ADVANCED NAVIGATION

SUBSONUS TAG
TRANSPONDER

Subsonus Tag fully encapsulates all parts in a maintenance-free polymer composite to completely eliminate the risk of leaks. This ground-breaking, pressure tolerant design offers unmatched reliability and uncompromising value. The innovative design and use of materials mean that the Subsonus Tag has the highest battery density on the market, offering up to 18 months of autonomy on a single charge.
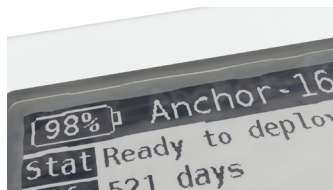

PERFORMANCE

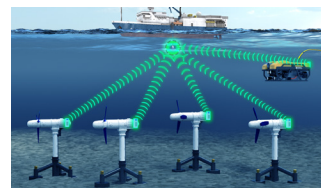⊙ 0.25 m Position Accuracy ⊖ 1000 m Range ⊡ 2000 m Depth Rating

FEATURES

ULTRA LONG BATTERY LIFE

Subsonus Tag features a revolutionary acoustic processing architecture that allows it to achieve unparalleled battery life of up to 18 months in slow update applications. Transmit power is configurable which allows extra battery life to be achieved when operating at close range.
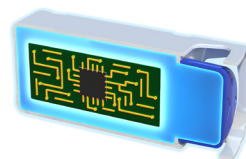

MULTI-TRACK TECHNOLOGY

Up to 65,000 Subsonus Tags can be deployed in the same area and tracked using one surface Subsonus unit. Each tag has a unique address and can be assigned a name for easy identification.

INTEGRATED DISPLAY

Subsonus Tag features a pressure tolerant display that allows for fast and easy identification of multiple tags and their status. The electronic paper technology consumes no power between updates of the screen graphics.

HERMETICALLY SEALED

The revolutionary design of Subsonus Tag features total encapsulation of the electronics and batteries. This unbroken hermetic seal offers unparalleled reliability since there are no pressure vessels, air cavities, o-rings or connectors. The only servicing required is biofouling management.
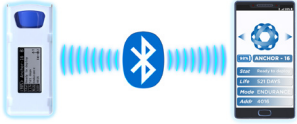
WIRELESS CHARGING

Subsonus Tag contains a Qi compatible wireless power receiver for convenient battery charging without using connectors. Qi charging is the standard found in most phones, so chargers are readily available at low cost.
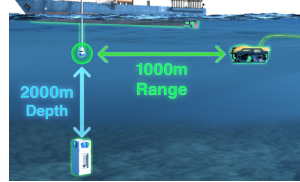
BREAKTHROUGH PRICE

Subsonus Tag redefines the low cost transponder market with massive savings from the hermetically sealed, connectorless design. This allows deployments in applications previously not feasible due to cost.

BLUETOOTH COMMUNICATION

Tags can be quickly configured and updated from a smartphone using bluetooth. An RS232 or USB bluetooth interface is also supported for configuration with a PC application.

1000 METRE RANGE

Subsonus Tag has an acoustic tracking range of up to 1000 metres and is depth rated to 2000 metres.

SPECIFICATIONS

POSITIONING (with Subsonus USBL)

Position Accuracy (5 m range)	0.25 m
Position Accuracy (100 m range)	1.5 m
Position Accuracy (1000 m range)	15.0 m

SENSORS

Roll & Pitch Accuracy	1.0 °
Heading Accuracy	2.0 °
Heading Source	Magnetic
Water Temperature Accuracy	0.5 °C

BATTERY

Battery Capacity	28 Wh
Battery Life (5 second ping rate)	48 hours
Battery Life (1 ping/hour)	12 months
Battery Life (listening)	18 months
Charging	Qi Wireless Charging v1.2
Battery recharge time	6 hours

DISPLAY

Display Type	Pressure Tolerant Electronic Paper Display (EPD)
Display Size	54 mm
Display Daylight Visibility	Direct Sunlight
Display Backlight	Yes (Configurable)

ACOUSTICS

Frequency	30 kHz (broadband)
Range	1000 m
Beam pattern	Omnidirectional
Range Timing Accuracy	0.01 m
Maximum Update Rate	1.3 Hz
Transmit Power	Dynamic
Data Transfer	Yes
Remote Acoustic Configuration	Yes

HARDWARE

Interface	Bluetooth Low Energy v4.1
Material	Polymer Composite
Depth Rating	2000 m
Operating Temperature	-5 °C to 50 °C
Storage Temperature	-20 °C to 60 °C
Shock Limit	40 g
Dimensions	54 x 54 x 130 mm
Weight in Air	550 g
Weight in Water	250 g