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.

A wide variety of options, including Deck Topside, Ranger 2 or the RT6 app are available to control RT 6-1000

Sonardyne's intuitive IP67 Deck Topside can be used with a dunking transducer and NFC reader to configure, release, geo-reference and report upon RT 6-1000.

RT 6-1000 can also be tracked and released using all Medium Frequency (MF) band Ranger 2 6G USBL systems.

When used with a USBL system, the release is configured with the RT6 Android™ App.

The App can also be used with an RT 6-1000 in Topside Control Mode to release another subsea 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. 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
- Intuitive operation through Deck Topside, paired with an MF dunking Transducer as a Shallow Water Deck Kit.
- Generate reports and monitor status with Deck Topside
- Track and release with Sonardyne MF Ranger 2 USBL systems
- NFC Android™ App available to test, configure, georeferenced and release RT 6-1000
- 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
- Storage mode eliminates power consumption when not in use
- Reliable, 'screw-off' release
- Rugged, compact design

Specifications
Release Transponder 6 (RT 6-1000)
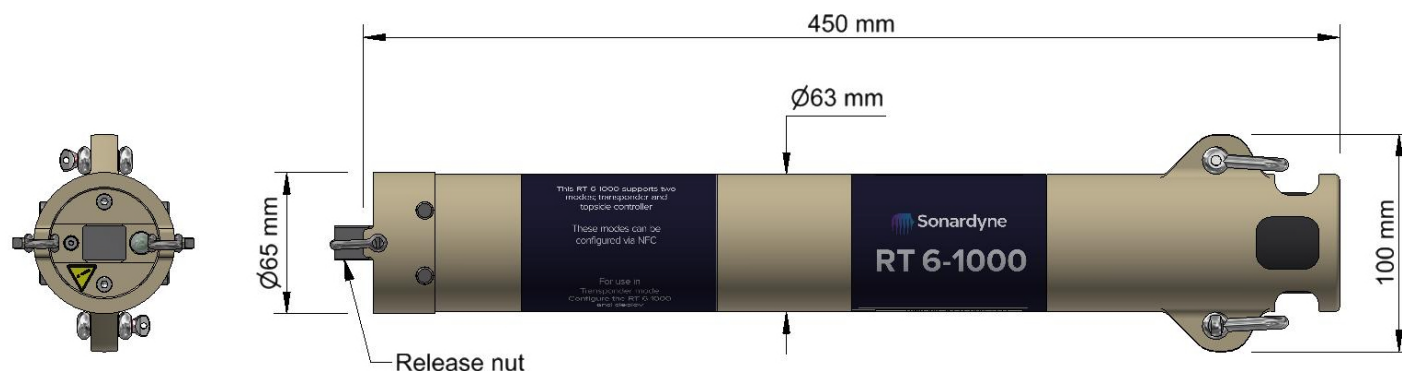
Feature	Type 8327
Depth Rating	1,000 m
Operating Frequency	MF 19–34 kHz
Transducer Beam Shape	Hemispherical
Transmit Source Level (dB re 1 µPa @ 1 m)	187 dB
Tone Equivalent Energy (TEE)[1]	193 dB
Receive Threshold (dB re 1 µPa)	<100 dB
Working Load Limit (4:1)	150 kg
Proof Load[2]	300 kg
Breaking Load	600 kg
Maximum Safe Release Load	150 kg
Battery Life (Alkaline)	>13 months
Inclinometer Accuracy	±5°
Surface Unit	Deck Topside, Ranger 2 USBL, RT 6 Android™ App
Mechanical Construction	Anodised aluminium alloy, plastic and super duplex stainless steel
Operating Temperature	-5 to 40ºC
Storage Temperature	-20 to 55ºC
Maximum Dimensions (Length x Diameter)	450 x 65 mm
Weight in Air/Water[3]	2.0/0.5 kg
Standards	CE Marked to EN-60945, EN-61010

Options		Part Number
Shallow Water Deck Kit (Deck Topside)		602-0175
Rope Canister	70 m (250 kg WLL)	641-0673
	120 m (250 kg WLL)	641-3265
	160 m (125 kg WLL)	641-0080
Release Nut		830-0048 (note: 10 nuts supplied with each new RT 6-1000)

[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.