Innomar standard
Parametric Sub-Bottom Profiler

A **NORBIT** Company





General & Applications
- First / latest product generation: 1997 / 2026
- Offshore route and site surveys

Performance
- Water depth range: 0.5–500 m
- Seabed penetration: up to 50 m (depending on seabed type and noise)
- Range resolution: up to 5 cm (depending on pulse settings)
- Depth accuracy: 2.5 cm + 0.06% water depth
- Motion compensation: Heave, Roll or Pitch (beam forming at transmit and receive; external sensor data required)

Transmitter
- Principle: parametric (nonlinear) acoustics
- Frequencies: 100 kHz (HF) / 4–15 kHz (LF)
- Primary Source Level: c. 241 dB//µPa re 1m
- Acoustic Power: c. 3.5 kW
- Beam width: c. 4° (±2°) for all frequencies
- Pulse type: CW, Ricker, FM Chirp
- Pulse width: 0.07–1 ms (CW), 1.5 ms (chirp)
- Pulse rate: up to 50 Hz, multi-ping mode

Data Acquisition
- Digital, 2 channels (LF and HF, "SES3" format)
- Sample rate 96 kHz @ 24 bit; resolution <1 cm
- LF sub-bottom data: raw (full-waveform)
- HF data: processed (envelope)

System Components
- Deck unit (transceiver electronics, IP20): Housing 19 inch / 7 U, desktop W 52 cm × D 40 cm × H 34 cm / c. 33 kg
- Transducer (no depth rating): W 34 cm × D 26 cm × H 8 cm / c. 30 kg (w/ cable) cable length 30 m, moulded to transducer
- System control & data acquisition PC: MS Windows® based, 10" TFT display

Optional Features
- Second transducer (dual-head option)
- Water-proof transducer cable inline connection
- Different cable length (20–40 m)
- Transducer mounting frame with shock absorbers
- SESWIN extended remote-control

Power Supply Requirements
- 100–240 V AC (fuse 16 A slow)
- Power consumption: typ. 150 W / max. 300 W
- Power-on inrush current: max. 25 A

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