



# ALR-S350 Sled Handheld

## Universal Mobile RFID without the Hassle

The ALR-S350 is a robust, simple to use UHF passive RFID sled designed for all day intensive use. The sled characteristics provides the flexibility to use your preferred operating system type/version while enabling access to the latest generation in communications infrastructure without being tied more slowly evolving monolithic device.

### FEATURES

- Supports Apple iOS® and Google Android® via Smart Device
- Enables LTE and 802.11ac/ad via Smart Device
- ETSI 865.6–867.6 MHz or FCC/IC 902–928 MHz
- ERP 2W/EIRP3.3W
- 2D imager supporting all major 1D / 2D barcodes
- Ergonomic 320 g / 11.3 oz
- Robust Quadlock™ physical smart device connection
- Bluetooth Low Energy communications to Smart Device



### APPLICATIONS

- Retail
- Warehouse
- Work in Progress
- Transportation
- Missing item location

| Feature  | Enabled By   | Benefit  |
|--|--|--|
| <b>Long battery life</b>                                       | <ul style="list-style-type: none"> <li>• Double-capacity single battery</li> <li>• Low power electronics</li> </ul>  | <ul style="list-style-type: none"> <li>• Up to 24 hours of intensive use</li> </ul>  |
| <b>Robust Design</b>   | <ul style="list-style-type: none"> <li>• Dust and water ingress protection (IP54)</li> <li>• Solid drop tested design (1.5m/4,9ft)</li> <li>• Quadlock® robust phone mounting</li> </ul> | <ul style="list-style-type: none"> <li>• Robust to normal knocks and drops despite being a sled form-factor</li> </ul>   |
| <b>Simple to use</b>   | <ul style="list-style-type: none"> <li>• Effortless Bluetooth 4.2 (Low Energy) connectivity</li> <li>• Single battery operation - only one battery to manage</li> </ul>                  | <ul style="list-style-type: none"> <li>• Simple smart device pairing</li> <li>• No battery swapping required</li> <li>• Dual battery systems may not operate when one of the batteries is weak</li> </ul>                      |
| <b>Operating System and Communications Technology Agnostic</b> | <ul style="list-style-type: none"> <li>• Sled design splits RFID from Comms and O/S</li> <li>• Apps downloadable from the Apple App Store and the Google Play Store</li> </ul>           | <ul style="list-style-type: none"> <li>• Use Android or iOS</li> <li>• Use LTE of next gen 5G services</li> <li>• Use latest WiFi 802.11ac, ad etc</li> <li>• Use a phone, tablet or media player (e.g. iPod Touch)</li> </ul> |



## ALR-S350 UHF Passive RFID Sled

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Unlike many competitors, the Alien ALR-S350 sled handheld reader is provided inclusive of all peripherals required to get started. The only item that is required and not included in the kit is your preferred smart device whether it is a phone, tablet or a simple media player such as an iPod Touch. Included are:

- ALR-S350 RFID sled
- Li-Po double capacity 7000mAh 3.7V battery
- Multi-national power adapter/charging kit
- Cradle/dock with spare battery charging slot
- Micro USB cable for charging your smart device when the ALR-S350 is docked and charging



To get started, simply visit the appropriate App Store for your device and download the Alien RFID Application, pair your device and you are ready.





## RFID

| Feature            | Description   |
|--------------------|---|
| Standards          | ISO 18000-63 (EPC Class 1 Gen2v2)<br>AES authentication in accordance with ISO/IEC 29167-10 supported   |
| Frequency          | ETSI 865.6–867.6 MHz or FCC/IC 902–928 MHz  |
| RF Power           | ERP 2W/EIRP 3.3W  |
| Antenna features   | Software controlled antenna modes: linear (horizontal & vertical), circular and proximity<br>Nominal reading distance: Linear polarization mode 7 m/22 ft, circular polarization mode 4 m/13 ft, proximity mode, read range down to 1 cm/0.4 inch |
| Typical read speed | 200 tags per second   |

## Bar Code

| Feature   | Description  |
|-----------|--|
| 2D Imager | All major 1D barcodes and 2D codes<br>High visibility LED aimer<br>2 character pre and post fixes, padding, replacement<br>Enhanced aiming mode (automatic switching between scan line / aiming dot)<br>Configurable scan alert sounds |

## User Interface

| Feature       | Description   |
|---------------|---|
| Keys          | Power and Unpair a Bluetooth device<br>Trigger button |
| User Feedback | 3 LEDs and buzzer                                     |

## Communications

| Feature      | Description   |
|--------------|---|
| Wireless PAN | Bluetooth 4.2 (Low Energy) Class 2<br>Supported profiles: GATT, HID |

## Power

| Feature               | Description   |
|-----------------------|---|
| Battery               | Rechargeable, removable Lithium-Ion battery pack 7000 mAh, 3.7V   |
| Charging of S350      | Charging over cradle (0 to 100 %) 5 h<br>Charging over micro USB connector (0 to 100 %) 5–10 h                                |
| Charging of host      | Charging from cradle via USB cable<br>Adaptive charging power (4–7W) based on charge level of ALR-S350 battery                |
| External power supply | AC adapter for desktop charger: input 100–240 VAC, 1 A, 50-60 Hz / output 5.2 VDC, 3 A, 15 W / Power adapter for EU, UK or US |



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### Size and Weight

| Feature    | Description   |
|------------|---|
| Dimensions | (H) 196 x (W) 83/91 x (D) 21/135 mm<br>(H) 7.7 x (W) 3.3/3.6 x (D) 0.8/5.3 inch |
| Weight     | 320 g / 11.3 oz   |

### Drop and Shock

| Feature       | Description                                   |
|---------------|---|
| Drop & Impact | 1.5m / 4.9ft                                  |
| ESD           | Contacts +/- 4KVdc<br>Air discharge +/- 8KVdc |

### Environmental

| Feature           | Description                          |
|-------------------|--------------------------------------|
| Temperature       | Operating -20 to +55 °C -4 to +131°F |
|                   | Storage -20 to +60 °C -4 to +140°F   |
|                   | Charging 0 to +45°C +32 to +113°F    |
| Relative Humidity | 10 % to 95 % non-condensing          |
| Fastening         | Quadlock®                            |



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## Ordering Information

| Model Number | Countries   | Frequency         | Transmit Channels | Channel Spacing | RF Power | Compliance Certification  |
|--------------|-------------|-------------------|-------------------|-----------------|----------|---|
| ALR-S350-USA | USA, Canada | 902 - 928 MHz     | 50                | 500 KHz         | 1 Watt   | Emissions: FCC Part 15<br>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-S350-EMA | Europe      | 865.6 - 867.6 MHz | 4                 | 600 KHz         | 1 Watt   | Emissions: ETSI EN 302-208-2 (4 channel plan), EN 301-489<br>Safety: EN 60950, EN 50360   |

## Accessory Ordering Information

| Model Number | Description   |
|--------------|---|
| ALX-540      | Docking Station & International Power Supply for ALR-S350 |
| ALX-542      | Replacement battery for ALR-S350                          |



ALX-542 (one included in base SKU)



ALX-540 International PSU and Dock (included in base SKU)

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Draft - Subject to Change

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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, 7358598, 7342490, 7324061, 7321159, 7301458, 7295114, 7288432, 7265675, 7262686, 7215249, 7214569, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113250, 7101502, 7080444, 7070851, 7068224, 7046328, 6998644, 6988687, 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.



For more information, visit:  
[www.rfidcanada.com](http://www.rfidcanada.com)  
 Email: [info@rfidcanada.com](mailto:info@rfidcanada.com)  
 +1 905-513-8919