

Radio Data Modems

RSX150
125-180MHz

RSX450
400-500MHz

RSX850
868-870MHz

High speed operation

Fully transparent over RF link

CRC

RS232 data rate
300 - 38400 baud

User configurable

Power save mode

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The RSX family is a group of high speed intelligent radio modems which incorporate the W&D Professional Range transceivers. These radios are proven multi-channel synthesised units which benefit from worldwide approvals in their own right.

The modems can operate at either VHF or UHF frequencies and are approved to EN 300 113 and EN 300 220 radio specifications and EN 300 489 EMC requirements.

The modems are housed in small rugged metal enclosures with straightforward access to RF and data interfaces via a BNC and D type connector. Mounting of the modems is by four external flange

fixings. The modems allow, depending on channel spacing, maximum on-air data rates of 4800 or 9600 baud using GMSK (Gaussian Minimum Shift Keying) modulation. Serial data is passed to the modem via the RS232 interface at data rates of up to 38400 baud.

To allow flexibility in meeting the individual user's operational requirements, the RSX modems are supplied with proprietary set up software.

This allows access to a wide range of configurable parameters including a link test facility and source and destination addressing.

The units operate from an internally selected 7V or 12V external negative earth supply.

The RSX family offers a high quality, yet cost effective wireless data solution for point to point digital messaging. The versatile nature of the configurable user interface will make the modems attractive for use by both the technical and non-technical user.



RSX Series Specification

Mode of operation	Transmit only, receive only, transceive (configurable)
Data input/output	RS232
RF Baud rate	4800 for 12.5kHz and 9600 for 20kHz and 25kHz channel spacing
Modulation type	GMSK
Frequency range	VHF 125-180MHz or UHF 400-500MHz and 868-870MHz
RF channels	80 (via separate RS232 input)
Channel spacing	12.5KHz/20KHz/25KHz available
RS232 Baud input rate	300, 600, 1200, 2400, 4800, 9600, 19200 and 38400 (configurable)
Source address	0-255 (configurable)
Destination address	0-255 (configurable)
Parity	None, odd, even (configurable)
Handshaking	RTS, CTS, DCD (squelch)
Supply voltage	5.5 -9.0V DC or 9.0 -15V DC - ve earth
Supply current at 7V	460mA typical (transmit); 120mA typical (receive)
Tx/Rx switching time	20mS
RF power output	500mW (High); 5mW (Low)
Interface connector	9 Way D type
RF connector	BNC
Type approval	ETS 300 113, MPT1329 and ETS 300 339 (EMC)
Size Overall	138 x 63 x 30mm (5.5" x 2.5" x 1.0")
Weight	670g (1.25lb)
Operating temperature	-10 to +55°C
Storage temperature	-30 to +70°C
General facilities	LED confirming functional state (Tx, Rx, fail)
Power save facility	Logic input provides modem on/off switching
Tx forcing mode	Configures the modem to transmit regardless of squelch state

RADIO MODULES

For full details of the radio modules used in the RSX family, see data sheet 1893 2013 which details the SX150, SX450 and SX850 devices. For more information on the modem refer to the handbook 1892 1139

Wood & Douglas maintain a policy of continuous improvements and enhancement. As a consequence the above specification may change without prior notice.

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