



ALR-8780 EPC CLASS 1 RFID READER



FEATURES

- Full ETSI EN 302-208 compliance, CE Mark, and adherence to European Health and Safety Regulations
- Seamless upgrade path to EPC Class 1 Gen 2 compatibility through software
- Operation at 2 watts ERP (3.3W EIRP) for improved read ranges and performance
- Listen-Before-Talk (LBT) and 10 channels for better performance in dense reader environments with 8X bandwidth of older European standards
- Full integration with EPC Class 1 global tags for multi-regional operation
- Over 97.5% duty cycle using LBT
- Software power attenuation to optimize read performance in specific environments
- Sophisticated data handling and notification for efficient management of LAN resources
- Network-readiness for easy implementation and management

High Performance Reader Delivers Benefits of New ETSI EN 302-208 Standards

The ALR-8780 is a high performance EPC Class 1 reader/programmer for use in demanding supply chain applications. Compliant with the new, higher power regulatory standards, the ALR-8780 offers European and International companies greatly increased supply chain performance over older European RFID standards such as 0.5 W ERP (UHF) (ETSI EN 300-220) and 13.56 MHz (HF).

Intelligent & Network Friendly

The ALR-8780 is suitable for immediate network installation without costly additional hardware, filtering middleware and excessive server loading. With downstream data management in mind, the ALR-8780 is equipped with a variety of configurable buffering and filtering modes. The elimination of redundant tag data reduces LAN traffic and server loading, saving on overall infrastructure costs.

- Filtering on whole or partial tag ID
- Reads triggered by schedule, external event or command
- Redundant ID elimination
- Data configured in XML, ASCII or custom format
- Event notification by LAN, I/O signal, or email
- Configuration via TCP/IP address or serial RS 232

Easy Implementation and Management

The ALR-8780 is easy and inexpensive to install and operate. Configuration is accomplished locally via serial port or remotely via the LAN with XML-packaged commands or a human readable, ASCII interface.

- Proven capability with leading RFID middleware
- Alien RFID Gateway software for immediate testing and development
- Well documented Software Developer Kit with royalty-free Java and .NET libraries

EPC Class 1 Gen 2

The ALR-8780 is designed for maximum upgradeability to future EPC specifications, including EPC Class 1, Generation 2.

PRODUCT SPECIFICATIONS

FREQUENCY:

865.6–867.6 MHz

POWER:

2 Watts ERP

REGULATORY COMPLIANCE :

Carries the CE mark. EM Compatibility: EN 302-208, EN 301 489; Safety: EN 60950, EN 50364

RFID PROTOCOL:

EPC Class 1,
EPC Class 1 Gen 2 upgrade

ANTENNAS:

4-ports, circular or linear polarization, 6 dBi, 6 meter cables, reverse polarity TNC

POWER SUPPLY:

12VDC, 5A (unregulated).
90-264 VAC input at 47-63 Hz.

COMMUNICATION INTERFACE:

Serial RS232; 9-pin, Sub D (female)

LAN INTERFACE:

10baseT Ethernet

GENERAL PURPOSE INPUTS/OUTPUTS:

4 programmable logic I/O

INDICATORS:

Reader (On), Serial (Tx, Rx), LAN (Link, Active),
Tag (Sniff, Lock), RF (On)

OPERATING TEMPERATURE:

0° C to +50° C

STORAGE TEMPERATURE:

-20° C to +70° C

DIMENSIONS:

30.4 cm x 22.9 cm x 4.4 cm

WEIGHT:

1.81 KG

	ALR-8780 under new ETSI EN 302-208 Standard	Older readers under previous ETSI EN 300-220 Standard
Power	2 Watts ERP	0.5 Watt ERP
Channels	10 @ 2 watts	1
Bandwidth	2 MHz	0.25 MHz
Authorized Duty Cycle	97.5% plus	10% (6 min. per hr.)

The ALR-8780 offers four times the power, eight times the bandwidth, and 10 times the number of channels than readers built to previous standards. The LBT capability ensures that readers in close proximity to each other function properly. Ten channels allow more readers to operate in proximity to each other. With over 9 times the duty cycle, the ALR-8780 provides significantly more coverage than readers operating under the old standard with a 6 minute per hour duty cycle.

ALR 8780 Developers Kit Includes:

- ALR 8780 Reader
- 2 ALR-8610 Antennas
- 150 EPC Class 1 tags (96-bit user data, 128 bits total)
- ALR-8780 Hardware Setup Guide
- Reader Interface Guide with API definitions
- Hardware Technical Specification
- Sample source code
- Royalty-free Java and .NET-compatible libraries
- Antennas, tags and accessories

Ordering Information

Reader model number ALR-8780

(includes power supply)

Developer's Kit model number ALR-8780-DevC

(includes reader kit, antennas, SW)

Circularly Polarized Antenna ALR-8610-AC

(includes 6 meter cable)

Linearly Polarized Antenna ALR-8610-L

(includes 6 meter cable)



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