

# 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 configured and released with Sonardyne's intuitive IP67 Deck Topside with remote dunking transducer.

RT 6-3000 can also be tracked and released using all Medium Frequency (MF) band Ranger 2 6G USBL systems, or a Deck Topside. 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.

When used with a USBL system, the release is configured with an iWAND 6G portable handheld acoustic transponder test and configuration device.

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.

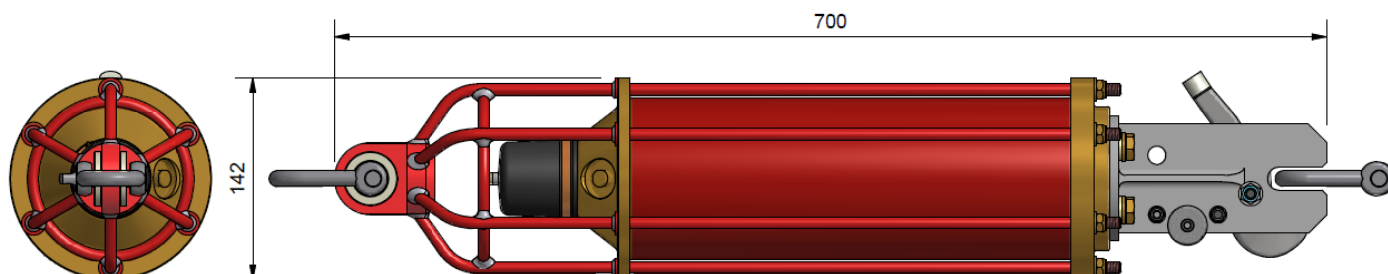
RT 6-3000 is compatible with Sonardyne's high load release frames.

### Key features

- WLL 1,275 kg (4:1)
- Breaking load 5,100 kg
- MF frequency band utilising Sonardyne Wideband 2 ranging and telemetry protocols
- Intuitive operation through Deck Topside, paired with an MF dunking transducer as a mid or shallow water deck kit
- Generate reports and monitor status with Deck Topside
- Track and release with Sonardyne MF Ranger 2 USBL systems
- Quick and easy to set-up and operate
- Robust performance in shallow water and reverberant environments around structures etc.
- 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
- 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 <sup>1</sup>
Maximum slant range	4,500 m
Operating frequency	MF (20–34 kHz)
Transducer beam shape	Hemispherical
Transmit source level (dB re 1 µPa @ 1 m)	186 dB
Tone equivalent energy (TEE) <sup>2</sup>	192 dB
Receive threshold (dB re 1 µPa)	<90 dB
Working load limit (4:1)	1,275 kg <sup>3</sup>
Proof load	2,550 kg
Breaking load	5,100 kg
Maximum safe release load	1,700 kg
Battery life <sup>4</sup>	>32 months (Alkaline pack) Optional >80 months (Lithium primary battery)
Inclinometer accuracy	±5°
Surface unit	Deck Topside, Ranger 2 USBL
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 <sup>5</sup>	20/15 kg
Standards	CE Marked to EN-60945, EN-61010
Options	Part number
Shallow water deck kit (Deck Topside)	602-0175
Mid water deck kit (Deck Topside)	602-0179
Heavy duty release frames (7.5 T, 15 T and 25 T)	Contact Sonardyne support

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> The standard supplied shackles have a WLL of 1,250 kg.

<sup>4</sup> Standard operation life when used as an acoustic release with new battery. All batteries are subject to temperature variations which can limit this operation time

<sup>5</sup> Estimated weights.