

Teledyne RESON

SeaBat® 7160

Multibeam Echo Sounder System



The SeaBat 7160 provides an unbeatable combination of range, resolution, portability and powerful features.

The SeaBat 7160 transducer array is comprised of linear receive and transmit arrays mounted together on a support base. The T-shaped array geometry provides the basis for a compact, high-resolution sonar which is easily installed for portable or hull mounts - a first for a high-resolution system in this frequency range. The system features a

pitch-stabilized transmitter and an active roll compensated receiver.

Performance enhancements over the SeaBat 8160 include the addition of 512 high density equi-distant beams, variable swath coverage, beam uncertainty measurement, water column data and many other efficiency enhancing features.

FEATURES

FREQUENCY

44kHz (nominal)

SWATH

Swath coverage greater than 4 x water depth

DEPTH

Operational depths 10m to 3000m

BEAMS

512 Equi-Distant
150 Equi-Angle

FLEXIBLE INSTALLATION

Hull-mount or portable

FEATURES

Water column data

Variable and steerable swath

Pitch & Roll stabilization

Tracker Autopilot

Adaptive & Manual Gates

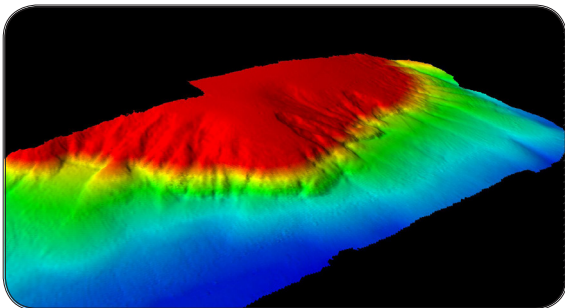
Integrated PDS2000 (optional)



SeaBat® 7160

SEABAT 7160 SYSTEM SPECIFICATIONS

| | |
|---------------------------------|---|
| Frequency | 44kHz (nominal) |
| Range resolution | 12cm |
| Swath coverage | Greater than 4x water depth |
| Typical depth | 3m to 3000m |
| Max depth | 3000m |
| Number of beams | 512 Equi-Distant / 150 Equi-Angle |
| Along-track beamwidth | 1.5° |
| Across-track beamwidth | 2.0° at nadir (nominal) |
| Pitch stabilization | ±10° |
| Max update rate | 50 Hz |
| Transducer depth rating | 60m |
| System supply | 115V/230V 50/60 Hz,500W |
| System control | Trackball or from Ethernet |
| Data output | 1GB Ethernet |
| Data uplink | High-speed digital coax |
| Temperature: operating, storage | Operating: -5° to +40°C, storage: -30° to +55°C |
| Transducer array dimension | 1477mm x 1100mm x 100mm |
| Dimension transceiver array | 265mm x 483mm x 469mm |
| Weight hydrophone | 34kg (air) / 14.6kg (water) including 15m cable |
| Weight transmitter | 42kg (air) / 17.5kg (water) including 15m cable |



WHY CHOOSE A SEABAT 7160 SYSTEM?

- High-resolution medium depth sonar which is easily installed for portable or hull mounts
- High performance - excellent swath
- High density beams
- Water column data
- Ideal for continental shelf mapping
- Upgrade from SeaBat 8160

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