



RX-C receiver

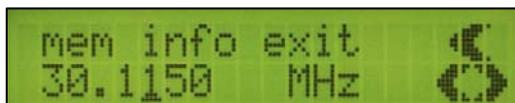
Datawell - Oceanographic Instruments

Advanced HF link receiver with digitally selectable reception frequency and preset memory

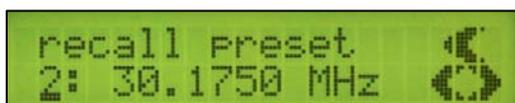


The RX-C is a dedicated HF link receiver that supports all Datawell Waverider buoys fitted with the standard HF transmitter.

In the RX-C, a programmable digital frequency synthesizer makes it possible to manually select the reception frequency in 100 Hz steps. This allows reception of any frequency between 25.5 and 35.5 MHz by the touch of a button.



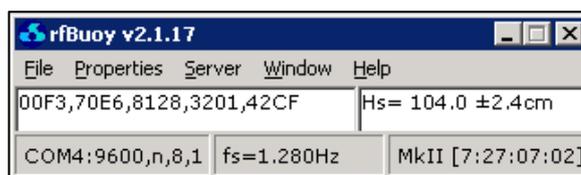
Additionally, up to 6 frequencies can be stored into the internal preset memory. This is ideal in those situations where the receiver is used as a spare for a small fleet of buoys.



To ensure the best reception possible, the RX-C uses a completely linear signal processing chain that does not distort the signal like traditional FSK receivers. This

makes the RX-C relatively resistant against near-band interference and noise signals.

At the computer side, the RX-C 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-C is standard delivered in a compact desktop casing. Alternatively, the RX-C is available as a 19" rack-mount version with the same specifications.

For applications where AC power is not available, such as remote (solar powered) stations, the RX-C can also be equipped with a 12 VDC power input instead of the standard 100 – 240 VAC power input.



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Specifications

HF	Frequency range	25.5 - 35.5 MHz (35.5 - 45.0 MHz on request) PLL synthesizer tuning
	Usable sensitivity	-116 dBm (0.5 μ V)
	Dynamic range	> 60dB
	Receiver bandwidth	1.2 kHz
	Antenna	N type connector, input impedance 50 Ω
	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, 800 mV _{rms} , output impedance 10 k Ω
	Serial output	3-wire RS232, 9600 bits per second
	AC power (standard)	100 - 240 VAC, 50 - 60 Hz power consumption approx. 3 W
	DC power (optional)	9 - 18 VDC power consumption approx. 2.3 W (1 W Bufin mode)
Environmental	Temperature range	-10 - +50 °C
	Relative humidity	10 - 80% (non condensing)
	Weight (desktop)	1.8 kg
	Weight (19")	2.3 kg
	Dimensions (desktop)	230 x 100 x 200 mm (W x H x D)
	Dimensions (19")	482 x 88 x 200 mm (W x H x D)