Rugged Master Module
Data Processing Unit of EnviScreen™ Monitoring Systems

- Provides novel networking solutions and reliable data communication for CBRN monitoring systems.
- Military Grade; Especially designed for harsh military use in military naval vessels & armored vehicles.
- Collects data from various CBRNW and similar sensors and adapts it into TCP/IP networks
Networking and data adaptation of multiple sensors
With versatile connection capabilities, the new military grade rugged Master Module is an ideal solution for creating sensor networks for CBRN monitoring for extreme environmental conditions. It is compatible with tens of different types of measuring devices from Environics CBRN detectors to 3rd party sensors. Operating as a sophisticated sensor gateway and a data processing unit, the Master Module reduces the cabling requirements and collects and harmonizes the measurement data in order to optimize the data transfer in the communication networks. Moreover, the Master Module enables on-line sensor management and fine-tuning of the sensor performance according to expected event scenarios.

Reliability for system integrations
The Rugged Master Module offers TCP/IP interface to the EnviScreen monitoring software and in addition, to 3rd party systems like C4I, BMS and IPMS to expand the system capabilities beyond the basic monitoring networks. The design of the Rugged Master Module guarantees high level of redundancy and reliability for sensor integrations and encryption methods are applied to secure data communication in the systems.

Key Features
- Reliable interfaces CBRNW sensors to Command Computer(s) using EnviScreen Operix 2016 software
- Military Grade
- Key components to create small vehicle CBRNW systems & large naval ship monitoring
- Readiness to interface wide range of different CBRNW & similar sensors
- Provides easy to integrate ASCII based interface protocol for 3rd party Battle Management System or similar
- Provides programmable relay contacts for critical actions, such as HVAC emergency shutdown & NBC filtration system startup
- No periodic maintenance required

Technical Data

Size
Approx. 295 x 210 x 357mm without rack
Approx. 335 x 345 x 428mm with rack

Weight
Approx. 7.2kg without a mounting rack
Approx. 11kg with a mounting rack

Power
9 – 36 VDC (85 – 264 VAC with optional external AC adapter)

Indicators
LED panel to indicate CHEM, BIO & RAD device status
Adjustable alarm buzzer (max. 83dB)

Operating Temperature
-32 to +55 °C
-26 to +131°F

Storage Temperature
-40 to +70 °C (Recommended 0 to +40°C)
-40 to +158°F (Recommended 32 to +104°F)

Dust & Water Resistance
IP64

EMI/EMC
MIL-STD-461 E essential parts
MIL-STD 1275D, essential parts
IEC 61000-4-2:2008, IEC 61000-4-8:2009

Environmental
MIL-STD-810G, essential parts
JSS55555S, essential parts

Shock/Vibration
MIL-STD-810G, essential parts
(with mounting rack)

Optional Features
External Alarm Unit
Shock absorbing mounting rack
External AC 85 - 264 VAC Powering Unit

Interfaces
Following connectors and interfaces are available:
- 1 x DC In (9-36) VDC
- 4 x Ethernet/PoE
- 1 x Ethernet
- 8 x RS232/422/485
- 8 x CL Input (4-20mA)
- 1 x for optional External Alarm Unit
- 8 x Programmable Relay (dry)
- 4 x Digital In (wet)