



Pulsar

Towed Side Scan Sonar



OVERVIEW

Pulsar acquires high-resolution acoustic images using a rugged and easy-to-operate tow fish. Large areas can be surveyed efficiently, revealing small objects and underwater structures in great detail. It is used for Search & Recovery (SAR), underwater inspection, and engineering and scientific surveys.

The system is designed for simple deployment and intuitive operation and can be operated by non-specialist personnel to quickly carry out effective surveys. Operating within a single frequency in the 550 kHz to 1 MHz range, FM or CW pulses can be selected to optimise range and resolution.

Included software for PCs connected via Ethernet to the deck unit allows users to plan and conduct surveys and acquire sonar data with embedded positioning information. Data can be visualised in real-time before being exported, in industry-standard formats, for further processing and interpretation as required.

KEY FEATURES

- Easy deployment and operation
- Freq. range: 550 kHz – 1 MHz
- Wide band FM, and CW pulses
- Integrated RTCM/SBAS GPS
- Compact, IP-66 rated deck unit
- Low-drag, Kevlar reinforced cable

APPLICATIONS

- Search & Recovery (SAR)
- Hydrographic surveys
- Object detection/identification
- Inspection & Engineering
- Marine Geology & Archaeology

Performance

Maximum Range per side	100 m in CW mode / 150 m in FM mode
Beam Pattern (typical)	50° x 0.5°
Pulse Repetition Rate	25 PPS at 30 m range / 5 PPS at 300 m range
Max Resolution (across track)	10 mm
Max Resolution (along track)	0.07 m at 10 m range / 0.35 m at 50 m range / 0.69 m at 100 m range
Max Cable Length	300 m

Tow Fish

Body	Stainless Steel
Physical	Body: 1100 mm (L) x 90 mm diameter Tail fin: 75 mm (L) Weight: 16.5 kg
Tow Speed	1 - 12 Knots
Source Level	223 ± 3 dB re 1 μPa @ 1 m
Sensitivity	-190 dB re 1V/μPa
Depression/mounting angles	Depression angle: 0° Mounting angle: 30°

Deck unit

Power Requirements	10-30 VDC, 43 W max 110/230 VAC, 50-60 Hz, 50 W max
Physical	200mm (D) x 300 mm (W) x 85 mm (H) Weight: 5 Kg
Storage Temperature	-20 °C to 70 °C
Operating Temperature	0 °C - 40 °C
Humidity	10 % to 90 % RH noncondensing IP64-Rated

Specifications subject to change without notice. E&OE

