

Mini Matrix MUX



The Mini Matrix is the response to a growing need for compact ROV systems carrying a larger spread of sensors. Based on the same technology as the successful Matrix MKII+, the Mini Matrix provides a plug and play interface for a large array of sensors in an extremely compact package. Supporting most dual head multibeam systems available on the market, together with a large number of Ethernet and serial channels and options for analogue and HD video, the Mini Matrix is an ideal system for adding advanced survey capabilities with minimal weight and size requirements. The advanced power management includes individual 2-pole power switching, insulation monitoring and software resettable fuses. With 1200W of DC power available in this compact system the Mini Matrix delivers market leading power to size ratio. All functions are controlled from the 19" rack mount topside controller with touch screen interface and web-based remote control.

Key Features

- 7-inch Linux based touch screen interface for control and diagnostics
- Status for all channels on screen
- Voltage and current monitoring
- Alarm / warning logging
- Operational hours logged
- Web browser-based interface for mirrored control
- Ethernet connection for control
- 19" 3U rack mount

Power Input

Subsea	47-63 Hz, 85-264 VAC / 120-370 VDC
Topside	90-265 VAC, 47-63Hz

Power Output

- 2 x 48 VDC/24 VDC noise attenuated 6A - Software switchable
- 1 x 48 VDC 3A/24V, 6A Fixed output. Hardware switchable
- 10 x 24 VDC 2A outputs 2-pole relay
- 1 x 110 VAC 2-pole relay output
- Software resettable fuses on DC power output
- 1200 W available DC power

Signal Interface

10 x RS232
4 x Software switchable RS232/RS485
3 x Gb Ethernet 10/100/1000
3 x Analog video
2 x 5V TTL trigger
All serial and trigger interfaces are isolated

Mechanical Properties

Materials Aluminium 6082-T6, hard anodized or Titanium Grade 5
Dimensions Dimensions: D 230mm (223mm) L 355mm
Depth Rating 3000 MSW
Shock and Vibration According to ISO 13628-6

Other

Water ingress detection
Two-stage noise attenuation filter on power input
Humidity sensor subsea
Temperature sensor topside and subsea
DC ground fault detection system
Fibre and SFP diagnostics
Control board diagnostics

Connectors

C1: Seacon 5506-2021-E	Gbps Ethernet, 24/48 VDC, RS232, Sync with C2
C2: Seacon 5506-2021-E	Gbps Ethernet, 24/48 VDC, RS232, Sync with C1
C3: Seacon 5506-2021-E	TTL 5V, 1 x 1 Gbps Ethernet, RS232/RS485, 24VDC/48VDC
C4: Burton 5506-1508	Camera 1 (Analog Video) RS232, 24 VDC
C5: Burton 5506-1508	Camera 2 (Analog Video) RS232, 24 VDC
C6: Burton 5506-1508	Camera 3 (Analog Video) RS232, 24 VDC
C7: Seacon MCBH8FS	RS232, 24 VDC
C8: Seacon MCBH8FS	RS232, 24 VDC
C9: Seacon MCBH8FS	RS232, TTL, 24 VDC
C10: Seacon MCBH8FS	RS232, TTL 5V, 24 VDC
C11: Seacon MCBH8FS	RS232/RS485, 24 VDC
C12: Seacon MCBH6FS	RS232, 110 VAC (depending on voltage supplied to the Matrix)
C13: Seacon MCBH8FS	RS232/RS485, 24 VDC
C14: Seacon MCBH8FS	RS232/RS485, 24 VDC
Fibre: Seacon OPT-G1-SM	Topside<->Subsea Comms (Optional Schilling fibre interface)
Power: Seacon 5506-2006	47-63 Hz, 85-264 VAC / 120-370 VDC