



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 RX202 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 RX202 readers can also 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. |

Compatibility

The RX202 is a direct pin for pin replacement for the RX201 and uses the legacy Wavetrend two pair wiring configuration.

It is designed for use in existing RX201 configurations as is entirely interchangeable with RX201 readers.

The RX202 cannot be used with the Cat5 patch cable compatible RX210, RX211 and IPSU.

RX202 Accessories Antenna Ranges

| | |
|--------------|---------------------------|
| AN100 | ¼ Whip up to 50m |
| AN200 | ½ Stub- up to 20m |
| AN350 | Circular patch up to 150m |
| AN400 | Outdoor Whip up to 150m |



AN100



AN200



AN350



AN400

*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.

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 : Black : 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 : 60 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 |

FCC Statement of Conformity Wavetrend RX202

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



IP Information

Wavetrend and the Wavetrend logo are either registered trademarks or trademarks of Wavetrend Technologies Limited in the United States and/or other countries. All other trademarks are the property of their respective owners. The product(s) described in this document are protected by various patents held by Wavetrend. Refer to the URL www.wavetrend.net/IPR for information on all patents and trademarks held, and for Wavetrend's Policy on Intellectual Property Rights.

Ordering & Further Information

For more information on purchasing the RX202 please email the Wavetrend' Sales team:

sales@wavetrend.net

For more information on Wavetrend® visit our website.