INNOVA

Mini MATRIX™

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Part number: 1071453

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 resetable fuses

The advanced power management includes individual 2-pole power switching, insulation monitoring and software resettable fuses.

With 1050 W 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.

TOPSIDE

- 7" 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)/24 VDC (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

CONNECTORS

	Type	Communication	Power
C1	5506-2021	Gbps Ethernet, RS232, Sync with C2	24/48 VDC
C2	5506-2021	Gbps Ethernet, RS232, Sync with C1	24/48 VDC
C3	5506-2021	TTL 5V, 1 x 1 Gbps Ethernet, RS232/RS485	24VDC/48 VDC
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 (same as input voltage)
C13	MCBH8F	RS232/RS485	24 VDC
C14	MCBH8F	RS232/RS485	24 VDC
Fibre	472-F-BCR, SM (OPT-F1-BCR, SM)	Topside<->Subsea Single mode	
Power	5506-2006		47-63 Hz, 85-264 VAC / 120-370 VDC

MECHANICAL PROPERTIES

- Aluminium 6082-T6, hard anodized or Titanium Grade 5
- Dimensions: D 230 mm (223 mm), L 384 mm
- Weight Canister: 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

CUSTOM BUILDS AVAILABLE ON REQUEST

Last modified: November 1, 2023
Note: We accept no liability for any printing errors or changes in specification.