

Brad® HarshIO IP67 I/O modules provide a reliable solution for connecting industrial controllers to I/O devices in harsh environments



Contained in IP67 rated housings, Brad® I/O modules can be machine mounted and are able to withstand areas where liquids, dust or vibration may be present. This makes them ideally suited for many industrial applications including material handling equipment and automated assembly machinery.

Advanced module features such as visible LEDs and user configurable I/O channels make configuration and operation simple. Following traditional industrial fieldbus practices, standard M12 connectors from sensing devices or actuators plug directly into the I/O modules. The built-in Brad® Ultra-Lock® connection system creates an environmentally sealed IP67 connection between the I/O module and the PROFIBUS network.

Brad® HarshIO 600 sPB

112038 Brad® HarshIO sPB PROFIBUS Digital I/O Configurable Classic 60.00 mm



FEATURES AND BENEFITS

- PNO Certified
- Rated IP67 for harsh environments
- Designed for direct machine-mount applications
- Vibration and shocks tested
- Overmolded module electronics
- Metallic connectors
- Accepts standard M12 threaded or Ultra-Lock® connectors
- Standard hole housing pattern allows for interchangeability with popular I/O modules
- Supports PNP & NPN input devices
- Configurable 16x I/O channels according to GSD setting
- Energy saving! Apply energy saving (up to 30%) on DP master disconnection
- Visible LEDs provide maintenance personnel with the ability to easily determine I/O, module & network status
- Module diagnostics available through I/O process image
- Short-circuit diagnostics per I/O channel
- Complete module and channel diagnostics supported via PROFIBUS
- Supports PROFIBUS DP-V0 Slave up to 12 Mbps
- Module addressing: 1 – 99 by rotary switches or 1 – 125 by Set_Slave_Address command
- Built-in 2-port Profibus for bus wiring topology



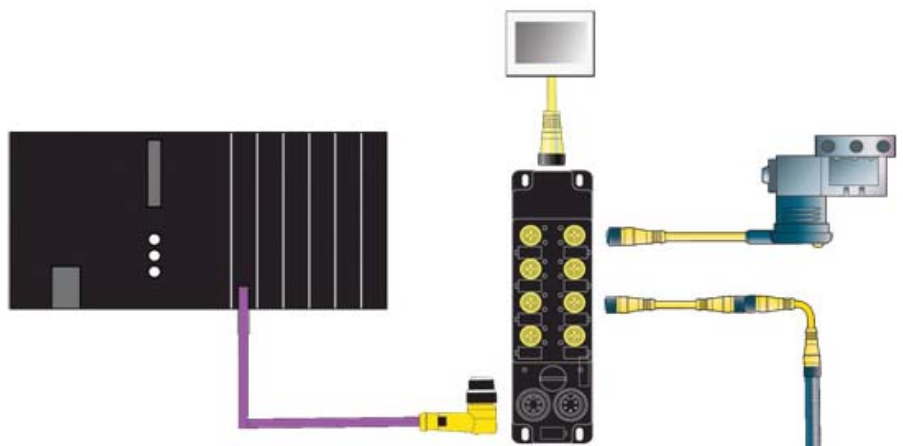
Brad® HarshIO 600 sPB Digital I/O Configurable Classic Module

LED Indicators

- Module & Input Power (I):
Green - power present
Red - power fault
Off - power not connected
- Output Power (O):
Green - power present
Off - power not connected
- Digital Input/Output (Ix/Ox):
Green - input/output on
Red - input/output fault
Off - input/output off
- PROFIBUS Network Status (NET)
Green - running
Red - module not configured
- I/O Module Diagnostics (MOD)
Off - no fault
Red - fault

MARKETS AND APPLICATIONS

- Machine tool industry
- Material handling systems
- Filling & packaging machines
- Steel industry



SPECIFICATIONS

Technical information

I/O Configurations:
16 I/O Universal & User Configurable

I/O Mapping:
16 Digital Input/Output
16 Digital Input/Output + Diagnostic

I/O Connectors:
Female, Ultra-Lock® M12, A-Coded, 5-pole

Bus Connectors:
Bus In: Male, M12, B-Coded, 5-pole
Bus Out: Female, M12, B-Coded, 5-pole

Power Connectors:
Power In:
Male Mini-Change® (7/8), 5-pole
Power Out:
Female, Mini-Change® (7/8), 5-pole

Power Requirements:
Module input power: 24V DC
Module output power: 24V DC (16 to 28V),
8.0A max per module

Communication Rate:
Auto baud, All PROFIBUS baud rates up
to 12 MBaud

Address Settings:
1 – 99 by 2 rotary switches, or 1 – 125
by Set_Slave_Address command

Fieldbus Specifications:
PROFIBUS DP-V0 Slave according
EN 50170

Input Type:
Compatible with dry contact, PNP or NPN,
2/3-wire sensors
Electronic short circuit protection

Input Filter:
1ms default or configurable through
PROFIBUS slave parameter

Input Device Supply:
140mA per port at +25°C

Output Load Current:
Maximum 2.0A per channel
Electronic short circuit protection

Maximum Switching Frequency: 200 Hz

Housing Dimensions:
60 x 220 x 20mm (2.36 x 8.66 x 0.78")

Mounting Dimensions:
37.50mm (1.480") horizontal on centers
210mm (8.270") vertical on centers
Center hole

Operating Temperature: -20 to +70°C
Storage Temperature: -25 to +90°C

RH Operating: 5 to 95% non-condensing

EMC: IEC 61000-6-2

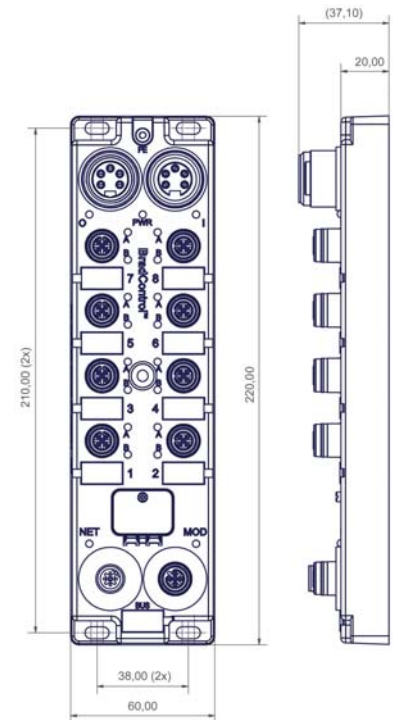
Protection: IP67 according to IEC 60529

Vibration: IEC 60068-2-6 conformance
Mechanical Shock: 10G, 11ms, 3 axis

Approvals:
CE, UL, cUL, PNO Certification

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PROFIBUS
Digital I/O Configurable
Classic 60.00 mm



ORDERING INFORMATION

Order No.	Engineering No.	Power	No. of Ports	Connectors	I/O Configurations	I/O Channels
					Input / Output	
112038-5005	TCDPB-8YYX-B1U	5-pin	8	M12 Ultra-Lock	16 Universal & User Configurable I/O	Configurable