

Datasheet

Release Transponder 6 (RT 6-3000)



The Release Transponder 6 (RT 6-3000) is a tough, reliable acoustic release designed for a wide variety of subsea applications and is fully compatible with Sonardyne's 6G[®] transceivers and USBL systems. RT 6-3000 is derived from mechanics of the highly reliable 7409 Oceanographic Release Transponders (ORT), which it supersedes.

RT 6-3000 integrates the functionality of a Sonardyne Wideband[®]2 compatible navigation transponder coupled with an integrated high load release mechanism.

RT 6-3000 can be tracked and released using all Medium Frequency (MF) band Ranger 2 6G USBL systems or a deck unit with remote dunking transducer. The maximum slant range for operation is dependent on the noise environment and topside used; however, ranges up to 4,500 m should normally be achievable.

Standard features include a Working Load Limit (WLL) of 1,275 kg (at 4:1) and a spring-assisted release mechanism.

A battery disconnect fob is located on the transducer and uses an internal magnetic switch to electronically disconnect the battery when not in use.

RT 6-3000 is compatible with Sonardyne's standard tandem and high load release frames.

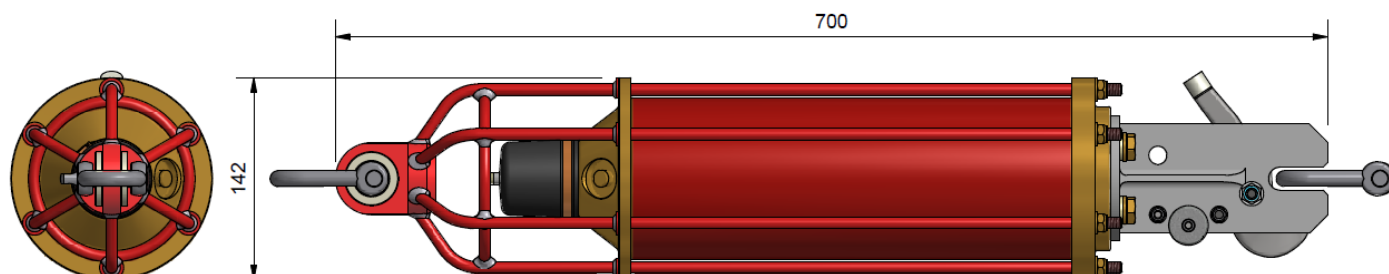
RT 6-3000 is configured with Sonardyne's iWAND 6G portable handheld acoustic transponder test and configuration device.

Key Features

- WLL 1,275 kg (4:1)
- Breaking Load 5,100 kg
- MF frequency band utilising Sonardyne Wideband 2 ranging and telemetry protocols
- Quick and easy to set-up and operate
- Robust performance in shallow water and reverberant environments around structures etc.
- Real-time diagnostics available on ranges to enable quality control
- Reduced mutual interference to further improve simultaneous operations
- Uses Sonardyne Wideband 2 acoustic addresses
- Highly reliable release mechanism
- Omni-directional transducer
- Operation down to >3,000 m
- Compatible with Sonardyne 6G transceivers
- Battery disconnect fob to maximise battery life
- Integrated inclinometer ($\pm 5^\circ$ accuracy)
- Battery status reporting

Specifications

Release Transponder 6 (RT 6-3000)



Feature	Type 8320-3411
Depth Rating	3,000 m ¹
Maximum Slant Range	4,500 m
Operating Frequency	MF (19–34 kHz)
Transducer Beam Shape	Hemispherical
Transmit Source Level (dB re 1 µPa @ 1 m)	186 dB
Tone Equivalent Energy (TEE) ²	192 dB
Receive Threshold (dB re 1 µPa)	<90 dB
Working Load Limit (4:1)	1,275 kg ³
Proof Load	2,550 kg
Breaking Load	5,100 kg
Maximum Safe Release Load	1,700 kg
Battery Life (Alkaline)	>32 months active
Inclinometer Accuracy	±5°
Surface Unit	Sonardyne 6G transceiver
Mechanical Construction	Aluminium bronze and duplex stainless steel
Operating Temperature	-5 to 40°C
Storage Temperature	-20 to 55°C
Dimensions (Length x Diameter)	700 x 142 mm (27.5 x 5.6")
Weight in Air/Water ⁴	20/15 kg
Options	Parallel Release Kit Heavy Duty Release Frame
Standards	CE Marked to EN-60945, EN-61010

¹ RT 6-3000 is pressure rated to 4,000 m; however, due to operating range constraints of MF, its use at depths greater than 3,000 m is not recommended.

² WBv2 signals are 2x the duration of Sonardyne tone signals, therefore the TEE figure is to give the user an idea of the operational performance when comparing Wideband and Tone systems.

³ The standard supplied shackles have a WLL of 1,250 kg.

⁴ Estimated Weights.