

Datasheet

Release Transponder 6 (RT 6-1000)



The Release Transponder 6 (RT 6-1000) has been designed for use in continental shelf waters to water depths of 1,000 m using Sonardyne's Wideband®2 acoustic ranging and telemetry protocol.

RT 6-1000 has both receive and transmit functions, enabling accurate slant ranges and position to be accurately determined, and release actuation confirmed with a Working Load Limit (WLL) of 150 kg.

RT 6-1000 can be used in both Transponder Mode (subsea) and Topside Control Mode (to release another subsea RT 6-1000) using the Sonardyne RT6 App on an NFC enabled Android™ device or tracked and released using a Ranger 2 6G® USBL system.

The Sonardyne RT6 App has been specially developed to configure, load the release nut prior to deployment and release the RT 6-1000. It can also run self-test functions, read battery status, add a GPS marker of your deployment position and locate a deployed RT 6-1000.

The NFC link also provides the ability to enter RT 6-1000 into a storage mode when not in use, thereby significantly increasing the overall battery endurance.

A 'screw-off' release mechanism ensures a positive release action that overcomes any biological growth and all external parts are made of high strength plastics that provide excellent environmental corrosion resistance.



An optional attachment for the RT 6-1000 is a rope canister that allows items left on the seabed, for example, tools, cables and salvage, to be quickly and easily hauled up.

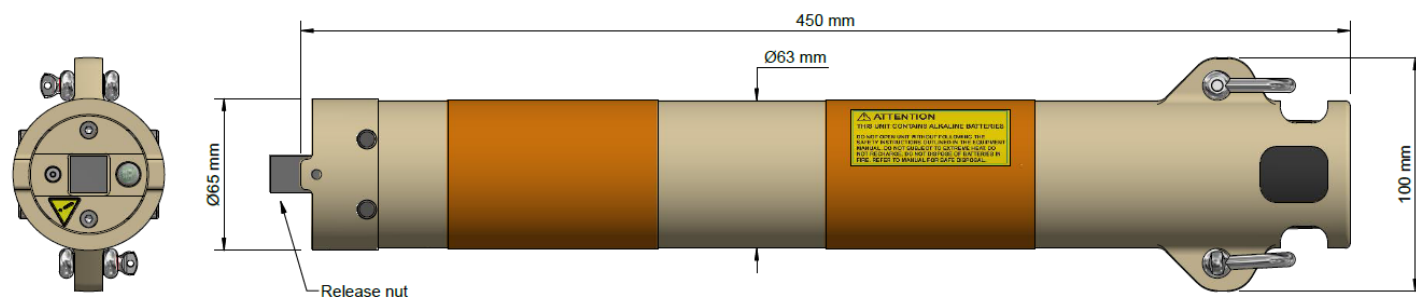
This works by mooring one end of the rope to the item on the seabed and the other end to the RT 6-1000 via the attached canister of rope. As the transponder ascends to the surface, high strength rope is deployed from the canister. This line can then be used to pull up the item directly or retrieve heavier tag lines.

Key Features

- MF frequency band utilising Sonardyne Wideband 2 ranging and telemetry protocols
- Compatible with Sonardyne's 6G transceivers and USBL systems.
- Uses Sonardyne Wideband 2 acoustic addresses
- Working Load Limit of 150 kg
- Depth rated to 1,000 m
- >13 months deployment with alkaline battery pack
- Integrated inclinometer
- NFC configuration and diagnostics
- Storage mode eliminates power consumption when not in use
- Reliable, 'screw-off' release
- Rugged, compact design

Specifications

Release Transponder 6 (RT 6-1000)



Feature	Type 8327	
Depth Rating	1,000 m	
Operating Frequency	MF 19–34 kHz	
Transducer Beam Shape	Hemispherical	
Transmit Source Level (dB re 1 μ Pa @ 1 m)	187 dB	
Tone Equivalent Energy (TEE) ¹	193 dB	
Receive Threshold (dB re 1 μ Pa)	<100 dB	
Working Load Limit (4:1)	150 kg	
Proof Load ²	300 kg	
Breaking Load	600 kg	
Maximum Safe Release Load	150 kg	
Battery Life (Alkaline)	>13 months	
Inclinometer Accuracy	$\pm 5^\circ$	
Mechanical Construction	Anodised aluminium alloy, plastic and super duplex stainless steel	
Operating Temperature	-5 to 40°C	
Storage Temperature	-20 to 55°C	
Maximum Dimensions (Length x Diameter)	450 x 65 mm	
Weight in Air/Water ³	2.0/0.5 kg	
Options	Rope Canister (longer lengths available)	70 m (250 kg WLL) 120 m (250 kg WLL) 160 m (125 kg WLL)
	Release Nut	Part No. 830-0048 (note: 10 nuts supplied with each new RT 6-1000)
Standards	CE Marked to EN-60945, EN-61010	

¹ WBv2+ signals are 4x the duration of Sonardyne tone signals (WBv1 & WBv2 are 2x). The TEE figure shows the operational performance when comparing wideband and tone systems.

² Sonardyne does not perform proof load testing of this product.

³ Estimated Weights.