

RM-232-151 VHF RADIO MODEM

10mW LOW POWER. 100mW HIGH POWER
LICENCE EXEMPT 151.300 MHZ

The RM-232-151 is a low cost high performance radio modem providing a reliable wireless data link capable of data throughput rates exceeding 2400bps at ranges to 2kms LOS. Its ease of use and numerous features make it ideal for adding wireless communications to any medium range point-to-point & point-to-multipoint RS232 link.

Features

- Acknowledged point-to-point & point-to-multipoint.
- Broadcast multi-drop & multimaster mode.
- DTE speed 600-115200bps.
- Air data speed 600-2400bps.
- Flow control - hardware/software/none.
- Up to 2Km outdoor & 150m indoor range.
- Extended range to 4Km with 100mW version
- Reliable data transfer with on-air encryption.
- Simple built-in command line configuration.
- Built-in RF link diagnostics.
- Remote over-air unit configuration.
- Front panel modem status indicators.
- Supplied with SMA antenna connector.
- Low profile ABS plastic enclosure
- Low operating current. Auto standby mode.
- 7 to 15VDC operation or internal battery.



Applications

- Remote data acquisition systems
- EPOS equipment, barcode scanners
- Remote monitoring and control systems
- Portable logging equipment (body worn etc)

Easy and Reliable

The RM-232-151 uses addressable data packets with error checking, packet acknowledgements and retransmissions to achieve a reliable invisible wireless data link. Built for ease of use and rapid installation, the RS232 interface ensures direct connection to serial equipment while the built-in diagnostics aid with site evaluation and network configuration.

Extending Range

Use an externally mounted remote antenna to improve range where a smaller SMA mounted antenna is not ideal. Additionally the RM-232-151 can be configured as a repeater to further increase the operational range. Note the use of a high gain external antenna may result in radiated power levels above the licensed levels permitted in the country of use.

Broadcast Multi-drop Networks

Configure the RM-232-151 for broadcast multi-drop mode and combine with any number of intelligent host computers/controllers to implement very large multipoint radio networks.

TECHNICAL SPECIFICATIONS

RM-232-151

General

- Operating Voltage 7 to 15VDC via 2.5mm DC Jack
- Operating Current
 - Transmitting/Receiving Average 40mA (Data streaming)
 - Transmitting/Receiving (100mW) Average 60mA (Data streaming). Peak 100mA.
 - Standby/Power-down 15mA/400uA
- Operating Temperature 0 to +55 degrees C
- Configuring settings Built-in software command line configurator
- Supplied with: 1.8 metre D9 RS232 cable
Manual supplied by email with order.

Interface

- RS232 Interface DCE - 9 pin female – 8 data/1 stop/no parity
- RS232 Signals RXD, TXD, RTS, CTS, DTR, GND
- Powerdown control Via DTR (software configurable)
- RS232 Handshaking Selectable as hardware/software/none
- DTE Interface Speed 600/1200/2400/4800/9600/
19200/38400/57600/115200
- Air Interface Speed 600/1200/2400
- Antenna Socket SMA Female

Receiver

- Sensitivity -116 dBm for 1ppm BER
- Standard frequency Single channel UHF 151.300 MHz
- Available frequencies (MOQ) 151.300MHz to 173.250MHz (MOQ)

Transmitter

- Output Power +10 dBm +/- 2dB into 50ohm load
- Output Power 100mW version +20 dBm +/- 2dB into 50ohm load
- Spurious Emissions -70 dBc

Approvals

- Australian Standards AS 4268.2
- European Standards EN 300 220-3, EN 300-489-3

Physical

- Dimensions 103mm (L) x 61.5mm (W) x 23mm (H) (Excludes SMA)
- Enclosure ABS Plastic with integrated PP3 battery compartment
- Mounting Adhesive Velcro. Optional TS35 DIN mounting bracket

Ordering Information

Part number	Description
RM-232-151/S	RM-232-151 fitted with SMA socket
RM-232-151P/S	RM-232-151 fitted with SMA socket. 100mW high power version.
ANT-151H-SMA	151MHz SMA mounted whip antenna
ANT-151D-HI	Ground independent end fed ½ wave dipole antenna
PSU-9V03	Plug pack power supply 9V @ 300mA. (Available Australia only)