# **Oceano R5**

## Oceanographic acoustic release

Oceano R5 is the latest version of iXblue's oceanographic acoustic release. It has been designed to be a real workhorse: based upon what made the success of the previous Oceano 2500S Universal (AR861B2S), robustness and reliability, Oceano R5 is lighter and shorter for the same depth rating (6,000m/19,700ft). It is equipped with a positive drive-off release mechanism for improved release reliability and built out of high-tensile strength super duplex stainless steel offering outstanding corrosion resistance. Fitted with new electronics, Oceano R5 was designed to minimize mechanical friction for added robustness.

All these improvements make Oceano R5 the ideal acoustic release for long-term deployment in harsh environments.



#### **FEATURES**

- · Positive drive-off release mechanism
- · Reduced size and weight for lower flotation needs
- · Up to 6,000 m depth rating
- Corrosion resistant super duplex stainless steel housing (titanium optional)
- · Secured 8-bit FSK 2-state command coding system
- · Command acknowledgment
- · Very-low power consumption
- · Off-the-shelf Alkaline batteries (lithium optional)
- · Back-up cell for release mechanism
- · Tandem coupling kit (optional)

#### **APPLICATIONS**

- · Long-term moorings
- · Instrumented moorings
- · Ultra-deep moorings
- · Harsh environments
- · Acoustic actuators (hydraulic shackle or cable cutter)



#### **TECHNICAL SPECIFICATIONS**

#### General

Assembly drawing number	PLA13325
Release ring	3t/SWL oval ring drawing 9103234
Operating temperature	-5°C to +40°C
Storage temperature	-20°C to +70°C
Acoustic commands	Ranging, release, release with pinger, pinger mode ON/OFF, diagnostic (verticality status and battery voltage)
Shipping	Plywood transit case, 790 x 280 x 240 mm, 36 kg

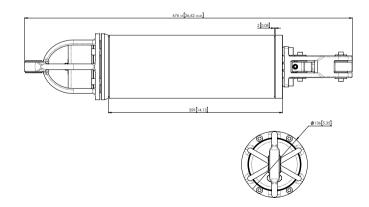
#### Mechanical

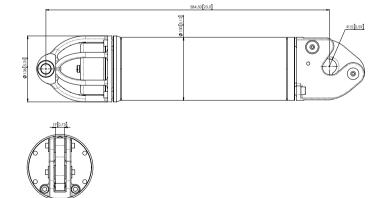
Construction	Super duplex stainless steel	
Load characteristics	2 500 kg SWL* / 2 500 kg RL** / 5 000 kg TL***	
Depth-rating	6,000 m	
Overall dimensions (dia x L)	136 x 676 mm	
Overall weight (air / water)	25 kg / 19 kg	

#### **Acoustical**

Operating frequency	Low frequency (8.0 to 17.5 kHz)
Transducer beam pattern	Omnidirectional
Transmit source level	191 +/-4 dB ref. 1µPa @ 1 m constant across battery life
Transmit pulse	Tonal pulse (10 ms) or MFSK-POSI code (16 kHz central, 3 kHz bandwidth, 25 ms wide)
Operating life	30 months @ $20^{\circ}$ C / 20 months @ $0^{\circ}$ C (Alkaline)
Ranging	More than 10,000 m in good sea conditions

### **Mechanical drawing**





\*SWL - Safe Working Load. The maximum static or dynamic load that can be supported by the instrument in normal operating conditions with no release command in progress.

\*\*\*TL - Test Load. The maximum load that can be supported by the instrument without permanent damage or water ingress (not to be used in normal operation mode).



<sup>\*\*</sup>RL - Release Load. The maximum load that can be supported by the hook while it is activated (DC motor rotating).