

Wavetrend Ethernet Reader

Product Code: L-RX900

Description: Ethernet Reader

The **L-RX900** Ethernet Reader detects and decodes RF transmitted signals from the Wavetrend family of tags. Interpreted data is converted into electrical information that is passed through the Ethernet port.

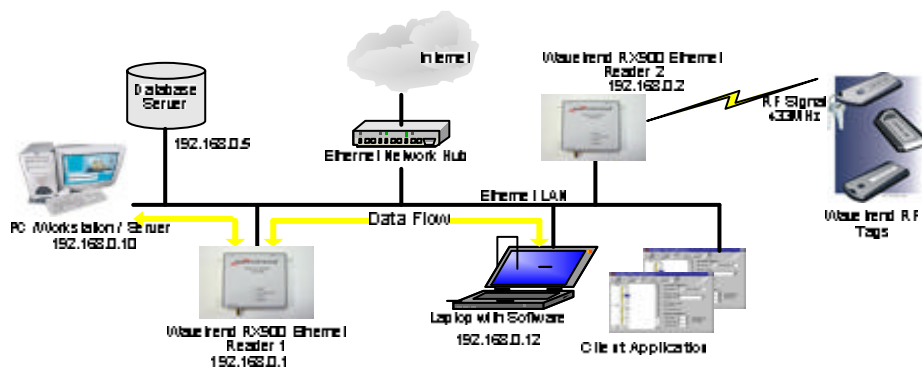
L-RX900 Readers can be used in a stand-alone mode or can be connected by using a network hub. The electrical connection between the host PC and the ethernet reader is by IEEE 802.3 protocol standard.



Features

- Embedded Web Server
- 10/100 MBit Ethernet Auto Sensing
- Easy configuration through a web interface
- Email capabilities
- Password Protection
- 128-, 192 or 256-bit AES Rijndael encryption (Optional)
- Up to 255 unique Receiver Addresses possible.
- Readers are powered by a 12v - 1.5amp power supply, centralised or distributed PSU topology may be used.
- Reader status indication by LED's.
- 2 Input Relays available
- ESD protection as specified by FCC and CE requirements.
- Conformance to the RF standards required by the internationally accepted regulatory bodies: i.e. FCC, CE and ETSI.
- Sensitivity adjustment, and reader addressing done remotely via PC software application.
- Reader programming (configuration) done dynamically via PC software.

Basic Configuration





Typical read ranges of Wavetrend Tags with various antennas

(Distances may vary depending on the ambient RF environment)

(The following tests were conducted in free air)

L-RX900

	Min	Max
Antenna Type	Range (metre)	Range (metre)
None	0.2	7
L-AN200 (Stub)	1	30
L-AN100 (Whip)	3	35
L-AN300 (Patch)	3	100
RSSI threshold	70	130

Specifications

RF Specifications

Rx Frequency	433 Mhz
Demodulation	ASK
Sensitivity	- 103 dBm
Stability	2ppm / °C
RF Input	50 Ohm BNC (Female)

Electrical Specifications

Supply Voltage	9V DC – 12V DC
Max current consumption	±72 mA to 80 mA
ESD protection	2 kV Human Body Model

Protocol Specifications

Standard Data Rate (Baud)	Ethernet 10/100Mbit/s
Interface	RJ45 connectors

Environmental

Operational temperature	- 10° C to + 60° C
Storage temperature	-20° C to + 70° C
Humidity	5 % to 90 % (non condensing)

Physical

Size	146 mm x 111 mm x 24 mm
Weight	340 grams
Colour	Silver
Type of material	Aluminium
Input/Output Connections	1 x RJ45 Socket , 12V Power , 2 x I/O Relays,





L - Series

Product Information Sheet

Certification

The following standards applied in accordance with Article 5 of the directive, 1999/5/EC:

- EN 300 220-1 V1.2.1 (1997-11)
- ETS 300 683 (1997-03).
- FCC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation
- All certifications are pending until the official release of the product

Summary of tests

Effective radiated power	25 MHz - 4 GHz
EN55022	Radiated emissions 30 MHz – 1GHz
EN55022	Conducted emissions 150 kHz – 30 MHz
EN61000-4-3	Radiated immunity 80 MHz – 1GHz, excl 433 MHz \pm 20 MHz
EN61000-4-4	Electrical fast transients
EN61000-4-2	Electrostatic discharge
EN61000-4-6	Conducted immunity 150 kHz – 80 MHz



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