

Micron DST Sonar

Ultra Compact CHIRP Digital Sonar



Features

- Extremely compact - our smallest sonar yet
- Digital CHIRP system
- Full software functionality
- True acoustic zoom
- Instant scan reversal and sector scan options
- Inverted mode operation
- Hard boot protection for transducer
- Cost effective and reliable
- Target size measurement
- 750m depth rating
- Simple to operate

Applications

- Small ROV obstacle avoidance and target recognition
- AUV guidance



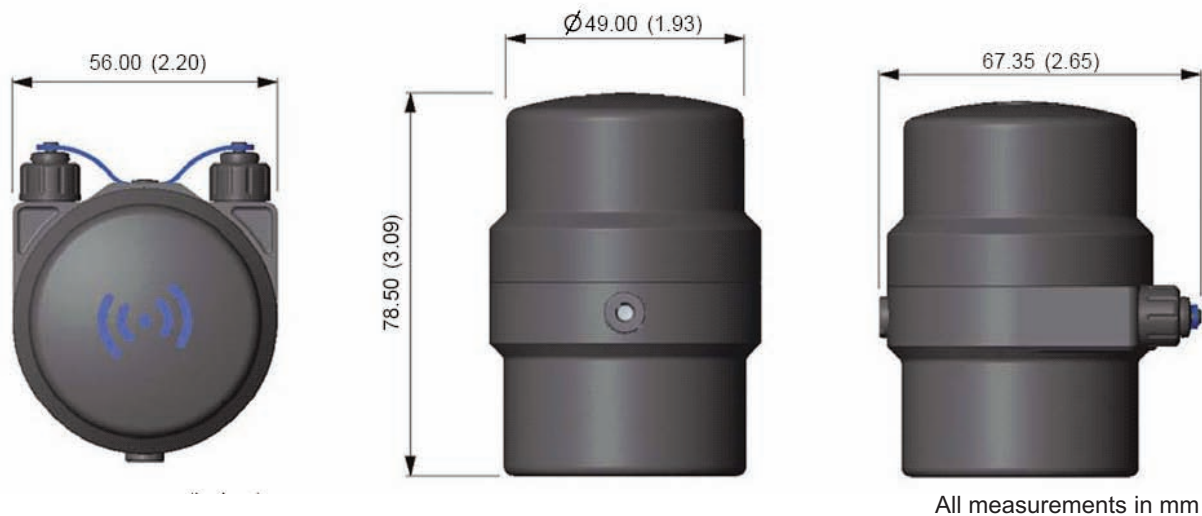
If the new generation of very small and low cost ROVs are to develop their full potential it is essential they are equipped with the vital tools and sensors expected on larger ROVs.

Along with the camera, the most important sensor for any vehicle is its obstacle avoidance sonar. The Tritech Micron DST (Digital Sonar Technology) sets new standards in compact sonar technology. It is the smallest digital CHIRP sonar in the world. CHIRP technology dramatically improves the range resolution compared with conventional sonars - it is a feature normally associated with much larger, more expensive systems.

Based on experience gained from Tritech's world class range of SeaKing and SeaPrince sonars, the Micron DST incorporates the most advanced acoustic features and software available today. The sonar can be controlled by a customer supplied PC or laptop and it can be configured for either RS232 or RS485 protocols. Micron DST has an auxiliary port to allow it to interface with other Tritech sensors.

This sonar incorporates the very latest surface mounted digital electronics and many software features normally found only on full sized commercial systems. Tritech believe that although the Micron DST is small in both size and cost it should offer the full range of functionality expected from a professional product.

Specifications



Operating frequency	Chirped 650kHz to 750kHz Other frequency bands available on request
Beamwidth, vertical	35°
Beamwidth, horizontal	3°
Range settings	From 2m (6ft) to 75m (250ft)
Scan sectors	User selectable up to 360° continuous
Step speed	Normal, Fast or Very Fast
True acoustic zoom	Yes
Instant reversal	Yes
Image measurement	Yes
Inverted head operation	Yes
Power requirements	12V - 50V @ 4 VA (Average)
Data communication	RS 485 (twisted pair), RS 232 (via modem up to 115kb/s)
Communication requirements	Maximum cable length 1000 metres (using RS 485)
Topside control	Customer supplied PC or Laptop using standard serial comms port. Windows 2000 or XP or Vista Operating System.
Software	Tritech SeaNet(OEM) display and control or low level direct command protocol
Maximum diameter	56mm (2.20 inches)
Maximum height	78.5mm (3.09 inches)
Weight in air	324g (10.25 ounces)
Weight in water	180g (5.15 ounces)
Maximum operational depth	750m (2,460ft) standard (3000m - 9,842ft version available)
Operating temperature	-10°C to +35°C
Storage temperature	-20°C to +50°C

*NB The Tritech Micron DST is only for use on vehicles with voltage spike protection on power supplies and communication lines.

All specifications are subject to change in line with Tritech's policy of continual product development.

Ref: EDS-SON-001.9