

Min

SOUNDER SERIES

KNUDSEN

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ISO9001:2015



Mini Sounder



Knudsen Sounder Systems are the next benchmark in survey echosounders. The affordable MiniSounder Sounder is industry unique in both compact size and performance. Less than 3 kg. in weight, the system incorporates the latest in digital signal processing technology and includes Knudsen SounderSuite Windows application software for easy interface to your computer via a USB connection. The MiniSounder is ideal for easy transport to changing project sites, and is well suited for quick deployment on small survey platforms in open air environments.

Available only in a single channel configuration but with a wide frequency range, the MiniSounder also offers the flexibility of using more than one MiniSounder together (up to 4) simultaneously within one user application. An attractive low cost, easy portability, and expandable design architecture make the MiniSounder an excellent choice for any project.

Technical Specifications (subject to change without notice)

Available Channels
Single channel only

Frequency 24 kHz - 210 kHz

Input Power 12 - 30 VDC

Pulse Length Up to 4 ms

Gain

Manual, automatic (AGC), and time-varied (TVG) 96 dB range of programmable analog gain

Range

5, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000

Phasing

Manual and automatic (up to 50% overlaps)

Units

Meters, feet, or fathoms

Resolution

1 cm (0 - 99.99), 1 dm (100 - 999.9), 1 m (> 1000) 1/100 ft (0 - 99.99), 1/10 ft (100 - 999.9), 1 ft (> 1000) 1/100 fm (0 - 99.99), 1/10 fm (100 - 999.9), 1 fm (> 1000)

Sound Velocity

1300 - 1800 m/s Resolution 1 m/s 4265 - 5906 ft/s Resolution 1ft/s 710 - 984 fm/s Resolution 1 fm/s

Draft

0 - 100 m Resolution 1 cm 0 - 328 ft Resolution 0.01 ft 0 - 54 fm Resolution 0.01 fm

Ingress Protection

Designed to meet a rating IP65 IP67 version available as an option

Operating Range

0 - 200 m (with 200 kHz transducer)

Output Power Up to 1 kW

Output Data

Full resolution envelope data in KEB binary format and XTF (for sidescan only) User configurable ASCII digital depth string

Dimensions

257 mm (10.1") x 158 mm (6.2") x 89 mm (3.5")

Weight

Less than 3 kg (7 lbs)

Interface

USB 2.0 Full Speed (12 Mbps)

Operating Temperature

0 - 50 °C

Additional Features

Frequency agility on all channels Built-in drivers for all popular GPS Built-in test signal generator Compatible with industry standard dataloggers and processing software (Hypack, QINSy, SonarWiz) Heave compensated echogram

Options

Sidescan option Network option for multiple-PC operation Remote display indicators EchoSIM Sonar Signal Simulator

SounderSuite Software (included)

Compatible with Windows
Easy to use graphical user interface
PostSurvey Display and Printing Software
Large Digitized Depth Display
Print to standard Windows printers

Accuracy

 $1\ cm+1\ ppm\ x\ D\ (0\ -99\ m)\ using\ 200\ kHz\ (5^\circ)\ transducer$ This assumes ideal laboratory conditions: flat and hard bottom, precise speed of sound and draft, optimal control settings (Power, Pulse Length), perfectly stable setup with calm water.