



# RX-D receiver

Datawell - Oceanographic Instruments

## Basic HF link receiver with fixed, crystal selected reception frequency



The RX-D is a dedicated HF link receiver that supports Datawell Waverider buoys fitted with the standard HF transmitter using the "HXV" transmission format. The HXV format is used by the current buoys.

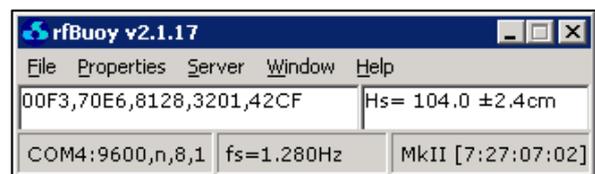


The RX-D is tuned to a single frequency by a crystal. The crystal can be custom made to allow reception of any frequency between 25.5 and 35.5 MHz. The receiver is pre-tuned at the factory but can be retuned later by Datawell to allow reception of other frequencies.

The RX-D is especially designed for single buoy applications or for use on fixed receiving locations where the reception frequency does not have to be changed often.

To ensure the best reception possible, the RX-D uses a completely linear signal processing chain that does not distort the signal like traditional FSK receivers. This makes the RX-D relatively resistant against near-band interference and noise signals.

The RX-D is supported by the W@ves21 software package and the new Waves4 package.



The RX-D comes standard as a compact desktop model. Alternatively, the RX-D is available as a 19" rack-mount model with the same specifications. Power requirements are 100 - 240 VAC.



# RX-D receiver

Datawell - Oceanographic Instruments

## Specifications

<b>HF</b>	Frequency range	25.5 - 35.5 MHz ( 35.5 - 45.0 MHz on request ) Crystal selected frequency
	Usable sensitivity	-116 dBm (0.5 $\mu$ V)
	Dynamic range	> 60dB
	Receiver bandwidth	1.2 kHz
	Link bit rate	81.92 bits per second, 2FSK modulation (HXV mode)
	Compatibility	Directional Waverider MkI, MkII, MkIII, DWR-G and WR-SG
<b>Interface</b>	Display	2 x 20 character liquid crystal display with backlight
	Serial output	3-wire RS232, 9600 bits per second
	AC power	100 - 240 VAC, 50 - 60 Hz, 3.0W avg. / 4.5W max.
<b>Environmental</b>	Temperature range	-10 - +50 °C
	Relative humidity	10 - 80% (non condensing)
	Weight (desk top)	1.8 kg
	Weight (19")	2.3 kg
	Dimensions (desk top)	230 x 100 x 200 mm (W x H x D)
	Dimensions (19")	482 x 88 x 200 mm (W x H x D)