

Gemini Sonar Interface Units

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 72 V VDSL interface unit is typically used, providing a power source suitable to run over a cable up to 300 m in length.



Benefits

- ROV Gemini sonar installation
- Over-the-side Gemini sonar installation
- Mass Flow Excavation (MFE) installation
- Simplify installation of Gemini imaging sonar
- Bench test of Gemini imaging sonars
- Power Gemini over longer cable length (max 300 m)

Features

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

Key Specification

IP rating	IP 64
Power consumption	80 W maximum
Communication ports	Dependent on setup

Electrical & Communication	Basic Ethernet	Basic VDSL	72V VDSL
Power requirement	22 - 75 Vdc (supplied via external AC PSU)	22 - 75 Vdc (supplied via external AC PSU)	100-240 Vac (50-60 Hz)
Power consumption (with sonar)	N/A (40 W)	3.8 W (40 W)	Fun 40 W (80 W maximum)
Communications	Ethernet (10/100) Base-T (80 m)	Ethernet (10/100) Base-T (80 m) VDSL (up to 500 m, 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 specification	Basic Ethernet/VDSL		72 V VDSL
Weight	1.1 kg / 2.43 lbs		2.93 kg / 6.46 lbs
Temperature rating (operating)	5 to 35 °C / 41 to 95 °F		5 to 40 °C / 41 to 104 °F
Temperature rating (storage)	-20 to +50 °C / -4 to +122 °F		
Materials	Enclosure: Aluminium alloy (AC-44300), Connectors: thermoplastic		
IP Rating	The Interface Box is sealed against dust and moisture ingress to IP64 standard*		

Specification subject to change in line with Tritech's policy of continual product development

