

IMAGENEX MODEL 851 MINIATURE SCANNING SONAR

APPLICATIONS:

- ROV Navigation
- Diving Support
- Inspection
- Search & Recovery

FEATURES:

- Sub-miniature split transducer design allows this unit to be mounted on the smallest ROV
- Low cost
- Direct connection to laptop computer

The Model 851 Digital Imaging Sonar was designed for use with the smallest of ROV's. For maximum flexibility, this is a split head design with a fluid filled front end and a pressure housing for the electronics.

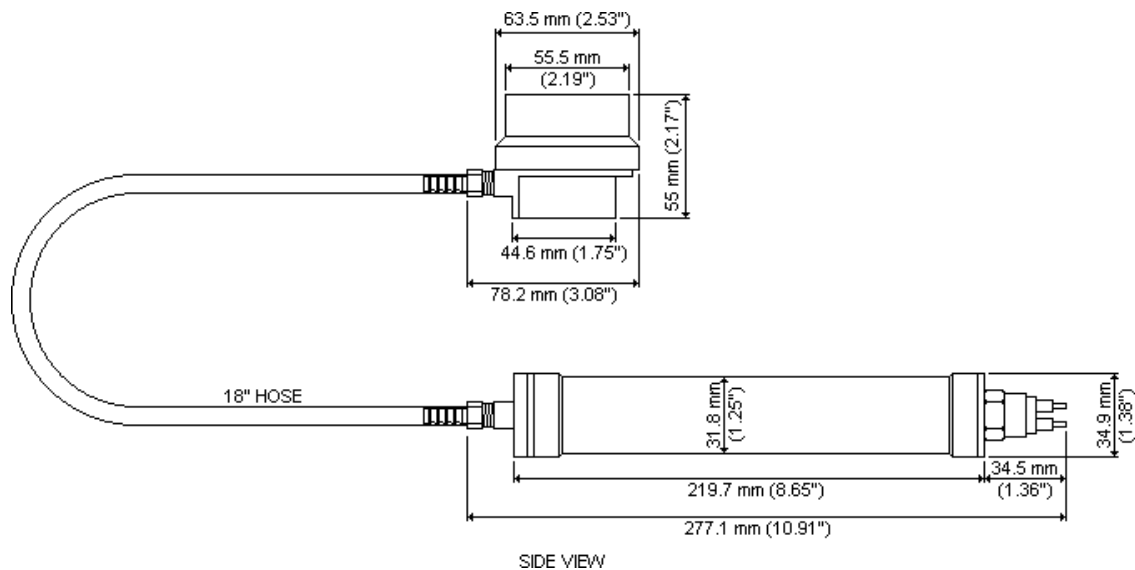


The unit requires approximately 2.5 Watts from 24 VDC, or optional 48 VDC. Serial communication is utilized, RS-485 or RS-232 at 115.2 kbps. This unit will scan a maximum of 306° with a maximum range of 50 meters. The total weight in water is less than 0.3 kg (0.6 lbs).

| HARDWARE SPECIFICATIONS: | |
|-------------------------------------|--|
| FREQUENCY | 675 kHz |
| TRANSDUCER | Imaging type, fan beam, fluid compensated |
| TRANSDUCER BEAM WIDTH | 2.5° x 22° |
| TRANSMIT PULSE LENGTH | 100 microseconds |
| RANGE RESOLUTION | 10 mm |
| MIN. DETECTABLE RANGE | 150 mm |
| MAX. OPERATING DEPTH | 1000 m |
| MAX. CABLE LENGTH | 1000 m on typical twisted shielded pair |
| INTERFACE | RS-485 @ 115.2 kbps (RS-232 optional) |
| CONNECTOR | Four conductor wet mateable (Impulse MCBH-4-MP-SS) |
| POWER SUPPLY | 22 – 30 VDC at less than 3 Watts Optional 40 – 56 VDC |
| DIMENSIONS | See drawing |
| WEIGHT: In Air | 653 g (1.5 lbs) |
| In Water | 286 g (0.6 lbs) |
| MATERIALS | 6061-T6 Aluminum & Polyurethane |
| FINISH | Anodized |

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|---|---|
| SOFTWARE SPECIFICATIONS: | Win851.exe |
| WINDOWS™ OPERATING SYSTEM | Windows™ 95, 98, Me, NT*, 2000*, XP* |
| MODES | Polar and Sector |
| RANGE SCALES | 5 m, 10 m, 20 m, 30 m, 40 m, 50 m |
| SECTOR SIZE: | |
| SECTOR MODE | 0° – 180°, 18° increments |
| POLAR MODE | 0° – 306°, 18° increments |
| STEP SIZES | Slow (0.9°), Fast (1.8°) |
| GRID TYPE | Polar |
| EXTERNAL INPUT | Compass heading, depth, turns count (RS-232) |
| FILE FORMAT | (filename).851 |
| RECOMMENDED MINIMUM COMPUTER REQUIREMENTS: | 100 MHz Pentium 16 MB RAM 1 GB Hard Disk 800 x 600 x 256 colour graphics |

* Requires Win851.exe v2.00 or higher (Free upgrade available for older versions – Contact Imagenex)



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|------------------------------|----------|-------------|
| ORDERING INFORMATION: | | |
| 1000 m UNIT | Standard | 851-000-100 |
| RS-232 | Option | -006 |
| 40 – 56 VDC | Option | -013 |

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