

Uni-MUX DeepLink6

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 DeepLink6 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
- Humidity & pressure monitoring in Subsea
- 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 -10/100 Mbps & 2- Gbps)
- Switchable power outputs (24 VDC, 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

- DC bus system - Up to 10 A on one connector
- Software resettable fuses on DC power output
- 1200 W available DC power

Subsea

- Housing: 585mm (L) X 230mm
- Estimated weight: 33.5 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

Signal Interface

8 x RS232 - 24VDC
2 X 1 Gbps Ethernet – 24V/48VDC
4 X 10/100 Mbps Ethernet - 24V/48VDC
3 x HD-SDI
3 x PPS/TTL 5V
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

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

Ethernet Channels

2 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 Channels

2 x TTL / PPS

Video Channels

3 x HD-SDI

