Gemini Sonar Interface Units

Ethernet and VDSL Interface Options

Ethernet and VDSL Interface Options.

The Gemini Multibeam imaging sonar from Tritech is available with Ethernet or VDSL communication protocols. To support these protocols, Tritech has a range of optional interface units for topside connection of the Gemini sonar.

Where a fibre-optic multiplexer is present the Gemini will most likely be operated in Ethernet mode. In this situation an interface unit is not required. However, to bench test the sonar the basic Ethernet interface unit simplifies the process and it is supplied with a suitable test cable.

In the event that the Gemini sonar is part of an installation where the communication conductors are copper, the recommended solution is to utilise the VDSL protocol. The VDSL configuration has two interface options and the user should select the one most suited to the installation.

The basic VDSL interface unit is for use on an installation which can directly supply the DC power required to operate the Gemini sonar (this is a typical ROV installation, where the power is supplied from the ROV). The basic VDSL interface can also be used to bench test the Gemini sonar using the short length of test cable, as supplied with the unit.

Where DC power cannot be locally supplied to the Gemini sonar the Tritech 72V VDSL interface unit is typically used, providing a power source suitable to run over a cable up to 300m in length.

Benefits

- Simplify installation of Gemini imaging sonar
- Bench test of Gemini imaging sonar
- Power Gemini over longer cable length (max 300m)

Features

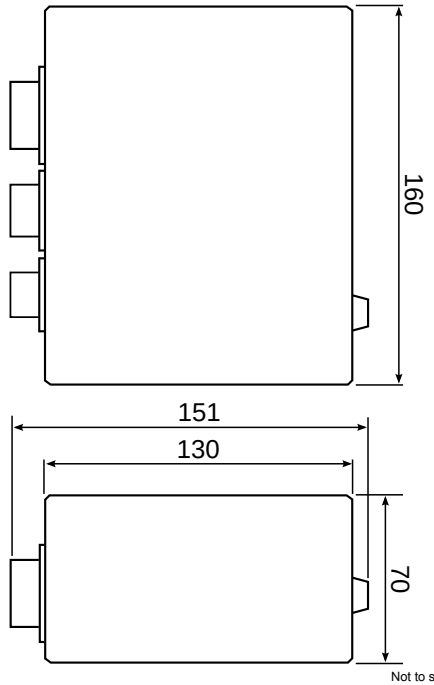
- AC to DC Power adaptor
- Deck / test cable supplied
- Connector tails for system installation
- Robust aluminium sealed box
- Sealed thermoplastic connectors

Applications

- ROV Gemini sonar installation
- Over-the-side Gemini sonar installation
- Mass Flow Excavation (MFE) installation

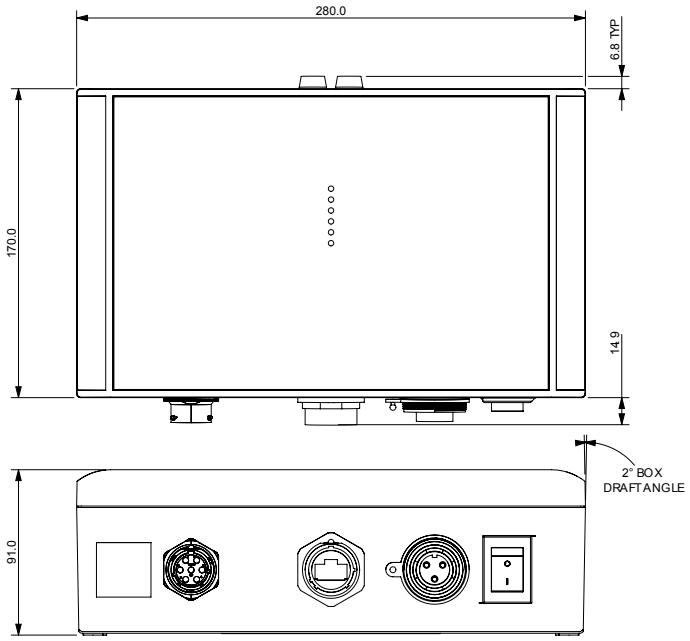
Specification

Basic Ethernet and Basic VDSL



Not to scale, dimensions in mm.

72V VDSL



Not to scale, dimensions in mm.

Electrical and Communications			
	Basic Ethernet	**Basic VDSL**	**72V VDSL**
Power Requirement	22 - 75V DC (supplied via external AC PSU)	22 - 75V DC (supplied via external AC PSU)	100-240V AC (50-60Hz)
Power Consumption (with sonar)	N/A (40W)	3.8W (40W)	40W (80W maximum)
Communications	2x Ethernet (10/100) Base-T (80m)	Ethernet (10/100) Base-T (80m) VDSL (up to 500m, locally powered)	Ethernet (PC interface) VDSL (Gemini interface)
Connectors	• Souriau UTS7124P • Souriau UTS71412S • Souriau UTS718RJFN	• Souriau UTS7124P • Souriau UTS7147S • Souriau UTS718RJFN	• Bulgin PX0730/P • Souriau UTS7147S • Souriau UTS718RJFN

Physical			
	Basic Ethernet	**Basic VDSL**	**72V VDSL**
Weight	1.1kg		2.93kg
Materials	Enclosure: Aluminium alloy (AC-44300), Connectors: thermoplastic		
IP Rating	The Interface Box is sealed against dust and moisture ingress to IP64 standard*		
Temperatures	Operating: 5 to 35°C Storage: -20°C to 50°C		Operating: 5 to 40°C Storage: -20 to 50°C

*: Note that the IP rating applies when all connectors are correctly fitted with the appropriate mating connector or blanks.

Specifications subject to change according to a policy of continual development.

0713-SOM-00004-01

Marketed by:

Tritech International Ltd
Peregrine Road, Westhill Business Park
Westhill, Aberdeenshire, AB32 6JL
United Kingdom
sales@tritech.co.uk
+44(0)1224 744 111