EMO Mini-T-SURVEY
Fibre optic multiplexer system

Features and benefits
- Small form-factor multiplexer
- Rugged design for extreme environments
- Depth rating down to 6,000 m rated subsea housings

Applications
- Remotely operated vehicles (ROVs)
- Pipe/hull inspection robotics
- Side scan sonar (ROV and towed array)
- Security, defence, and industrial sensor applications
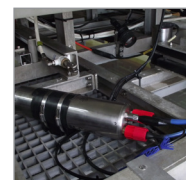- Subsea ocean observation systems

Options
- Fibre redundancy
- Optical diagnostics
- Power switching

The Mini-T-SURVEY multiplexer is a dedicated fibre optic multiplexer system for oceanographic survey applications offering digital fibre optic transmission of multiple high-speed Ethernet and serial data channels over a single fibre optic link.

The multiple Ethernet and serial channels make the Mini-T-SURVEY suitable for integration with many profiling, side scan sonar and other survey hardware as well as acoustic platforms.

The size of the Mini-T subsea hull is approximately 5 x 14 inches. The Mini-T can provide a telemetry solution for remotely operated vehicles (ROVs) including smaller observation, explorer and light-working class models. The subsea unit is complemented by a 19" 1 U Euro-rack style enclosure at the surface or controlling end of a telemetry system.

The Mini-T utilises state-of-the-art CWDM optical technology and offers the ability to upgrade or modify the optical configuration or electrical specification of a system.

Specifications - topside unit

Mechanical

Dimensions:	19" rack mount, 1 U high

Electrical

Supply voltage:	110-230 VAC, 50/60 Hz
Power consumption:	20-30 W

Transport

Delivered in Pelicase

Specifications - subsea unit

Mechanical

Dimensions:	OD 3.98" (101.10 mm)
	Length 14.52" (368.85 mm)
Depth rating:	1,000 m
Material:	Acetal/Delrin
Weight in air:	Approx. 6.55 kg (14.44 lbs)
Depth rating:	4,000 m
Material:	Stainless steel (AISI 316)
Weight in air:	Approx. 10.34 kg (22.75 lbs)
Depth rating:	6,000 m
Material:	Titanium (Gr 2)
Weight in air:	Approx. 7.25 kg (15.98 lbs)

Multiplexer

Ethernet:	2 x 10/100/1000Base-T
RS 232:	2 x 120 Kbaud (optional)
RS 485:	2 x up to 5 Mbaud (optional) or
RS 422:	1 x up to 5 Mbaud (optional)

Electrical

Supply voltage:	110 VAC/48 VDC
Output voltages:	48 VDC (universal)

Fibre optic

Fibre type:	Single mode 9/125
Data rate:	1.5 GB, 622 Mb for serial data
Wavelengths:	CWDM red band 1,471-1,611
Number of fibres required:	1
Flux budget:	20 dB
Max link distance:	10 km