



## IMAGENEX MODEL 852-GS GYRO STABILIZED ULTRA-MINIATURE IMAGING SONAR

### APPLICATIONS:

- ROV, AUV, & UUV
- Manned Submersibles
- Search & Recovery
- Scientific Research

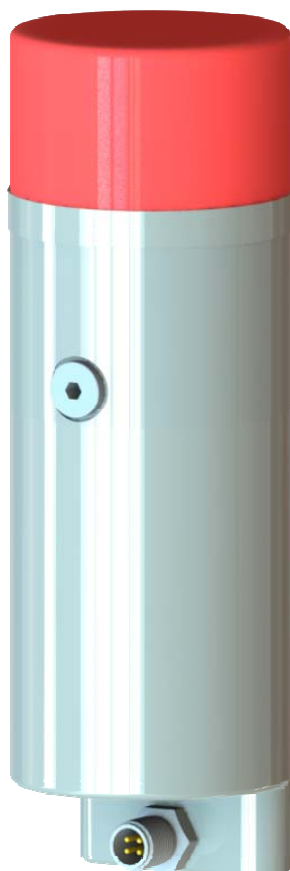
### FEATURES:

- Ultra-miniature size is ideal for mounting on today's micro ROV's
- Gyro stabilized transducer steering
- Daisy-chain sonar with optional echo sounder
- Simple set-up and installation
- Orientation module

The Imagenex Model 852-GS was designed for use with the smallest of ROV's and inspection vehicles. Gyro-stabilization is integrated directly into the sonar head, so the sonar is no longer compromised by the blurring effects of host vehicle rotation.

Connect the optional echo sounder to the sonar and straight to the surface.

Serial communication is utilized, RS-485 or RS-232 at 115.2 kbps. This unit will scan 360° with a maximum range of 50 meters.



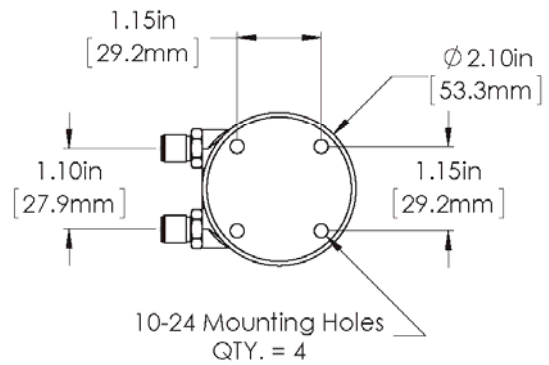
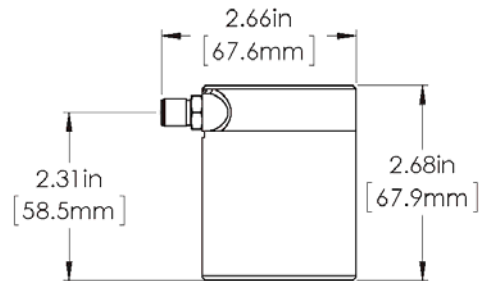
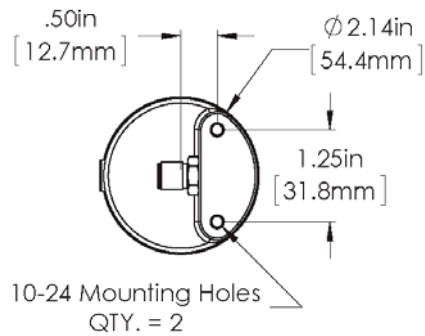
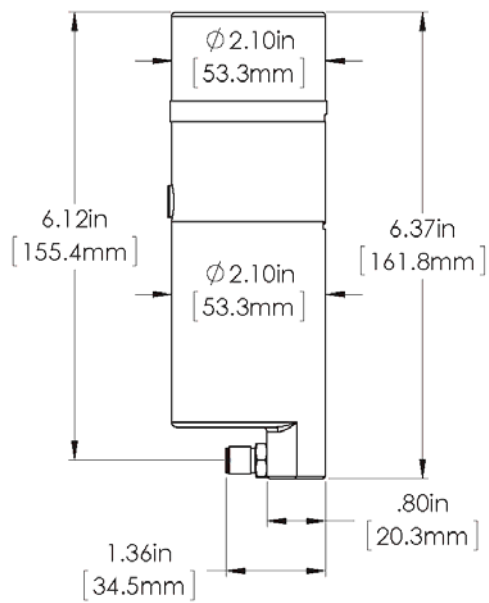
Optional Echo Sounder

|   |  |
|---|--|
| <b>HARDWARE SPECIFICATIONS:</b>         |  |
| <b>FREQUENCY</b>                        | 675 kHz  |
| <b>TRANSDUCER</b>                       | Imaging type, fluid compensated  |
| <b>TRANSDUCER BEAM WIDTH</b>            | 675 kHz: 2.4° x 20°  |
| <b>RANGE RESOLUTION</b>                 | 5 m & up: 10 mm (0.4") @ 500 data points or<br>20 mm (0.8") @ 250 data points (Polar mode) |
| <b>ORIENTATION MODULE (accuracies):</b> |  |
| <b>PITCH &amp; ROLL</b>                 | TBA  |
| <b>HEADING (Magnetic)</b>               | TBA  |
| <b>MIN. DETECTABLE RANGE</b>            | 150 mm (6")  |
| <b>MAX. OPERATING DEPTH</b>             | 300 m  |
| <b>MAX. CABLE LENGTH</b>                | 1000 m on typical twisted shielded pair (RS-485)   |
| <b>INTERFACE</b>                        | RS-485 serial interface @ 115.2 kbps (or optional RS-232)                                  |
| <b>CONNECTOR</b>                        | IE55-1206-BCR  |
| <b>POWER SUPPLY</b>                     | 12 – 50 VDC at less than 3 Watts   |
| <b>DIMENSIONS</b>                       | 54.4 mm (2.14") diameter x 161.8 mm (6.37") length   |
| <b>WEIGHT: In Air</b>                   | ~0.6 kg (~1.3 lbs)   |
| <b>In Water</b>                         | ~0.3 kg (~0.7 lbs)   |
| <b>MATERIALS</b>                        | 6061-T6 Aluminum & Polyurethane  |
| <b>FINISH</b>                           | Hard Anodize   |

|   |  |
|---|--|
| <b>SOFTWARE SPECIFICATIONS:</b>                   | <b>Win881ALGS.exe</b>  |
| <b>WINDOWS™ OPERATING SYSTEM</b>                  | Windows™ XP, Vista, 7, 8, 10   |
| <b>MODES</b>                                      | Sector, Polar, and Side Scan   |
| <b>GYRO MODES</b>                                 | North Up, Heading Up, Target Steering  |
| <b>RANGE SCALES</b>                               | 5 m, 10 m, 20 m, 30 m, 40 m, 50 m  |
| <b>TRAIN ANGLES</b>                               | Continuous rotation, 3° increments   |
| <b>SECTOR SIZE:</b>                               |  |
| <b>SECTOR MODE</b>                                | 0° – 180°, 3° increments   |
| <b>POLAR MODE</b>                                 | 0° – 357°, 3° increments, or Continuous rotation                                 |
| <b>STEP SIZES</b>                                 | Slow (0.3°), Medium (0.6°), Fast (0.9°), Faster (1.2°), Fastest (2.4°)           |
| <b>GRID TYPES</b>                                 | Polar and rectangular  |
| <b>FILE FORMAT</b>                                | (filename).81R   |
| <b>RECOMMENDED MINIMUM COMPUTER REQUIREMENTS:</b> | 2 GHz Pentium 4<br>256 MB RAM<br>20 GB Hard Disk<br>1024 x 768 Screen Resolution |

| <b>OPTIONAL ECHO SOUNDER<br/>HARDWARE SPECIFICATIONS:</b> |   |
|---|---|
| <b>FREQUENCY</b>  | 675 kHz                                 |
| <b>TRANSDUCER</b>   | Conical                                 |
| <b>TRANSDUCER BEAM WIDTH</b>                              | 10°                                     |
| <b>RANGE RESOLUTION</b>                                   | 20 mm                                   |
| <b>MIN. DETECTABLE RANGE</b>                              | 500 mm                                  |
| <b>MAX. OPERATING DEPTH</b>                               | 300 m                                   |
| <b>MAX. CABLE LENGTH</b>                                  | 1000 m on typical twisted shielded pair |
| <b>INTERFACE</b>  | RS-485 @ 115.2 kbps (RS-232 optional)   |
| <b>CONNECTOR</b>  | IE55-1206-BCR                           |
| <b>POWER SUPPLY</b>                                       | 12 – 50 VDC at less than 3 Watts        |
| <b>DIMENSIONS</b>   | See drawing                             |
| <b>WEIGHT: In Air</b>                                     | ~0.23 kg (~0.5 lbs)                     |
| <b>In Water</b>   | ~0.07 kg (~0.16 lbs)                    |
| <b>MATERIALS</b>  | 6061-T6 Aluminum                        |
| <b>FINISH</b>   | Hard Anodize                            |

| <b>OPTIONAL ECHO SOUNDER<br/>SOFTWARE SPECIFICATIONS:</b> |  |
|---|--|
| <b>WINDOWS™ OPERATING SYSTEM</b>                          | Windows™ XP, Vista, 7, 8, 10   |
| <b>MODES</b>  | Echosounder  |
| <b>RANGE SCALES</b>                                       | 5 m, 10 m, 20 m, 30 m, 40 m, 50 m  |
| <b>EXTERNAL INPUT</b>                                     | Depth, Heading, Turns  |
| <b>FILE FORMAT</b>  | TBA  |
| <b>RECOMMENDED<br/>MINIMUM COMPUTER<br/>REQUIREMENTS:</b> | 2 GHz Pentium 4<br>256 MB RAM<br>20 GB Hard Disk<br>1024 x 768 Screen Resolution |



Optional Echo Sounder

| <b>ORDERING INFORMATION:</b> |          |             |
|------------------------------|----------|-------------|
| <b>300 m UNIT</b>            | Standard | 852-000-400 |
| RS-232                       | Option   | -006        |
| External Trigger             | Option   | -023        |
| Echo Sounder                 | Option   | -053        |

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