



# ALH-901x

## COMPACT/CONNECTED HANDHELD RFID READER

The Alien Technology® enterprise-level ALH-901x family of “connected” 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

- Rugged yet **compact** and lightweight for ease of use
- **Ergonomic** design provides superior user comfort
- “**Connected**” via the full set of enterprise-class wireless networking
- IP65 sealing for dust and water resistance
- Choose between **standard or high-end** model to accommodate your needs
- **Prolonged usage** capabilities provided by a 3,000 mAh lithium polymer main battery pack
- Windows Mobile 6.5

Benefit	Enabled By:	What does this mean to me?
Ease of Use	<ul style="list-style-type: none"> <li>• Simple intuitive hardware &amp; software</li> <li>• Simple interfacing to corporate networks</li> </ul>	<ul style="list-style-type: none"> <li>• Easy to set up and deploy</li> <li>• Less maintenance and overhead</li> <li>• Minimizes network infrastructure</li> </ul>
Rugged, yet light, compact, and ergonomic	<ul style="list-style-type: none"> <li>• <b>Rugged IP65 rated design</b></li> <li>• <b>Light-weight</b> and <b>smaller</b> than comparable solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Low risk enterprise solution</li> <li>• Easier to handle than other solutions</li> </ul>
Full enterprise class features & extensibility	<ul style="list-style-type: none"> <li>• <b>Enterprise</b> class I/O and O/S (Windows Mobile 6.5)</li> <li>• 1D or 2D <b>bar-code</b> support</li> <li>• <b>Camera</b></li> <li>• <b>Enterprise class WiFi, Cellular, GPS, and Bluetooth</b></li> <li>• Slots for memory, SIM's, 2nd battery</li> </ul>	<ul style="list-style-type: none"> <li>• Single solution for all handheld needs</li> <li>• Grows with your needs</li> <li>• Wireless simplicity</li> </ul>



### Compact/Connected Enterprise Handheld

This feature-rich reader delivers exceptional performance with best-in-class receive sensitivity, enhanced interference rejection, compact ergonomic footprint, delivering high read rates for demanding applications in an easy-to-integrate, easy-to-manage package.

### Fully Loaded

The ALH-9010 come well featured including basic bar code (1D) capability and WiFi connectivity to your corporate network. The 3.5” touch sensitive color display clearly conveys reader status and enables interaction with standard or customized applications. A memory expansion slot is standard for flexibility for additional local storage.





## Compact/Connected Handheld RFID Reader

High Performance, Easy to Use, Easy to Manage, Easy to Deploy

Standard accessories include:

- Cradle with ethernet and USB
- Gun handle
- Sync cable
- Power adapter for US or Europe
- Stylus pen
- Hand strap
- Protective screen film

The step-up unit ALH-9011, adds a number of features including:

- 2D bar code reader
- Camera (with flash)
- Bluetooth
- GPS (for location aware applications)
- HSDPA 3G cellular connectivity for use beyond corporate WiFi areas.

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



### Developers Kit

The Developers Kit comes complete with all the essentials to get you started for software development or for evaluation. It comes in a hard-sided plastic carrying case with foam inserts for all components. This allows easy transportation of the device and accessories. The kit includes additional accessories such as SD card that is required for software installation and a leather protective cover for the handheld unit. The Developers Kit is **only** available with the ALH-9011 handheld.

The kit contains:

- ALH-9011 - Windows Mobile 6.5, advanced model
- All standard accessories
- SD Card (for software development/loading)
- Leather protective cover (ALX-505)
- Sample tags
- Hard-sided plastic carry case with foam cut outs.

## Compact/Connected Handheld RFID Reader

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Baseline Specification	ALH-9010
RFID Reader	RFID UHF reader
Scanner	1-D bar code
Networking	Wireless WLAN 802.11 b/g
Communications	USB host & client
Operating System	Windows Mobile 6.5
Display	3.5" color QVGA touch screen
CPU	Marvel PXA320, 820MHz
Memory	256MB RAM / 256MB ROM
Battery	3,000mAh lithium polymer
Expansion Slot	1 Micro SD slot, 1 SIM slot
Weight without gun battery	1.22 lbs / 0.55Kg
Weight with gun battery	1.42 lbs / 0.65Kg
Dimensions without gun handle	6.25" (L) x 3.1" (W) x 4.6" (H) 15.9cm (L) x 7.9cm (W) x 11.7cm (H)
Dimensions with gun handle	6.25" x 3.1" (W) x 5.3" (H) 15.9cm (L) x 7.9cm (W) x 13.5cm (H)
Security	IEEE 802.11i, WPA-2-Enterprise, EAP-TLS, PEAP-MSCHAPv2, PEAP-GTC, PEAP-TLS, EAP-TTLS, LEAP, and EAP-FAST.

Step-Up Features (Added to Baseline Specification)	ALH-9011
Scanner	2-D bar code scanner
Camera	3 mega-pixel fixed focus with flash
Body Network	Wireless Bluetooth v2.0, Class II (SPP)
Cellular Network	Wireless HSDPA
Location Services	GPS
Battery	Additional 4,400mAh high capacity battery

Physical Characteristics	
Ingress Protection	IP65
Drop	1.5 Meters (5 feet) - 6 axis (1 foot greater than MIL-STD-810 G)
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

Included Accessories
Gun Handle
Cradle with Ethernet
Sync Cable
Power Adapter US or EU
Stylus Pen
Hand Strap
Protective Film

Additional Accessories	
Ordering Information	Description
ALX-503	4,400mAh high capacity battery for gun handle option
ALX-504	Spare 3,000mAh standard lithium polymer battery
ALX-505	Leather cover
ALX-506	Vehicle charger cable



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Ordering Information					
	Baseline or Step-Up		Country Code NOTE: Please contact your Alien Representative for a full list		Developers Kit
<b>ALH-901</b>	<b>x</b>	-	<b>xxx</b>	-	<b>xxxx</b>
	0 = Base		(blank) = North America		(blank) - standard
	1 = Step-Up		EMA = Europe		DEVC - Developers kit
			CHL = China with China Language		
			WR1 = Misc countries (contact your Alien distributor)		

### Examples:

ALH-9011-EMA - Windows Mobile unit, step-up features for Europe

ALH-9010 - Windows Mobile, base unit for North America

ALH-9011-CHL-DEVC - Developers kit for China (Note: Developers kit are only available with the ALH-9011)

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HANDLING PRECAUTIONS Observe standard handling practices to minimize ESD.

DISCLAIMER Application recommendations are guidelines only - actual results may vary and should be confirmed. This is a general purpose product not designed or intended for any specific application.

This product is covered by one or more of the following U.S. patents: 7716208, 7716160, 7688206, 7671720, 7659822, 7619531, 7615479, 7598867, 7580378, 7576656, 7562083, 7561221, 7559486, 7559131, 7554451, 7411503, 7385284, 7377445, 7364084, 7353598, 7342490, 7324061, 7321159, 7301458, 7295114, 7288432, 7265675, 7262686, 7215249, 7214569, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113250, 7101502, 7080444, 7070851, 7068224, 7046328, 6998644, 6988667, 6985361, 6980184, 6970219, 6952157. Other patents pending.

This product is licensed under patents of Round Rock Research, LLC, for use solely with UHF RFID Readers (such as Alien reader products) that are licensed under an agreement with Round Rock Research, LLC.



Alien Technology  
18220 Butterfield Blvd.  
Morgan Hill, CA 95037  
866-RFID NOW  
www.alientechnology.com