



# ALH-90xx

## COMPACT/CONNECTED HANDHELD RFID READER

The Alien Technology® enterprise-level ALH-90xx 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 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** and **Windows CE 5.0** available

| 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 featured & expandable                | <ul style="list-style-type: none"> <li>• <b>Enterprise</b> class Microsoft O/S (Windows Mobile 6.5 or Windows CE 5.0)</li> <li>• 1D or 2D <b>bar-code</b> support</li> <li>• <b>Camera</b></li> <li>• <b>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-9000 (Win CE) and ALH-9010 (Windows Mobile) 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 units, the ALH-9001 (Win CE) and ALH-9011 (Windows Mobile) adds a number of features including 2D bar code reader, camera (with flash), Bluetooth, GPS (for location aware applications), and HSDPA 3G cellular connectivity for use beyond corporate WiFi areas.

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



| Baseline Specification        | ALH-9010 (Windows Mobile)<br>ALH-9000 (Windows CE)                     |
|-------------------------------|--|
| RFID Reader                   | RFID UHF reader  |
| Scanner                       | 1-D bar code   |
| Networking                    | Wireless WLAN 802.11b/g  |
| Communications                | USB host & client  |
| Operating System              | ALH-900x: Windows CE NET 5.0<br>ALH-901x: 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)<br>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)<br>15.9cm (L) x 7.9cm (W) x 13.5cm (H)     |

| Step-Up Features (Added to Baseline Specification) | ALH-9011 (Windows Mobile)<br>ALH-9001 (Windows CE) |
|--|--|
| 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                                    |



## Compact/Connected Handheld RFID Reader

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### 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 case   |
| ALX-506              | Vehicle charger cable                                |

### Ordering Information

|               | Operating System       | Baseline or Step-Up |   | Country Code            |
|---------------|------------------------|---------------------|---|-------------------------|
| <b>ALH-90</b> | <b>x</b>               | <b>x</b>            | - | <b>xxx</b>              |
|               | 0 = Windows CE Net 5.0 | 0 = Base            |   | (blank) = North America |
|               | 1 = Windows Mobile 6.5 | 1 = Step-Up         |   | EMA = Europe            |
|               |                        |                     |   | CHN = China             |

#### Examples:

- ALH-9011-EMA - Windows Mobile unit, step-up features for Europe
- ALH-9000 - Windows CE, base unit for North America

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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.

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