

MiniMatrix



The MiniMatrix 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 MiniMatrix 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 MiniMatrix 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 MiniMatrix 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.

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

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:

- Aluminium 6082-T6, hard anodized or Titanium Grade 5
- Dimensions: D 230mm (223mm) L 355mm
- Depth rating: 1600 MSW

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-G4-SM | Topside<->Subsea Comms (Optional Schilling fibre interface) |
| • Power: Seacon 5506-2006 | 47-63 Hz, 85-264 VAC / 120-370 VDC |

CUSTOM BUILDS AVAILABLE ON REQUEST

Version: Rev.1/GGT

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Note: technical specifications are subject to change without notice. We accept no liability for any inaccuracy or printing errors.

