



Waverider fl

Datawell - Oceanographic Instruments

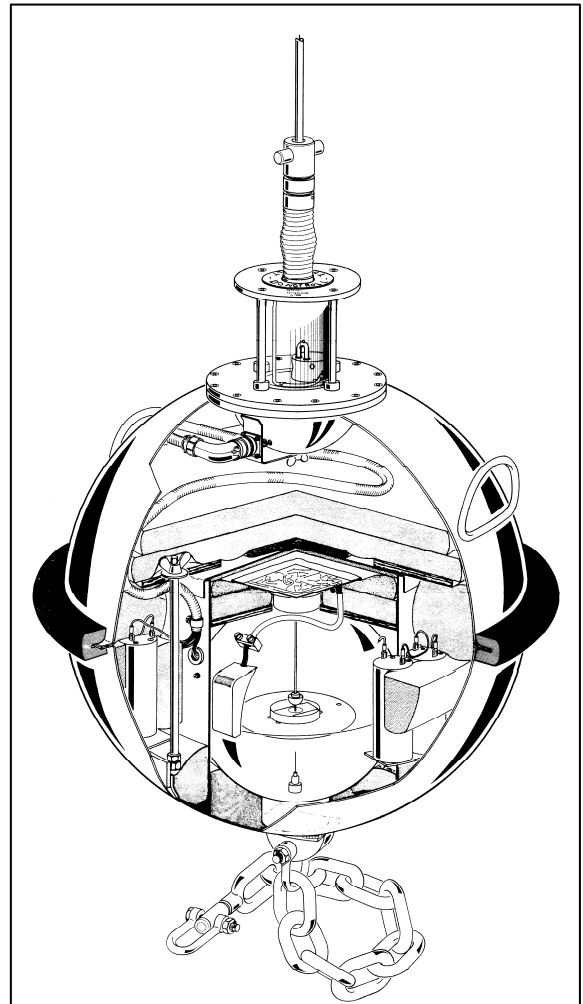
The Datawell Waverider, the first and most sold wave buoy ever

The quality and reliability of the Waverider does not need any advertising anymore. Over the years thousands of these buoys have been sold. Many of them operating over 15 years in the harsh sea environment.

Waves are measured by integrating the vertical acceleration. To avoid measurements of unwanted accelerations, the accelerometer is mounted on a stabilized platform having a natural period of 40 seconds. By this means the sensitive axis is kept within a few degrees of the vertical.



0.7 m



Though the suspension of the stabilized platform is fragile, the construction as a whole has proven to be very reliable. This reliability is accomplished by making the platform and the accelerometer neutrally buoyant in the sensor fluid. Many buoys have survived direct ship collisions, even propeller hits, without the sensor being damaged.



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Specifications

Wave height	Range	-20 m - +20 m
	Noise	0.02 m peak - peak (bandwidth 1 Hz)
	Frequency range	0.065 Hz - 0.45 Hz (0.3 dB) (0.9 m diameter) 0.035 Hz - 0.55 Hz (3 dB) 0.065 Hz - 0.5 Hz (0.3 dB) (0.7 m diameter) 0.035 Hz - 0.65 Hz (3 dB)
Standard features	Flash light	Xenon tube, color yellow, pattern 5 flashes every 20 seconds, visibility range about 4 nautical miles
	HF transmitter	frequency range 26 MHz - 44 MHz transmission range 50 Km (over sea) radiated power 80 mW \pm 20 %
Options	Water temperature	range 0.7 °C - +39.5 °C, resolution 0.02 °C, accuracy 0.2 °C
	Hull painting	Brantho Korruux "3 in 1" paint system (no anti-fouling)
General	Hull diameter	0.9 m (0.7 m) (excluding fender)
	Weight	171 Kg (102 Kg)
	Material	3 mm (2 mm) AISI 316 stainless steel or Cunifer 10, Cunifer 10 does not suffer from pitting and fouling
	Mooring	standard, 15 m of 35 mm rubber cord (enables the Waverider to follow the wave orbital movement)
	Batteries	operational life 28 months (14 months), 26 (13) batteries, type Datacell RC25G (green)
	Receiver	DIWAR