Sonardyne Global Headquarters
T. +44 (0) 1252 872288
F. +44 (0) 1252 876100
E. sales@sonardyne.com
www.sonardyne.com

Datasheet

Nano Transponder

Description

The Wideband Nano Transponder is specially designed for short duration acoustic positioning of divers or small underwater vehicles. The small lightweight wireless rechargeable transponder design allows for easy, unobtrusive attachment to a diver or vehicle.

The Nano Transponder connector-less design is recharged and programmed via the Nano Docking Station. It takes around 12 hours to fully recharge the high capacity battery.

The standard instrument is depth rated to 500 m (300 m with pressure sensor) and has an acoustic source level and beam-shape that is designed to operate over a 750 m slant range under normal conditions.

The Nano Transponder operates in the Medium Frequency (MF) band so it is compatible with Sonardyne's Mini-Ranger 2 6G® Wideband USBL system.

The Nano transponder is available with and without a pressure sensor depending on the operating requirements. The pressure information can be used by the Mini-Ranger 2 system to depth aid the USBL position.

The wireless connection enables several operating parameters to be changed, like the acoustic address, navigation power and turn-around time using the programmer. In addition, using wireless energy harvesting, the instrument can also be put into and brought out of a storage mode where the battery is disconnected.

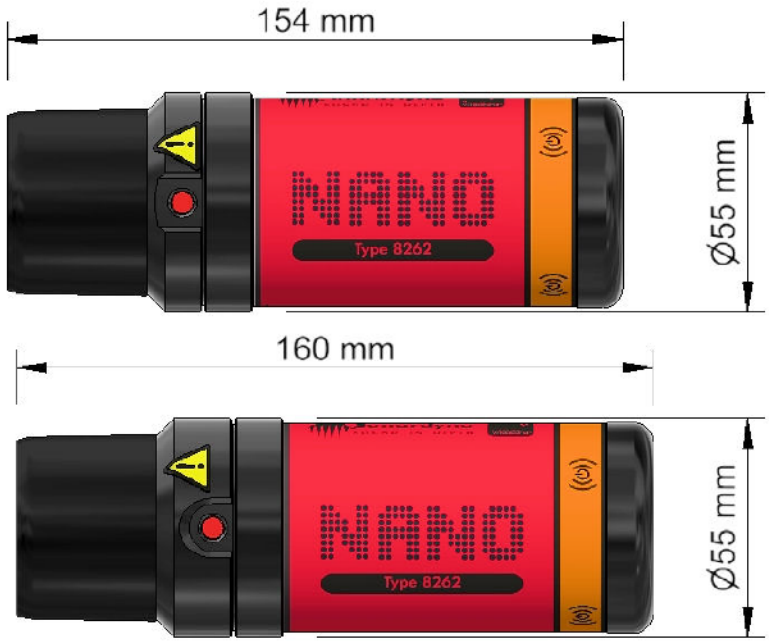
Test functions via the wireless connection include: configuration, battery status, initiate power-down or wake up, acoustic test signal transmission and firmware update.

Key Features

- Miniature size for fitting on divers and small ROVs
- Reliable connector-less design
- Depth rated to 500 m (300 m with pressure sensor)
- Powerful acoustic transmission level
- Connector-less recharging using the Nano Docking Station
- Medium Frequency operation
- Compatible with Sonardyne Mini-Ranger 2 USBL systems
- Configuration using the Nano Docking station wireless communications
- Battery disconnect storage mode
- Integrated pressure sensor for depth aiding
- >300 independent acoustic addresses

Sonardyne Global Headquarters
T. +44 (0) 1252 872288
F. +44 (0) 1252 876100
E. sales@sonardyne.com
www.sonardyne.com

Specifications
Nano Transponder



Nano Transponder:
8262-000-01

Nano Transponder with Integrated Pressure Sensor:
8262-000-03

Feature		Type 8262
Depth Rating	With Pressure Sensor Without Pressure Sensor	300 m 500 m
Frequency Band		MF (19–34 kHz)
Transducer Beam Shape		Omni-Directional ±130°
Source Level (re 1 µPa @ 1m)		184 dB
Communication Interface		USB connection to the Nano Docking Station
Pressure Sensor		30 bar abs +/-0.7% FS
Charger (115/230 V AC)		USB connection to the Nano Docking Station Recharge time: 12 hours using the 115/230 V ac charger (18 hours when docking station is connected to a PC[1])
Battery Life	Quiescent listening 5 sec ping rate	>10 days >15 hours
Operating Temperature		-5 to 40°C
Storage Temperature		-20 to 55°C
Mechanical Construction		Polymer
Dimensions (Length x Diameter)		154 x 55,0 mm 160 x 55,0 mm (with integrated pressure sensor)
Weight in Air/Water		458/140 g 536/218 g (with integrated pressure sensor)

[1] The USB standard limits the maximum current to 500 mA