

## RM-232-433 UHF RADIO MODEM

### HIGH SPEED LOW POWER LICENCE EXEMPT 433.920 MHZ

The RM-232-433 is a low cost high speed radio modem providing a reliable wireless data link capable of data throughput rates exceeding 14400 bps. Its ease of use and numerous features make it ideal for adding wireless communications to any point-to-point or point-to-multipoint RS232 serial link.

### Features

- Acknowledged point-to-point & point-to-multipoint.
- Broadcast multi-drop & multi-master modes.
- DTE speed 600-115200bps.
- Air data speed 600-14400bps.
- Flow control - hardware/software/none.
- Up to 300m outdoor & 50m indoor range.
- Up to 1Km outdoor using external antenna.
- 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.
- Low operating current. Auto standby mode.
- 7 to 15VDC operation or internal PP3 battery.
- Low profile enclosure with integrated PP3 battery.
- Optional SMA connector and TS35 DIN rail bracket.



### Applications

- Remote data acquisition systems
- EPOS equipment, barcode scanners
- Wireless computer peripheral networks
- Remote monitoring and control systems
- PDA, laptop, organiser, printer connectivity
- Portable logging equipment (body worn etc)

### Easy and Reliable

The RM-232-433 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 external antenna to improve range where the fixed helical or 1/4 wave whip antennas are not ideal. Additionally the RM-232-433 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-232-433 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-232-433

### General

Operating Voltage	7 to 15VDC via 2.5mm DC Jack
Operating Current	
Transmitting/Receiving	Average 40mA (Data streaming)
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 controlled)
RS232 Handshaking	Selectable as hardware/software/none
DTE Interface Speed	600/1200/2400/4800/9600/14400 19200/38400/57600/115200
Air Interface Speed	600/1200/2400/4800/9600/14400

### Receiver

Sensitivity	-100 dBm for 1ppm BER
Operating Frequency	Single channel UHF 433.920 MHz

### Transmitter

Output Power	10mW ERP
Spurious Emissions	-70 dB

### Approvals

Australian Standards	AS 4268.2
European Standards	EN 300-220-1, ETS 300-683

### Physical

Dimensions	103mm (L) x 61.5mm (W) x 23mm (H) (Excludes antenna)
Enclosure	ABS Plastic with integrated PP3 battery compartment
Mounting	Adhesive Velcro. Optional TS35 DIN mounting bracket
Antenna	Fixed helical stubby or fixed ¼ wave whip or SMA.

### Ordering Information

Part number	Description	Unit Price ex works Ellighausen
RM-232-433	RM232 fitted with stubby helical antenna	upon request
RM-232-433/W	RM232 fitted with flexible ¼ wave whip antenna	upon request
RM-232-433/S	RM232 fitted with SMA socket	upon request
RM-232-433/SD	RM232 fitted with SMA socket and DIN rail bracket	upon request
ANT-433H-SMA	433MHz SMA mounted helical antenna	upon request
ANT-433D-3DB	Industrial standard end fed 3dB dipole antenna	upon request