The Master Module provides novel networking solutions and reliable data communication for safety and environmental monitoring systems. The intelligent Master Module collects data from various sensors and adapts it into TCP/IP networks.
Networking and data adaptation of multiple sensors
With versatile connection capabilities, the Master Module is an ideal solution for creating sensor networks for CBRN, environmental and industrial monitoring. 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 wireless or wired 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 Master Module offers TCP/IP interface to the EnviScreen monitoring software and in addition, to the building automation and C4I systems to expand the system capabilities beyond the basic monitoring networks. The design of the Master Module guarantees high level of redundancy and reliability for sensor integrations and encryption methods are applied to secure data communication in the systems.

Applications
Fixed and mobile CBRN, environmental and industrial monitoring systems for:
- Critical infrastructure, e.g. critical buildings, shelters, subways, power plants
- Areas/borders, e.g. industrial sites, nationwide networks, airports, seaports
- Naval vessels for military and civil defence and environmental hazard prevention
- CBRN reconnaissance vehicles for civil and military defence

# Technical Data

<table>
<thead>
<tr>
<th>Size</th>
<th>Approx. 350 mm x 360 mm x 115 mm (13.8” x 14.2” x 4.5”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Approx. 9.2 - 10.2 kg (20.3 - 22.05 lb) Depending on configuration (options)</td>
</tr>
<tr>
<td>Power</td>
<td>85…264 VAC (50-60Hz) or 18...30 VDC</td>
</tr>
</tbody>
</table>
| Operating Temperature | -20 to +55 °C  
                        | -4 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 | IP 41 (with fan) |

Optional Features
- Wireless Communication (WLAN, GPRS, 3G)
- External Alarm Unit
- Shock absorbing mounting rack

Interfaces
Master Module supports the following physical interfaces:
- 1 Ethernet RJ45-port
- 8 RS232, RS422 or RS485 ports (configurable)
- 12 Programmable Relay Outputs
- 3 Digital Inputs for potential free contacts
- 3 Digital Inputs for 3-24V DC or AC
- 4 (0)4-20 mA current loop inputs
- 8 RJ45-port integrated Ethernet switch
- 6 RJ45-port (4poE) integrated Power Over Ethernet (POE) switch

* Only one of the options can be selected