



UHF Radio Link to 5km (RL 60 Series)

- *Access your weather station remotely with a medium range wireless link.*
- *Permanent data-streaming capability: display the current weather conditions in your office or on the internet*
- *No ongoing costs, license-free operation.*

Features

- Low power with long range
- Secure packet transmission
- Extended range antenna options
- Compatible with all Envirodata weather stations
- High speed

The RL60 series modems are supplied as a complete field-ready package including two radio modems, antennas, lightning protection, housing and power supply where applicable.

These UHF modems are capable of transmitting data over long distances with low total power consumption. This makes them easy to solar-power at the weather station end, reducing both size and cost of solar panels, batteries and regulators.

The RL60 series radio modems have a transmission distance of up to 1 kilometre line of sight with the omnidirectional dipole antennae option, and up to 5 kilometres with the optional directional antenna.

The RL65 version is designed to fit inside our Weather Maestro IP66 PVC inner housing.

For the WeatherMaster and Logging Rain Gauge series of Weather Stations, a field UHF modem with a separate housing is required (RL62 package).

Package RL61 is a complete stand-alone solar panel, regulator and batteries, for the RL62 package.

The RL60 Series Telemetry packages are a cost effective solution for remotely accessing your weather data, including streaming the data to your office or SCADA system and viewing live data on the web when using our WebGen software.



Specifications

General

- Networkable packet radio modem

Frequency Band

- 433 Mhz unlicensed ISM (Instrument, Scientific and Medical) band

Operating mode

- Direct FM, spread spectrum frequency hopping transceiver set to 9600 baud

Range (line of sight)

- Dipole RL60D package – 1 kilometre
- Yagi RL60Y Package – 5 kilometres

Receiver sensitivity

- 108 dBm

Transmitter Power

- 25 milliWatt

Communications Interface

- RS232 including Tx ,Rx, CD, and ground

Reliability

- Typically five (5) years' operation expected between factory services

Housing (RL62)

- High impact PVC sealed IP65 with sealed antenna, power and communications connectors
- Powder coated aluminium sunshade for mounting.

Operating Conditions

- Temperature: -20°C to +60°C
- Humidity: 0% to 100%

Power Supply

- 12 volt sealed lead acid battery

Current Drain

- < 20 mA in standby mode
- < 45 mA in transmit mode

Configurations

RL60

- Base station for all RL60 based systems
- Suits all Envirodata Weather Stations

RL62

- For WeatherMaster 2000 and Logging Rain Gauge systems
- Requires RL61 solar assembly

RL65

- For Weather Maestro Weather Stations
- Mounts inside Weather Maestro IP66 Inner PVC sealed housing

RL60D

- Dipole Antennae (pair) package including cables, mounts and lightning protection
- 1km range line of sight

RL60Y

- Yagi Directional Antennae (pair) package including cables, mounts and lightning protection
- 5km range line of sight

Shipping Weight

- RL60: 5 kg
- RL62 & RL61: 10 kg
- RL65: Add 2kg
- RL60D / RL60Y 3kg / 5kg