

Uni-MUX DeepLink 6+

High-Performance Communication Multiplexer

Introduction

It is an advanced **subsea communications and data aggregation unit** designed to combine multiple types of signals and power over a **single optical fiber** link for underwater vehicles and survey systems.

It is **high-performance subsea data, video and communications multiplexer** used primarily in **ROV (Remotely Operated Vehicle)** and **underwater survey/inspection systems**.

Uni-MUX DeepLink 6+ is designed to combine many different signals and power over a single fiber optic connection for deep-sea environments.

Applications

- › ROV communication and control systems
- › Subsea survey and inspection platforms
- › Integrated subsea sensor and equipment systems
- › Subsea power and communication distribution units



Key Features

- › Topside & subsea temperature monitoring
- › Dynamic Power allocation
- › DC ground fault & water ingress detection
- › Galvanically isolated ports
- › Internal managed network switch with fiber/SFP diagnostics
- › Dual independent PPS channels
- › Flexible communications: RS232, RS485, TTL/PPS, Ethernet (4 x 10/100 Mbps & 4 x Gbps)
- › Switchable power outputs (24 / 48 VDC), 110/230 VAC, with real-time monitoring
- › System health monitoring with LED status indication
- › Intelligent alarms with automatic fault shutdown

Key Features

- › Automated logging (voltage, current, temperature, system performance)
- › DHCP & static IP configuration
- › 7" touchscreen LCD with integrated web-based GUI
- › Wi-Fi (wireless communication capability)
- › DC Overcurrent, overvoltage, undervoltage protections
- › High bandwidth fiber-optic communications
- › Software resettable eFuses and power reporting
- › Graphical load representation in UI, for individual ports
- › Upload and download port configuration
- › Design and tested with Survey sensors

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Specifications

Power Output

- 1200 W available DC power
- Software resettable fuses on DC power output
- Current Monitoring on DC power output

Subsea

- Housing: 585mm (L) X 230mm
- Estimated weight: 34 kg
- Material: Anodized AL 6082-T6
- Max depth: 3000 meters

Software

- Web Based Control
- System Health Monitoring
- Alarm & Safety
- Flexible communication
- Network & IP Config
- Power management
- Firmware & Diagnostics
- User Friendly Control
- Automated logging
- Wi-Fi Communication
- Intelligent load management

Signal Interface

8 x RS232
4 x 1 Gbps Ethernet
4 x 10/100 Mbps Ethernet
13 x PPS/TTL 5V (Outputs)
1 x RS232 110V/240VAC
4 x RS485/RS232 Switchable

Technical Specifications

Power Output: 1200 W

Input Voltage

85 – 264V AC; 43 – 63 Hz

Output Voltages

3 x 48V DC / 24V DC, 5.5A (max)
1 x 48V DC / 24V DC, 3A (max)
11 x 24V DC, 2A (max each)
1 x 110/230V AC @ 3.15A (max)

Ethernet Channels

4 x Gigabit Ethernet (1000 Mbps)
4 x Fast Ethernet (10/100 Mbps)

Serial Channels

8 x RS232
4 x RS232 / RS485 (software selectable)

TTL / PPS Input Channels

2 x TTL / PPS

