°C / 14°F to 122°F
Storage Temp	-40°C to 70°C / -40°F to 158°F
Weight	371 g / 13.1 oz (no batteries) 448 g / 15.8 oz (with main battery) 623 g / 22.0 oz (with gun handle and all batteries)
Dimensions without gun handle	7.28″ (L) x 3.35″ (W) x 4.13″ (H) 185 mm (L) x 85 mm (W) x 105 mm (H)
Drop	1 meter / 3.28 feet

Model Number	Countries	Frequency	Transmit Channels	Channel Spacing	RF Power	Compliance Certification
ALR-H450	USA, Canada, Colombia, Mexico	902 - 928 MHz	50	500 KHz	1 Watt	Emissions: FCC Part 15 Safety: cTUVus tested to: CAN/CSA–C22.2 No.60950-1-03, and UL 60950-1:2007 specifications IEC 60950-1 and EN60950-1, IFETEL
ALR-H450-ARG **	Argentina					
ALR-H450-BRA * and **	Brazil	902 - 907.5MHz & 915-928 MHz	35	500KHz	1.3 watts EIRP	Emissions: Agência Nacional de Telecomunicações - ANATEL Safety: UL Brazil
ALR-450-CHN	China	920.5 - 924.5 MHz	16	250 KHz	1 Watt	Emissions: CMII Safety: IEC 60950-1:2005 2nd edition & CCC
ALR-450-CHN-M *	Singapore	920.5 - 924.5 MHz	16	250 KHz	1 Watt	Emissions: ETSI EN 302-208-2 (4 channel plan), EN 301-489 Safety: EN 60950, EN 50360
ALR-H450-EMA	Europe, South Africa	865.6 - 867.6 MHz	4	600 KHz	1 Watt	Emissions: ETSI EN 302-208-2 (4 channel plan), EN 301-489, ICASA Safety: EN 60950, EN 50360, NRCS
ALR-H450-RSA	South Africa	915.4 - 919 MHz	17	200KHz	4W EIRP	Emissions: ICASA Safety: NRCS
ALR-H450-URY	Uruguay, Peru	916 - 928 MHz	23	500 KHz	4W EIRP	Unidad Reguladora de Servicios de Comunicaciones (URSEC), Ministerio de Transportes y Comunicaciones
ALR-H450-WR1	Hong Kong	920 - 925 MHz	8	500 KHz	4W EIRP	OFTA

* Due to country specific regulations the cellular modem (WWAN) is not present in units for Singapore (the "-M" signifies no Cellular Modem) and Brazil

** Ships into the country without a power supply (needs to be sourced in country)

The following are all included in the ALR-H450 package.

Replacements or additions may also be purchased separately using the order numbers indicated below

Accessories Included	
Ordering Information	**Description**
ALX-520	ALR-H450 Pistol Grip
ALX-521	ALR-H450 Pistol Grip Battery
ALX-522	ALR-H450 Flat Main Body Battery
ALX-523	ALR-H450 Break-out Connector
ALX-524	ALR-H450 Dock
ALX-525	ALR-H450 USB Cable
ALX-526-1	ALR-H450 Power Adapter US (In US kit ALR-H450 only)
ALX-526-2	ALR-H450 Power Adapter Europe (In Europe kit ALR-H450-EMA only)
ALX-526-3	ALR-H450 Power Adapter China (In China kit ALR-H450-CHN only)

ALX-521

ALX-523

ALX-525

ALX-520

ALX-522

ALX-524

ALX-526

The ALX-526 does not ship to Argentina or Brazil

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