HarshIO IP67 Compact Modules for EtherNet/IP

HarshIO IP67 I/O Compact Modules for EtherNet/IP* provide a reliable solution for connecting industrial controllers to I/O devices through on-machine mounting in harsh environments, saving precious control cabinet space and enabling localized troubleshooting and modification.

Features and Benefits

Harsh-duty design
IP67 rating and construction materials eliminate need for a protective cabinet in harsh environments. Tested to withstand shock, high-vibration and high temperature. Potted with resin and uses metallic connectors.

Two integrated fieldbus ports
Enables wiring of the entire module application without an additional tee. Utilizes daisy-chain wiring topology which creates cost savings for the customer.

Versatile Interface
8 user configurable Inputs and Outputs. Supports PNP input sensors. Visible diagnostic LEDs provide maintenance personnel with the ability to easily determine I/O, module & network status.

Ambient-temperature resistance of 70°C
Enhances design flexibility and can withstand harsh-duty environmental stresses.

Compact Design
30mm housing saves space on machines while using industry-standard M8 or M12 I/O connectivity.

Tree rotary switches select IP Address
Decreases modules commissioning times and simplifies device replacement.

Diagnostic notifications via fieldbus messaging and visible diagnostic LEDs
Enables both internal and external solutions.

Mounting Holes
Suitable for 2 screws.

Applications

Industrial Automation
Compact Machines
High-Speed Machines
CNC Machines
Food and Beverage
Plastic Injection
Robot & Tool Makers
Material Handling
Packaging
Automatic Guided Vehicles

Food Processing
Automated Guided Vehicles
CNC Machines
Specifications

HARDWARE
Compact size: 30 x 175 x 20mm
Operating Temperature: -25 to +70°C
Storage Temperature: -40 to +90°C
Housing material: PBT VALOX 420 SEO
Black 7701

POWER SUPPLY
Power connector: M12, A-Coded, 5-pin, male, nickel brass
Module & Input power: 24V DC, -15/+20% (protected against power crossing)
Output power: 24V DC, -15/+20% (protected against power crossing)
2x Diagnostic LEDs (Logic/Input + Output) with detection of low voltage operation

INPUT CHANNEL(S)
Connector: Ultra-Lock M12 5-pin A-Coded or M8 3-pole, Female, nickel brass
Input type: PNP, Sinking, 2/3-wire sensors
Sensor power supply: 250mA
Input channel voltage (“1”): 10V … 25V
Input channel voltage (“0”): -0.2V … 5V
Electronic short circuit protection
Input filter: 0.5 … 3 ms
(1 ms by default, filter step 0.5)

OUTPUT CHANNEL(S)
Connector: Ultra-Lock M12 5-pin A-Coded or M8 3-pole, Female, nickel brass
Output type: PNP, Sourcing
Output current: 0.5A per channel
Maximum output current: 4.0A at 25°C
Electronic short circuit protection
Switching frequency: 200 Hz

FIELDBUS
Network IN connector: M12, 4-pin, female, D-Coded, stainless steel
Network OUT connector: M12, 4-pin, female, D-Coded, stainless steel
Diagnostic LED per port (Link / Speed / Activity)
3x Rotary switches (Static IP, DHCP, etc)
Protocol: EtherNet/IP Adapter
Support of I/O and explicit messaging
Ethernet Packet: Manage up to 3000 packet/sec
Min refresh I/O Interval: 1ms
Description file: Yes (EDS)
ODVA certification

SHOCK AND VIBRATION
MIL-STD-202F, method 204D, condition A (Vibration)
MIL-STD-202F, method 213B, condition B (Mechanical Shock)
MIL-STD-1344A (Thermal Shock)

REGULATORY APPROVALS
CE
REACH

Ordering Information

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Engineering No.</th>
<th>Protocol</th>
<th>No. of Ports</th>
<th>Housing Size</th>
<th>I/O Connectors</th>
<th>I/O Configuration</th>
<th>I/O Channel</th>
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<td>TBDEI-8YYP-D84</td>
<td>EtherNet/IP</td>
<td>8</td>
<td>30mm</td>
<td>M8</td>
<td>8x User Configurable</td>
<td>PNP</td>
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<td>M12</td>
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<td>PNP</td>
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