IMAGENEX MODEL 853
SCIENTIFIC ECHO SOUNDER with DATA LOGGER

APPLICATIONS:

- Seaglider Installation
- ROV, AUV & UUV
- Offshore Oil & Gas
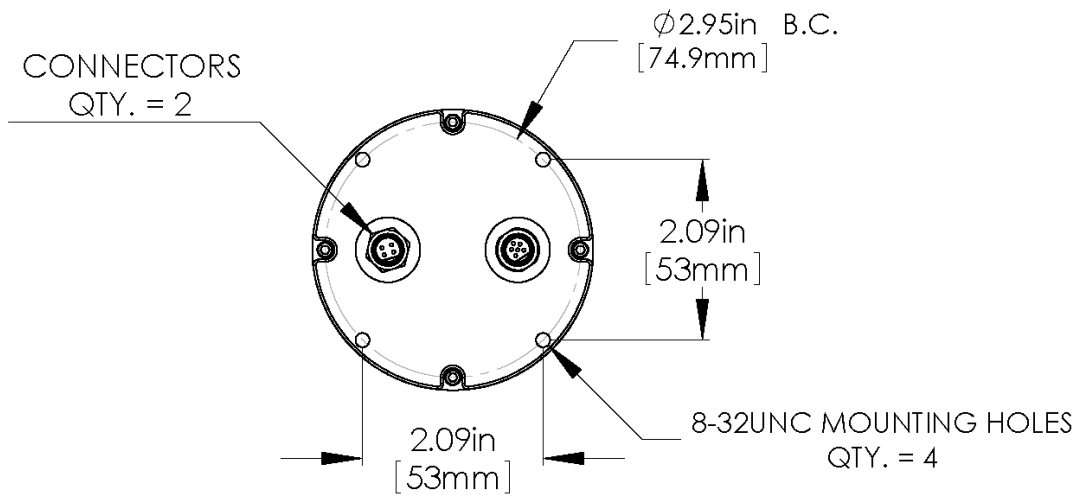- Surveying
- Scientific Research
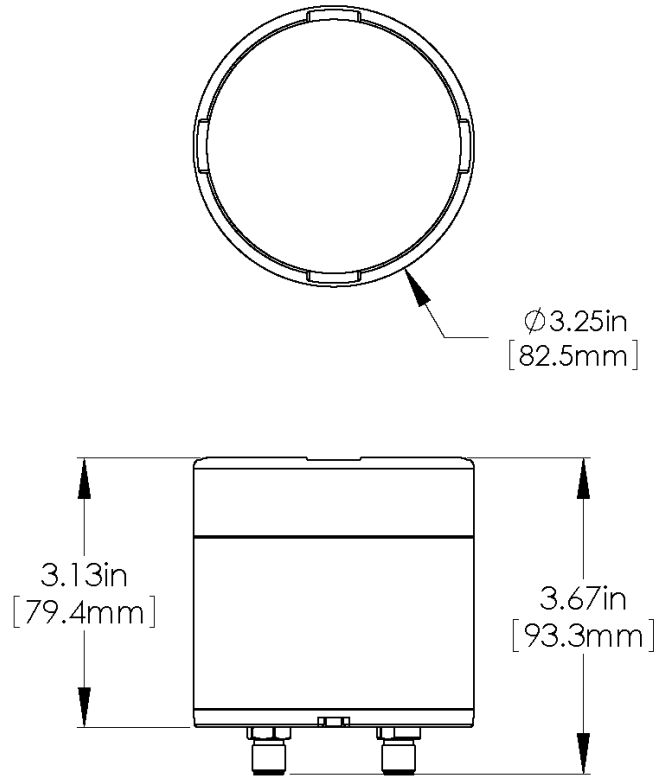- Fisheries Research

FEATURES:

- Programmable
- High performance
- Low power
- Simple set-up and installation
- Digital telemetry
- 25, 50 or 100 m operation
- Compact size
- Communication format available to user
- USB Data download

HARDWARE SPECIFICATIONS:	
FREQUENCY	120 kHz or Optional 300 kHz
TRANSDUCER	Conical
TRANSDUCER BEAM WIDTH	10°
TRANSDUCER SOURCE LEVEL	210 dB re 1 µPa @ 1 m (nominal)
TRANSDUCER RECEIVE SENSITIVITY	-180 dB re 1 V/µPa (nominal)
RECEIVE BANDWIDTH	10 kHz
PULSE LENGTH	100 µs
MAXIMUM INPUT LEVELS	with 20 dB Gain: 35 mV$_{RMS}$ with 40 dB Gain: 3.5 mV$_{RMS}$
NOISE FLOOR	with 40 dB Gain: -96 dB re 1 V$_{RMS}$
RANGE BINS	200
DATA STORAGE	200 Days before Download
MIN. DETECTABLE RANGE	0.5 m
MAX. DETECTABLE RANGE	100 m
MAX. OPERATING DEPTH	1000 m
MAX. CABLE LENGTH	15 m (RS-232), 3 m (USB)
TELEMETRY/ PROGRAMMING INTERFACE	RS-232 Serial Interface @ 115.2 kbps (or as ordered)
DOWNLOAD INTERFACE	USB
CONNECTORS	Impulse IEW55-1004-BCR / IEW55-1006-BCR
POWER SUPPLY	9 – 32 VDC at less than 0.25 Watts (Glider mode only)
TEMPERATURE	-5 to +35 °C (operational) -40 to +50 °C (storage)
DIMENSIONS	See drawing
WEIGHT: In Air	~ 1 kg (2.2 lbs)
In Water	~ 0.55 kg (1.2 lbs)
MATERIALS	6061-T6 Aluminum, PVC
FINISH	Hard Anodize

SOFTWARE SPECIFICATIONS:	Programming/Download/Viewing program: Win853.exe
WINDOWS™ OPERATING SYSTEM	Windows™ XP, Vista, 7, 8, 10
MODES	Normal (interrogate to ping) Glider (one ping every 4 seconds) Stand Alone (one ping per second)
RANGE SCALES	25 m, 50 m, 100 m
FILE FORMAT	(filename).853
RECOMMENDED MINIMUM COMPUTER REQUIREMENTS:	2 GHz Pentium 4 256 MB RAM 20 GB Hard Disk 1024 x 768 screen resolution

∅3.25in
[82.5mm]

3.13in
[79.4mm]

3.67in
[93.3mm]

∅2.95in B.C.
[74.9mm]

CONNECTORS
QTY. = 2

2.09in
[53mm]

8-32UNC MOUNTING HOLES
QTY. = 4

2.09in
[53mm]

ORDERING INFORMATION:		
1000 m UNIT	Standard	853-000-140
300 kHz	Option	-049

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