Knudsen Sounder Systems are the next benchmark in survey echosounders. The Sounder Portable 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 unit, housed in a lightweight, rugged, splashproof case, is ideal for easy transportation to changing project sites, and quick deployment on small survey platforms in open air environments.

Available in a 2 or 4 channel configuration, the versatile system is particularly well suited to multiple survey roles and includes a wide range of standard shallow water bathymetry and sidescan frequencies.

Technical Specifications: *(subject to change without notice)*:

- **Available Channels**
  - Sounder 1612: up to 2 channels
  - Sounder 1614: up to 4 channels

- **Frequency**
  - All channels: 24 kHz - 210 kHz
  - (12 kHz option available)

- **Output Power**
  - Up to 1 kW per channel

- **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

- **Ranges**
  - 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 (0.999), 1 dm (100 - 999.9), 1 m (>1000)
  - 1/100ft (0.9999), 1/10ft (100 - 999.9), 1 ft (>1000)
  - 1/100fm (0.9999), 1/10fm (100 - 999.9), 1 fm (>1000)

- **Sound Velocity**
  - 1300 - 1800 m/s Resolution 1 m/s
  - 4265 - 5906 ft/s Resolution 1 ft/s
  - 710 - 984 ft/m Resolution 1 ft/m

- **Draft**
  - 0-100m Resolution 1 cm
  - 0-328ft Resolution 0.01 ft
  - 0-546m Resolution 0.01 m

- **Interface**
  - USB 2.0 Full Speed (12 Mbps)

- **Output Data**
  - Full resolution envelope data in KEB binary format and XTF (for sidescan only)
  - User configurable ASCII digital depth strings

- **Dimensions**
  - 485 mm (19.2”) x 386 mm (15.2”) x 185 mm (7.3”)

- **Weight**
  - Sounder 1612: 9 kg (20 lbs)
  - Sounder 1614: 11 kg (24 lbs)

- **Installation**
  - Splash-proof case

- **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 Vista or higher
  - Easy to use Graphical User Interface (GUI)
  - Post-survey display and printing software
  - Large Digitized Depth Display
  - Print to standard Windows printers