



Transducer

ROV subsea housing

Screenshot of the operating software

► **Performance**

- depth rating 1,000 m / 2,000 m
- range below transducer 1 – 500 m
- penetration: up to 50 m, depending on sediments
- layer resolution: up to 5 cm
- motion compensation: heave, pitch
- beam width @ 3 dB: $\pm 2^\circ$ / footprint < 7 % of altitude for all frequencies

► **Transmitter**

- primary frequencies: approx. 115 kHz (band 100 – 130 kHz)
- secondary low frequencies: 5, 6, 8, 10, 12, 15 kHz (band 4 – 22 kHz)
- primary source level: > 240 dB/ μ Pa re 1 m
- pulse width: 0.07 – 1.3 ms
- pulse rate: up to 40/s
- multi-ping mode
- pulse type: CW, Ricker, LFM (chirp)

► **Acquisition**

- primary frequency (echo sounder, bottom track)
- secondary low frequency (sub-bottom data, multi-frequency mode)
- sample rate 70 kHz @ 24 bit

► **System Components**

- subsea housing with all transceiver electronics (D 0.30 m x L 0.75 m; 49 kg)
- transducer (D 0.47 m x H 0.06 m; 32 kg)
- system control: topside PC via Ethernet link (UDP, required bandwidth 5 Mbit/s)

SES-2000 ROV

Parametric Sub-bottom Profiler

► **Software**

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

► **Power Supply Requirements**

- 100 – 240 V AC / 50 – 60 Hz
- power consumption: < 250 W

