

Mini MATRIX



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 a compact package. Supporting most dual head multibeam systems available on the market. By combining a large number of Ethernet and serial channels together with access to analog video, the Mini Matrix is an ideal system for adding advanced survey capabilities with reasonable weight and size requirements.

Key Features

- Small size
- Web based control interface
- Software resettable fuses

Topside

- 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
- Weight: 8 kg

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
1050 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

Aluminium 6082-T6, hard anodized or Titanium Grade 5
Dimensions: D 230mm (223mm) L 384 mm
Weight Canister: mm 25 kg (air), 12 kg (sea)
Depth rating: 3000 MSW

Other

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
Water ingress detection

Connectors

C1	5506-2021 - Gbps Ethernet, 24/48 VDC, RS232, Sync with C2
C2	5506-2021 - Gbps Ethernet, 24/48 VDC, RS232, Sync with C1
C3	5506-2021 - TTL 5V, 1 x 1 Gbps Ethernet, RS232/RS485, 24VDC/48VDC
C4	5506-1508 - Camera 1 (Analog Video) RS232, 24 VDC
C5	5506-1508 - Camera 2 (Analog Video) RS232, 24 VDC
C6	5506-1508 - Camera 3 (Analog Video) RS232, 24 VDC
C7	MCBH8F - RS232, 24 VDC
C8	MCBH8F - RS232, 24 VDC
C9	MCBH8F - RS232, TTL, 24 VDC
C10	MCBH8F - RS232, TTL 5V, 24 VDC
C11	MCBH8F - RS232/RS485, 24 VDC
C12	MCBH6F - RS232, 110 VAC (depending on voltage supplied to the Matrix)
C13	MCBH8F - RS232/RS485, 24 VDC
C14	MCBH8F - RS232/RS485, 24 VDC
Fibre	472-F-BCR, SM (OPT-F1-BCR, SM) Topside<->Subsea Comms (Optional Schilling fibre interface)
Power	5506-2006 - 47-63 Hz, 85-264 VAC / 120-370 VDC