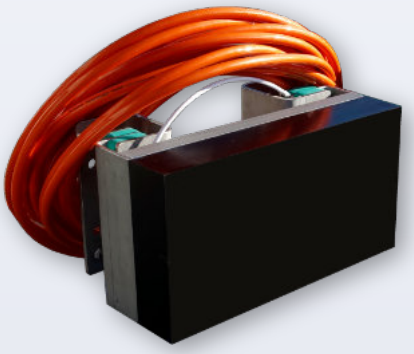
Innomar deep-15

Parametric Sub-Bottom Profiler

A **NORBIT** Company



General & Applications

- First / latest product generation: 2019
- Offshore route and site surveys

Performance

- Water depth range: 10–11,000+ m
- Seabed penetration: up to 250 m (depending on seabed type and noise)
- Range resolution: up to 20 cm (depending on pulse settings)
- Depth accuracy: 15 cm + 0.08% water depth
- Motion compensation: Heave, Roll and Pitch (beam forming at transmit and receive; external sensor required)

Transmitter

- Principle: parametric (nonlinear) acoustics
- Frequencies: 15 kHz (HF) / 0.75–3.7 kHz (LF)
- Primary Source Level: >243 dB//µPa re 1m
- Acoustic Power: c. 10 kW
- Beam width: c. 4.6° (±2.3°) for all frequencies
- Pulse type: CW, Ricker, FM Chirp
- Pulse width: 0.25–5 ms (CW), 20 ms (chirp)
- Pulse rate: up to 40 Hz, multi-ping mode

Data Acquisition

- Digital, 2 channels (LF and HF, "SES3" format)
- Sample rate 48 kHz @ 24 bit; resolution <2 cm
- LF sub-bottom data: raw (full-waveform)
- HF data: processed (envelope)

System Components

- Deck units (transceiver electronics, IP20):
  TX: 19 inch / 16 U, c. 95 kg
  W 52 cm × D 50 cm × H 74 cm
  RX: 19 inch / 9 U, c. 40 kg
  W 52 cm × D 40 cm × H 44 cm
- Transducer (8 sections w/ frame, no depth rating):
  W 140 cm × D 140 cm × H 35 cm / c. 925 kg
  (w/o cables), cable length 30 m (moulded)
- System control & data acquisition PC:
  MS Windows® based

Optional Features

- Water-proof transducer cable inline connections
- Different cable length (20–50 m)
- SESWIN extended remote control
- KVM extender
- Transducer ice protection (acoustic window)

Power Supply Requirements

- 100–240 V AC (fuse 16 A slow)
- Power consumption: typ. 600 W / max. 1,000 W
- Power-on inrush current: c. 25 A

Software

- SESWIN data acquisition software
- SES-Convert SEG-Y/XTF data export
- SES-NetView remote display
- ISE post-processing software (optional)

Innomar Technologie GmbH
Schutower Ringstr. 4 • 18069 Rostock • Germany
+49 381 440 790 • info@innomar.com

2024-10

www.innomar.com