

Brad® EtherNet/IP* HarshIO Analog Modules for Roller Drives†

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Ideal for many material handling applications, Brad™ EtherNet/IP* HARshIO Analog Modules provide an IP67 rated solution for interfacing industrial controllers with conveyor rollers in harsh duty environments



Brad® EtherNet/IP* HarshIO Analog Module for Roller Drives

Features and Advantages

M12 Ultra-Lock Interface

Allow fast connections and change-overs. Reduce time to connect the cordsets to the module

Roller Drive Connectivity

Connect up to 4 roller drives†. Control start/stop and speed of each roller

EtherNet/IP™

IP67 Housing

To use directly on the machine. Dust, water and vibration resistant. Large temperature range. No need of protective cabinet

Diagnostics

Diagnostic capabilities via fieldbus messaging. Visible diagnostic LEDs provide maintenance personnel with the ability to easily determine I/O, module and network status

Push Buttons

IP address setting (Static, DHCP, Stored)

Display

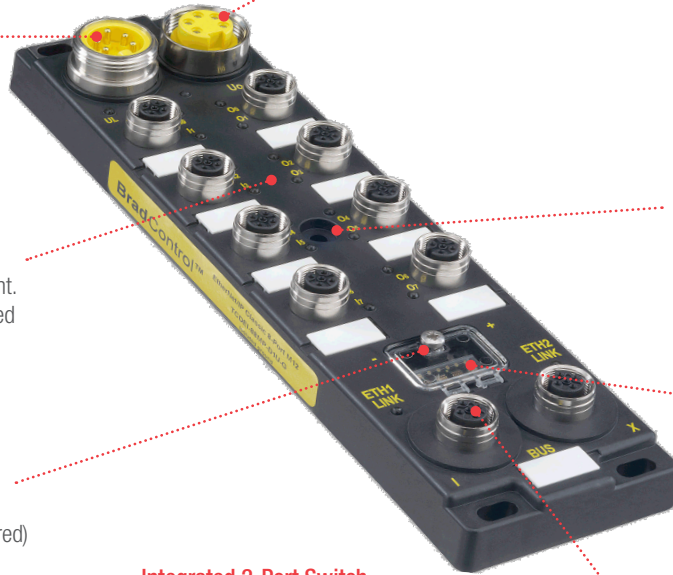
4-digits scrolling information. Status information (Ipconfig, PLC connection, I/O diagnostic)

Integrated 2-Port Switch

Daisy-chain wiring possible wire entire application without switches achieve cost savings

Fieldbus Ready

ODVA certified. Upload EDS file from module using Rockwell RSLinx



Applications

Industrial Automation - Conveying

- Food processing
- Warehousing & Distribution
- Industrial production
- Express parcel, postal and courier sector
- Airport logistics
- Baggage handling
- Supermarket



Baggage handling and sorting



E-Commerce distribution centers



Plant conveying system

* EtherNet/IP is a trademark of the Open DeviceNet Vendor Association (ODVA)

† INTERROLL EC310 Roller Drives

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Specifications

REFERENCE INFORMATION

Hardware

IP67 housing
Dimensions: 600 x 220 x 20mm
(2.36" x 8.66" x 0.78")
Operating Temperature: -25 to +70°C
Storage Temperature: -40 to +90°C
Relative Humidity: 10 to 95%, non-condensing
Housing Material: PBT VALOX 420 SEO Black 7701

Power Connectors

Power In: Male Mini-Change™, 5-pole
Power Out: Female, Mini-Change™, 5-pole
Protected against power crossing

I/O Connectors

Female, Ultra-Lock™ M12, A-Coded, 5-pole

Fieldbus Connectors

Female, Ultra-Lock™ M12, D-Coded, 4-pole

Ethernet Switch

2-port, 10/100 Mbps (auto-negotiation), full duplex,
Storm Protection
Diagnostic LED per port (Link / Speed / Activity)
Fieldbus

EtherNet/IP* Adapter
RPI (min): 1ms
Quick Connect: Yes (Class A)
ACD: Yes
IP Address Capabilities: DHCP, Static Address,
Stored (EtherNet/IP* 0xF5 / 0xF6 objects)
EDS file
Firmware upgradable

Power Requirements

Module logic/input power: 24V DC (-15/+20%)
Module auxiliary output power: 24V DC (-15/+20%)
Diagnostic LEDs (Logic/Input + Output) with detection of
low voltage operation

Input Digital Channel(s)

Connector: Female, Ultra-Lock™ M12, A-Coded, 5-pin
Input type: PNP, Sinking, 2/3-wire sensors
Sensor power supply: 200 mA at 20°C
Electronic short circuit protection
Diagnostic LED
Input delay: 5ms
Output Digital Channel(s)
Connector: Female, Ultra-Lock™ M12, A-Coded, 5-pole
Output type: PNP, Sourcing
Output current per channel: 2.0A per as rated, 5.0A as peak

Maximum output current: 9.0A at 25°C
Electronic short circuit protection
Switching frequency: 200Hz
Switch on/off power supply of Roller Drive EC310

Output Analog Channel(s)

Speed direction control of EC310 Roller Drives
Output current: 1.0mA per Channel
6 steps for speed control for EC310 Roller Drives
0-24V capability

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
ODVA certified, CE, UL / cUL, RoHS, REACH

Ordering Information

Engineering No.	Order No.	Description	Digital
TCDEI-88MP-D1U-G	1120955118	HarshIO Module, EtherNet/IP for Roller Drives	8 Digital Inputs, 4 Digital Outputs, 4 Analog Outputs

www.molex.com/link/harshio.html