ALR-9650
Smart Antenna RFID Reader

ALIEN®

Alien® ALR-9650 combines reader and circular polarized antenna into a single, simple-to-use, inexpensive and low-profile solution. A second antenna port enables 2-antenna applications.

2 YEAR WARRANTY

- Simple, low-profile solution for single antenna applications
- Integrated, high-performance circular antenna — only 9"x 9"

- POE eliminates cost of AC power drop
- EPC Gen 2 Dense Reader Interoperable
- Second antenna port enables 2-antenna applications
- Manageable and upgradable

Benefit	Enabled By:	What does this mean to me?
Ease of Use	• Integrated antenna • Alien Reader Protocol • Smart reader/autonomous mode • Alien Reader Control Architecture & Ruby • Power-over-Ethernet (PoE) • Remote firmware management	• Easy to set up and deploy • No additional costly controllers • Less maintenance and overhead • Minimizes network infrastructure • Can be set up in areas with no power • Small footprint for tidy implementation
Low set-up and low-running cost		
Deployable in commercial environment	• Small footprint • Integrated antenna • Few cables required (e.g. no power cable) • Blends into commercial environment	• Space efficient • Usable in highly visible locations • No additional housing required

Simple, Low Profile, Gen 2 RFID Solution

With its integrated antenna, Power-Over Ethernet (POE) and out-of-the-box software compatibility, the ALR-9650 Gen 2 RFID Reader is a simple, low profile solution that enables new users to start reading tags and developing solutions immediately.

Easy to Integrate

The ALR-9650 communicates via the popular Alien Reader Protocol, with key RFID platform support including Microsoft® BizTalk RFID, OatSystems, Oracle®, Xterprise and others.

A well-documented SDK featuring .NET, Java and Ruby libraries enables easy development of custom interfaces to control the reader if desired. The user friendly Alien RFID Gateway software enables the user to begin solution development immediately.

Low System Cost

The cost of installing AC power can sometimes rival the cost of the reader. The ALR-9650's POE capability allows power to be delivered over properly-equipped local area networks, eliminating expensive AC wiring installation. A POE power injector is provided to supply power if POE is not available. The combination of this capability with the elimination of the external antenna significantly reduces the cost and complexity of installing an RFID read point.

Small Footprint

The ALR-9650 takes up little space; at only 9 inches square it uses less than half the real-estate of a typical reader and antenna system. Combined with the elimination of messy cables for antennas and power, the ALR-9650 easily fits into a variety of tight spaces and enables neat and tidy placement when it is visible to consumers or the general public.

ALR-9650 Smart Antenna RFID Reader
Complete, Easy-to-manage, Integrated-Antenna RFID Solution

Model Number	ALR-9650
Supported RFID Tag Protocols	EPC Gen 2; ISO 18000-6c
Reader Protocol	Alien Reader Protocol, firmware upgradable
LAN Protocols	TCP/IP, NTP, DNS, DHCP, SNMP
Dense Reader Management	Dense Reader Mode, Auto event triggering and event management
Frequency	902.75 MHz – 927.25 MHz
Channels	50
Channel Spacing	500 KHz
RF Power	Max; 4 watts EIRP with internal antenna
Power	24 VDC supplied via an AC/DC power converter or POE (IEEE 802.3af). Unit ships with a Power Sourcing Equipment (PSE) module
Communications	LAN TCPI/IP (RJ-45), RS-232 (DB-9 F)
Antennas	One internal, one external port with RTNC connector
General Purpose Inputs/ Outputs	2 inputs, 2 outputs, TTL compatible
Dimensions	(L) 9.13″ x (W) 9.0″ x (D) 2.0″
Weight	1.0 kg (2.2 lb) max
Operating Temperature	-20°C to +55°C (-4°F to +131°F)
LED Indicators	Power, LAN Link, LAN Active, RF On, Read, Fault
Software SDK	Java, .NET, Ruby APIs
Vibration	MIL STD 810 514.5C-3 Composite wheeled vehicle profile
Shock	40 G's Acceleration, 11 ms duration, sawtooth waveform
Compliance Certification	Emissions: FCC Part 15 Safety: cTUVus tested to: CAN/CSA–C22.2 No.60950-1-03, and UL 60950-1:2003 R7.06 specifications IEC 60950-1 and EN60950-1
Warranty	12 months / 2 Years*

2 YEAR WARRANTY

Industry-Leading Reliability

Enjoy the best in technology with confidence. Alien's world-class readers now come standard with a two-year warranty. Contact your local Alien representative to inquire about specifics.

Models by Country

Model Number	Countries	Frequency	Transmit Channels	Channel Spacing	RF Power	Compliance Certification
ALR-9650	USA, Canada, Mexico	902 - 928 MHz	50	500 KHz	4W EIRP	Emissions: FCC Part 15 Safety: cTUVus tested to: CAN/ CSA-C22.2 No.60950-1-07+AI:2011
ALR-9650-CHN	China, Singapore	920 - 925 MHz	16	250 KHz	2W EIRP	Emissions: CMII Safety: IEC 60950-1:2005 2nd edition & CCC
ALR-9650-KR2	South Korea	916.7 - 920.9 MHz	6	600KHz	4W EIRP	KC
ALR-9650-RSA	South Africa	915.4 - 919 MHz	17	200 KHz	4W EIRP	NRCS, ICASA
ALR-9650-TAI	Taiwan	922 - 928 MHz	12	500KHz	1W ERP	NCC
ALR-9650-WR1	Australia, Hong Kong, Thailand	920 - 925 MHz	8	500 KHz	4W EIRP	ACMA
ALR-9650-ID	Indonesia	923 - 925 MHz	4	500 KHz	2W ERP	Ministry of Communications and Information Technology

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