



MATRIX MK II +

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The Matrix is a stand-alone fibre optic multiplexer and control solution, providing a simple, plug and play interface for a large array of sensors and equipment to any remotely operated system.

The system consists of a compact, one-atmospheric subsea unit rated for 3000 MSW, and a 19" rack mounted topside unit with touch screen and status for all channels on the screen.

Key features

- Web based control interface
- Software resettable fuses
- Highly configurable in software

The Matrix's internal control system provides individual 2-pole switching of all power outputs as well as DC power insulation monitoring. The DC power outputs are equipped with software resettable fuses to save operation time. All DC power outputs are equipped with voltage and current monitoring, which is also displayed in the topside controller.

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

- 9 x RS232
- 4 x software switchable RS232/RS485
- 2 x Gb Ethernet
- 3 x 100 Mbps Ethernet
- 3 x HD-SDI
- 2 x 5V TTL trigger
- All serial and trigger interfaces are isolated
- Optional: 2 x single direction PECL

CONNECTORS

C1	5506-2021	Gbps Ethernet, 24/48VDC, RS232, Sync with C2 (optional PECL interface)
C2	5506-2021	Gbps Ethernet, 24/48VDC, RS232, Sync with C1 (optional PECL interface)
C3	5506-2021	TTL 5V, 2 x 100 Mbps Ethernet, RS232/RS485, 24VDC/48VDC
C4	MINL-5515-75 Ω	Camera 1 (HD-SDI) RS232, 24 VDC
C5	MINL-5515-75 Ω	Camera 2 (HD-SDI) RS232, 24 VDC
C6	MINL-5515-75 Ω	Camera 3 (HD-SDI) RS232, 24 VDC
C7	MCBH8F	RS232, 24 VDC
C8	MCBH8F	RS232, 24 VDC
C9	MCBH8F	Ethernet, TTL, 24 VDC
C10	MCBH8F	TTL 5V, RS232, 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	OPT-G4-SM	Topside <-> Subsea Comms (optional Schilling fibre interface)
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 230mm (223mm) L 600mm
- Depth rating Aluminium 6082-T6: 3000 MSW
- Depth rating Titanium Grade 5: 5000 MSW
- Shock and vibration: According to ISO 13628-6



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

Note: We accept no liability for any printing errors or changes in specification.

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