The 3D Profiling Sonar Model 2001-SMS is designed to operate long term on fixed structures to gather high resolution bathymetry data. Manufactured in PEEK / Hard Anodised Aluminium or Stainless Steel or Titanium and only 90mm in diameter the unit can be installed on a Bridge Pier, Dam Wall or Offshore Windfarm. Multiple units can be linked together and controlled via Ethernet to enable large areas to be fully mapped. The windows software allows images to be merged to produce a single point cloud picture. Operation can be stand alone with built in data logging capacity in the sonar unit using a micro SD card with remote access via Ethernet / Internet / 4G mobile network.

- Bridge Pier Scour Monitoring
- Offshore Wind Turbine Scour monitoring
- Water Intake and Dam Inspection
- Designed for long-term deployment
- High resolution 3D data captured directly
- Range Frequency Dependent
- Ethernet / 4G
- On screen cursor measurement tools
- Windows operating system with multiple views
- Complete Off Grid Power Options
- Multiple Unit Installations
- Optional Sensors
Specifications are subject to change without notice

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### Scour Monitoring Sonar

**Model 2001-SMS**

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### Specification

#### Acoustic
- **Operating Frequency**: 1MHz (see options)
- **Transducer Beamwidth**: 1.8° (+/- 3dB points conical)
- **Range Resolution**: <1mm
- **Sample Rate**: 1us to 100us
- **Range Settings**: 0.5m to 20m in 0.1m steps
- **Transmit Pulse Length**: 10usec to 250usec
- **Swath Resolution**: 0.45° to 4.5° in 0.45° steps
- **Rotational Resolution**: 0.9° to 9° in 0.9° steps

#### Interface
- **Power Consumption**: 10W Scanning 1mW Standby
- **Supply Voltage**: 12V DC
- **Communications**: Ethernet
- **Connectors**: 8 way / 12 way Micro Subconn

#### Physical
- **Size**: 90mm diameter by 400mm long
- **Material**: PEEK / Anodised Aluminium / Stainless Steel / Titanium
- **Depth Rating**: 100m
- **Weight in Air**: 3.5kg Aluminium
- **Weight in Water**: 1.5kg
- **Temperature Range**: 0 to +35° (operating) / -10 to +60° (storage)

#### Options
- **Operating Frequencies**: 2MHz, 1MHz, 700KHz, 500KHz or 250KHz
- **Pitch & Roll sensor**
- **Pressure Sensor**
- **Temperature Sensor**
- **Conductivity Sensor**
- **Cable Operated or WiFi / 4G**
- **Offgrid Power Systems**