

EMO Mini-T

Compact customisable fibre optic multiplexer



The Mini-T multiplexer system is equipped with CWDM fibre optic technology, allowing it to transmit multiple channels of High-Definition Video, Gigabit Ethernet, and Serial data over a single fibre optic link.

Available in three standard configurations, the Mini-T is also fully customisable, providing a tailored telemetry solution for virtually any marine application.

The Mini-T is small and versatile enough to provide primary or auxiliary telemetry for most remotely operated vehicle (ROV) systems.

The subsea multiplexer unit is complemented by a 19" rack mountable topside unit.

Features and benefits

- Compact design
- Lightweight
- High data throughput
- Designed for extreme environments
- Standard configurations
- Fully customisable channel and power configurations
- Depth rating up to 6000 m
- Optical diagnosis
- Remote power switching
- eFusing

Applications

- ROV, ROTV, ASV and AUV
- Ocean observatories
- Drop/tow camera systems
- Marine energy installations
- Security, defense and industrial marine applications
- Pipe/hull inspection

Options

- Fibre redundancy



Specifications - topside unit

	Mini-T Standard	Mini-T HD-Video	Mini-T Ethernet	Mini-T Custom
Mechanical				
Dimensions	19" 1U-2U rack mount			
Electrical				
Supply voltage typical (VAC/Hz)	85-265/50/60			
Power switching	Not Available	Not Available	Available	Consult factory
Monitoring	Leak and temperature sensor, optical budget, fibre link and video status, with LED indicators			

Specifications - subsea unit

	Mini-T Standard	Mini-T HD-Video	Mini-T Ethernet	Mini-T Custom
Mechanical				
Pipe diameter OD (mm)	102			102/114
Pipe length (mm)	380			380/508
Vacuum test port	Yes			
Material	SS316/Titanium			
Max depth rating (m)	4,000/6,000			
Weight in air approx. (kg)	13-20			
Weight in water approx. (kg)	6-19			
Electrical				
Video (NTSC/PAL)	2	-	-	Custom
HD-Video (SDI, HD-SDI) SMPTE 259M/SMPTE 292M	1	0-3	-	Custom
HD-Video (3G-SDI) SMPTE 424M	-	0-3	-	Custom
RS232 (up to 500 Kbaud) RS485/422 (up to 1.25 MBaud) Optional TTL	0-5	0-5	0-5	Custom
Ethernet (10/100/1000 Base-T)	1	-	3	Custom
Subsea supply voltage (VDC/VAC)	250 425/85-264			
Output voltages (efused and switched) (VDC)	12/24/48			Custom
Fibre Optic				
Fibre type, single mode (µm)	9/125			
Fibre redundancy	Included			
Flux budget (dB)/Max link distance (km)	24/10			