



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 all Datawell Waverider buoys fitted with the standard HF transmitter.



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 normally 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.

At the computer side, the RX-D is supported by the W@ves21 software package.



The W@ves21 rfBuoy module decodes the data received by the receiver and makes it available to the user. Additionally, rfBuoy can be used to transmit the data over the internet. This makes it possible to use the receiver on remote locations where only an internet connection is available. The RX-D is delivered in a compact desktop casing. Power requirements are 100 – 240 VAC.



RX-D receiver

Datawell - Oceanographic Instruments

Specifications

HF	Frequency range	25.5 - 35.5 MHz (35.5 - 45.0 MHz on request) Crystal selected frequency
	Usable sensitivity	-116 dBm (0.5 μ V)
	Dynamic range	> 60dB
	Receiver bandwidth	1.2 kHz
	Link bit rate	81.92 bits per second, FSK modulation
Interface	Display	2 x 20 character liquid crystal display with backlight
	Audio output	6.3 mm jack connector
	Serial output	3-wire RS232, 9600 bits per second
	AC power	100 - 240 VAC, 50 - 60 Hz, 3.0W avg. / 4.5W max.
Environmental	Temperature range	-10 - +50 °C
	Relative humidity	10 - 80% (non condensing)
	Weight	1.8 kg
	Dimensions	230 x 100 x 200 mm (W x H x D)