

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.

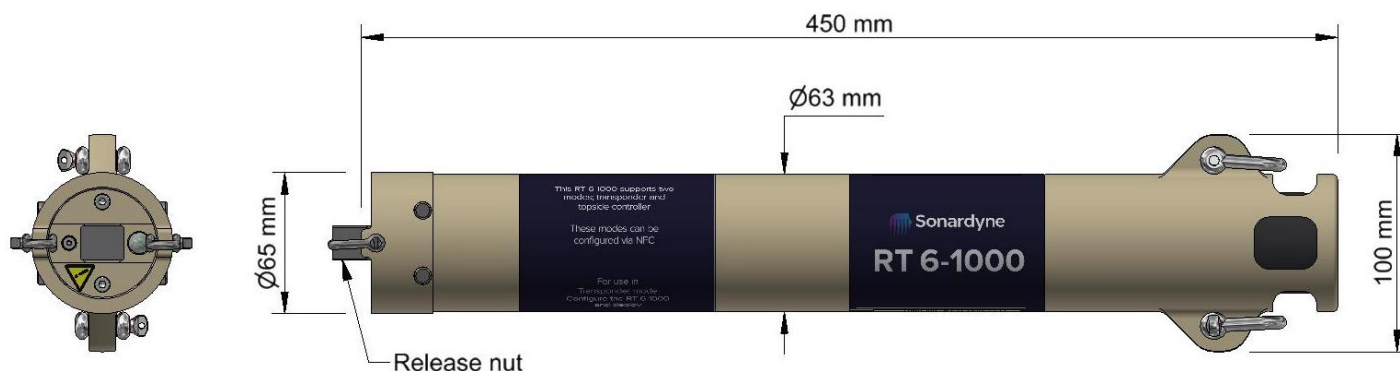
This works by mooring one end of the rope to the item on the seabed and the other end to the RT 6-1000 via the attached canister of rope. As the transponder ascends to the surface, high strength rope is deployed from the canister. This line can then be used to pull up the item directly or retrieve heavier 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 20–34 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	$\pm 5^\circ$	
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 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	
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	830-0073 (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.

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.

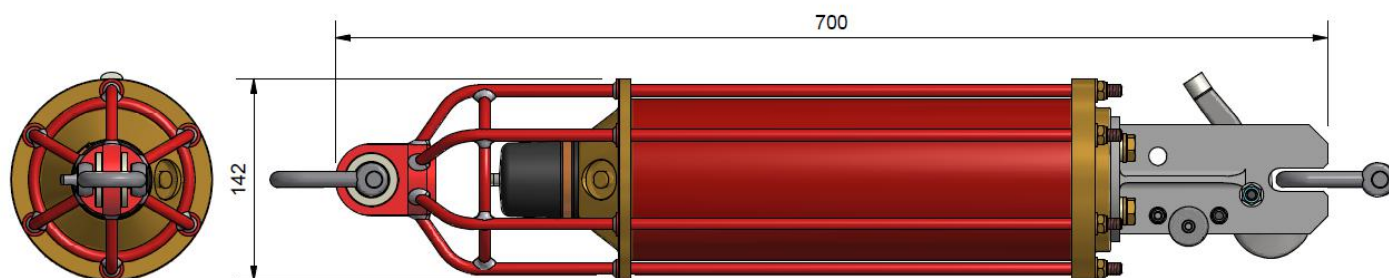
RT 6-3000 is compatible with Sonardyne's high load release frames.

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 ¹
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) 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
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 ⁴	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

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.

Datasheet

Release Transponder 6 (RT 6-6000)



The Release Transponder 6 (RT 6-6000) 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 6-6000 is derived from mechanics of the, now superseded, but highly reliable 7710 Deep Oceanographic Release Transponders (DORT).

RT 6-6000 integrates the functionality of a Sonardyne Wideband[®]2 compatible navigation transponder coupled with an integrated high load release mechanism.

RT 6-6000 can be configured and released with Sonardyne's intuitive IP67 Deck Topside with remote dunking transducer.

RT 6-6000 can also be tracked and released using both MF and LMF Ranger 2 6G USBL systems.

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.

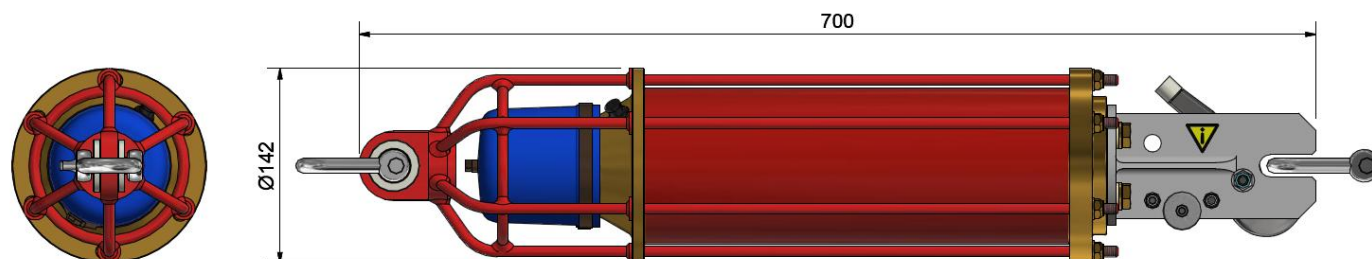
RT 6-6000 is compatible with Sonardyne's high load release frames.

Key features

- WLL 1,275 kg (4:1)
- Breaking Load 5,100 kg
- LMF frequency band utilising Sonardyne Wideband 2 ranging and telemetry protocols
- >2.5 years deployment
- Intuitive operation through Deck Topside, paired with an LMF dunking transducer as a Deep Water Deck Kit
- Generate reports and monitor status with Deck Topside
- Track and release with Sonardyne 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 6,000 m
- Battery disconnect fob to maximise battery life
- Integrated inclinometer ($\pm 5^\circ$ accuracy)
- Battery status reporting

Specifications

Release Transponder 6 (RT 6-6000)



Feature	Type 8321-6250
Depth rating	6,000 m
Operating frequency	LMF (14–19 kHz)
Transducer beam shape	Hemispherical
Transmit source level (dB re 1 μ Pa @ 1 m)	188 dB
Tone equivalent energy (TEE) ¹	192 dB
Receive threshold (dB re 1 μ Pa)	<90 dB
Working load limit (4:1)	1,275 kg ²
Proof load	2,550 kg
Breaking load	5,100 kg
Maximum safe release load	1,700 kg
Battery life (alkaline)	>32 months
Inclinometer accuracy	$\pm 5^\circ$
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 ³	20/15 kg
Standards	CE Marked to EN-60945, EN-61010
Options	Part number
Deep Water Deck Kit (Deck Topside)	602-0180
Heavy Duty Release Frames (7.5 T, 15 T and 25 T)	Contact Sonardyne Support

¹ 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.

² The standard supplied shackles have a WLL of 1,250 kg.

³ Estimated Weights.