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Innomar "medium-70" Sub-Bottom Profiler



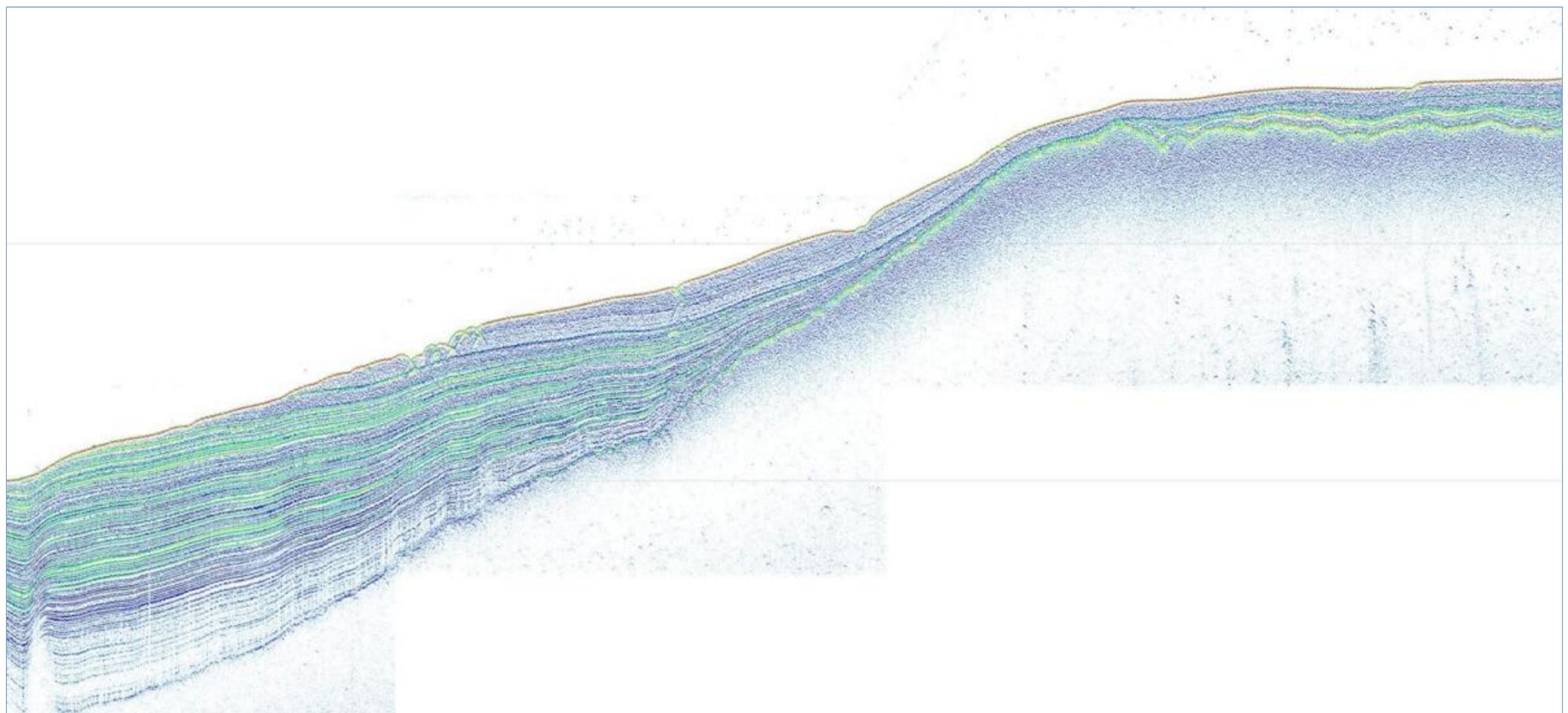
Innomar "medium-70" SBP

The Innomar "medium-70" parametric sub-bottom profiler is designed for offshore applications down to 2,500m water depth.

This model is available in two versions. The basic version features heave and roll compensation while the "RP" version offers additional pitch compensation.

The Innomar "medium-70" SBP acquires full-waveform data that can be processed with any seismic software (SEG-Y format). Innomar also provides the ISE post-processing software specialized on the Innomar SBP data.

The first generation of this SBP model was introduced in 2012 ("SES-2000 medium-70"), while the **latest generation has been launched in 2021**.



Innomar "medium-70" SBP data example from the Norwegian Trench (pulse 10kHz / 500μs; depth range 330-480m)

Technical Specification

Water Depth Range	5 – 2,500 m below transducer
Sediment Penetration	up to 100 m (depending on sediment type and noise)
Sample / Range Resolution	<1 cm / up to 7 cm (depending on pulse settings)
Transmit Beam Width (-3dB)	c. ±1.5° for all frequencies / footprint c. 5.5% of water depth
Ping Rate	up to 40 Hz (pings/s)
Heave / Roll / Pitch Compensation	heave + roll + optional pitch (depending on external sensor data)
Primary Frequencies (PHF)	c. 70 kHz (frequency band 60 – 80 kHz)
PHF Source Level / Acoustic Power	>246 dB//μPa re 1m / c. 7.5 kW
Secondary Low Frequency (SLF)	centre frequency user selectable: 3, 4, 5, 6, 8, 10, 12 kHz
SLF Total Frequency Band	1.5 – 15 kHz
SLF Pulse Type	Ricker, CW, LFM Chirp
Pulse Width	user selectable 0.1 – 1.0 ms (CW); 5 ms (chirp)
Data Acquisition and Recording	digital 24 bit / 96 kHz (SLF full waveform, PHF envelope)
Data File Format	Innomar "SES3" (24 bit), "SEGY" (via SESconvert)
External Sensor Interfaces	HRP (motion), GNSS position, depth (all RS232 / UDP), trigger (BNC)
Bottom Detection	internal (PHF and SLF data) or external depth
Depth Accuracy	(2.5cm @ 70 kHz / 5 cm @ 8 kHz) + 0.04% of water depth
Remote Control / Survey Integration	KVM / basic functions via COM or Ethernet (UDP), NMEA
Topside Unit (Transceiver)	W 52 cm × D 40 cm × H 44/63 cm (19" / 9/13U) / weight c. 52/63 kg
Transducer	W 60 cm × D 60 cm × H 25 cm / weight c. 140 kg (excl. 30 m cable)
Transducer Depth Rating	Surface
Power Supply	100–240 V AC
Power Consumption	<450W

Control / Data Storage PC

integrated PC (MS Windows 10/11 OS)

First / Latest Product Generation

2012 / 2021

Included Features

- Heave / Roll beam stabilization
- 24-bit SLF full waveform data acquisition / Innomar "SES3" data format
- Multi-ping mode for maintaining a high pulse rate in deep waters
- Multi-frequency signals
- LFM chirp (3 – 12 kHz)
- SESWIN basic remote-control via COM / UDP (e.g. line start/stop, line name)
- Transducer frame with integrated shock absorbers for hull-mounting

Optional Features

- KVM extender for remote control
- SESWIN extended remote-control via Ethernet (all survey settings)
- Pitch beam stabilization
- internal 10" TFT display
- Bottom slope control

Software

- [SESWIN](#) data acquisition software
- [SES Convert](#) data converter software (RAW to SEG-Y, XTF, ASCII)
- [SES NetView](#) for online data and system information display on remote computers
- [ISE](#) post-processing software (optional)

Technical specifications are subject of change without notice.

[^ Product overview](#)

["medium-100" SBP](#)

["medium-70" SBP](#)

["deep-36" SBP](#)

["deep-15" SBP](#)

[Shallow Water](#)

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[Remotely Operated](#)

[Multi-Transducer](#)

[Innomar Software](#)

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