

ACTIVE RFID



- Instant reporting of detected Wavetrend active RFID tags
- User configurable tag data and read range filters
- Singular use or as part of multiple reader daisy chain network
- Easy remote configuration via the reader network
- Supports RS232, RS485 and USB connection
- Supports wide variety of antennas to achieve custom coverage areas
- Compatible with L Series

The RX210 reader detects and decodes RFID (radio frequency identification) signals from Wavetrend's range of active RFID tags. It can operate in rugged conditions at ultra long ranges, subject to the appropriate antenna being fitted to the unit. The data from detected tags is sent by the reader via RS485 / RS232 or USB to authorised corporate computing systems.

Typical Applications

This reader is ideally suited for use in systems that track tagged assets such as containers, plant and machinery or high value assets, or for monitoring personnel in health and safety or security applications. The RX210 readers can be used to create RFID networks within buildings. For more robust and rigorous uses they can be deployed externally across large complexes, such as container ports, warehouses or external yards if suitably protected.

The tag data and reader status information is fed into the end-user application enabling complete management of all tagged assets and the automation of business decisions about them based on accurate and near real-time knowledge of their location and condition.

KEY FEATURES	BUSINESS BENEFITS
Up to 255 unique Receiver Addresses possible	Allows for multiple readers to be connected in a daisy-chain RS485 network
Remote readers are powered via standard CAT5 cable centralised or distributed PSU topology may be used.	Units can be powered over the network or individually depending on the clients requirements
Reader status indication by LED's at RJ45 connectors.	Provides activity and function diagnostics
Certified for FCC and ETSI	Can be deployed in all major countries
High RF long and short range sensitivity	High near field resolution < 0.5m
USB connection	Allows easy installation diagnostics and demonstrations
RF hardened Receiver	Maintains high performance in RF noisy backgrounds
Configurable protocol support for L series	Can read L series tags
Two modes of data transmission: <ul style="list-style-type: none"> ▪ Hardware auto-polling: tag data provided automatically from Reader network ▪ Software polling: tag data requested from each reader individually by intelligent edge devices or host application. 	<ul style="list-style-type: none"> ▪ Hardware auto-polling allows for the continuous feed of tag data to the system in the fastest possible manner. ▪ Software polling allows for dynamic communication with each reader by software applications, instant notification of reader offline and customisation of reader polling order and frequency.

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Compatibility

The RX210 is designed for use with the Wavetrend IPSU and RX211 access readers, these products can all be networked using standard Cat5 cabling.

It should be noted that the RX210 is not pin for pin compatible with the RX202 or RX201 and if used with these products can cause damage to them.

Specifications

Environmental <ul style="list-style-type: none"> Operating temperature Storage temperature Humidity IP Rating 	<ul style="list-style-type: none"> : -40°C to +85°C : -20°C to +70°C : 5% to 90% (non condensing) : IP50
Physical <ul style="list-style-type: none"> Size Weight (unit) Colour Material Connections 	<ul style="list-style-type: none"> : 105 mm x 58mm x 28mm : 118 grams : Aluminium Grey : Aluminium : 2 x RJ45 socket : 1 Mini USB type socket : 2.5mm Power socket
Radio Frequency <ul style="list-style-type: none"> Receive Frequency Modulation RF Input 	<ul style="list-style-type: none"> : 433.92 MHz : ASK : 50 Ohm BNC
Electrical <ul style="list-style-type: none"> Supply Voltage Max. current consumption 	<ul style="list-style-type: none"> : 7V ~ 16Vdc : 60 ma
Protocol Specification <ul style="list-style-type: none"> Standard Data Rate Interface 	<ul style="list-style-type: none"> : 9,600 ~ 115,200 (baud rate) : RJ45 connectors

RX210 Accessories

Antenna Ranges

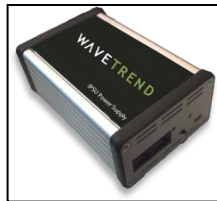
AN100	¼ Whip up to 50m
AN200	⅓ Stub- up to 20m
AN350	Circular patch up to 150m
AN400	Outdoor Whip up to 150m

Serial Networking hardware

Completing the networking suite for all power and access control requirements please refer to the RX211 and IPSU.



RX211



IPSU

*Read ranges are affected by environmental conditions and site configurations and may not match those stated in this sheet. Read ranges will generally be greater outdoors than indoors. With specialist antennas, ranges in excess of 500m can be achieved.

FCC Statement of Conformity

Wavetrend RX210

This device complies with Part 15 of the FCC rules subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept all interference received, including interference that may cause undesired operation.
- 3) Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Certified for FCC and CE use



Ordering & Further Information

For more information on purchasing the RX210 please email the Wavetrend' Sales team:

sales@wavetrend.net

For more information on Wavetrend® visit our website.

IP Information

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