

ALR-2850



ALIEN.

LONG-RANGE, BATTERY ASSISTED PASSIVE RFID READER

The ALR-2850 is a high-performance battery assisted passive interrogator for use in long-range asset management and supply-chain applications. Featuring an enhanced DSP-based processor and second generation software, the ALR-2850 delivers:

- Scalable Anti-collision Algorithm
- Superior Range and Sensitivity
- Sophisticated Data Handling and Notification
- Easy Implementation and Management
- Easy Upgradeability



The **ALR-2850** fixed reader is ideal for commercial, industrial and warehouse applications. This fully featured, FCC-certified reader can be easily mounted to cover areas where tagged objects are located or transition through.

Application Examples:

- Long-range asset tracking
- Supply chain aggregation management
- Cold chain management
- Remote sensor monitoring

SCALABLE ANTI-COLLISION ALGORITHM

The **ALR-2850** fixed reader through the use of simple commands can, rapidly singulate tags with no limit to the number of tags in the field. Tags can be read up to 40 times a second.



SUPERIOR RANGE AND SENSITIVITY

Removing the need of the reader to power the tag and employing an intermediate frequency to increase the signal to noise ratio, the ALR-2850 has the longest passive read range using unlicensed power levels. An advanced low-noise RF design provides maximum sensitivity to tags whose signals have been dimmed by distance, moisture or metal. The use of circularly polarized antennas eliminates the need for large and expensive orientation-insensitive tags by making tags readable regardless of orientation.

SOPHISTICATED DATA-HANDLING AND NOTIFICATION FEATURES

With downstream data management in mind, we equipped the ALR-2850 with a variety of configurable first pass buffering and filtering modes. The elimination of redundant tag data reduces LAN traffic and server loading, saving on overall infrastructure costs. The ability to trigger reads by external event, command or schedule allows the reader to mold to the business process rather than the reverse. Similarly, the reader can be configured to notify operators of tag events by LAN, I/O signal, or even email.

Configurable tag data formats:

- XML
- ASCII text
- Custom

EASY IMPLEMENTATION AND MANAGEMENT

The ALR-2850 is easy and inexpensive to install and operate. Configuration is accomplished either locally via serial port or remotely via the LAN using a human-readable interface. LAN-friendly, the reader acquires an IP address and begins issuing an identification heartbeat automatically. Just plug it in. Alien RFID Gateway™ demonstration software allows immediate testing and development work to begin. Software integration is easily implemented through the use of Java and Visual Basic libraries found in a well-documented Software Developer's Kit.

Available documentation includes:

- Hardware Setup Guide
- Reader Interface Guide
- Hardware Technical Spec



EASY TO UPGRADE

With field-upgradeable firmware and a high-performance digital signal processor, the ALR-2850 is designed for maximum upgradeability to future enhancements.

For use with all Battery Assisted Passive Tags



Product Specifications

MODEL: ALR-2850

FREQUENCY:

2410-2472 MHz ISM band – FCC certified for unlicensed use

ANTENNAS:

Separate transmit and receive ports, 50 Ohm, reverse TNC connector

POWER SUPPLY:

12VDC, 2A (unregulated)

POWER CONSUMPTION:

25 Watts

COMMUNICATION INTERFACE:

RS232; 9-pin, Sub D (female)

COMMUNICATION SETTINGS:

Baud 115200, Data bits 8, Stop Bits 1, Parity None

LAN INTERFACE:

10baseT Ethernet

INPUTS/OUTPUTS:

4 programmable logic I/O

INDICATORS:

Power, RF, Sniff, Lock

OPERATING TEMPERATURE:

-20°C to 55°C

STORAGE TEMPERATURE:

-40°C to 80°C

DIMENSIONS:

7 inches (height) x 10 inches (width) x 2 inches (depth)

WEIGHT:

4.6 lbs