

EtherNet/IP IO-Link master block for welding environments

SIMPLIFY SMART SERVICE INTEGRATION IN HARSH INDUSTRIAL ENVIRONMENTS

Electromagnetic interference (EMI) can negatively impact work processes, interfering with digital, analog and communication equipment. Balluff's new IO-Link master can insulate your productivity by:

- Reducing inductive noise with coil choke filters.
- Reducing conductive noise with its fiberglass-reinforced plastic, polypropylene sulfide (PPS) housing, that breaks conductive loops.
- Reducing capacitive noise by raising the PCB further from the backplane. Since PPS is non-conductive, the housing does the work of a separate grounding plate.

PPS is also inherently non-stick, so welding spatter slides off it.

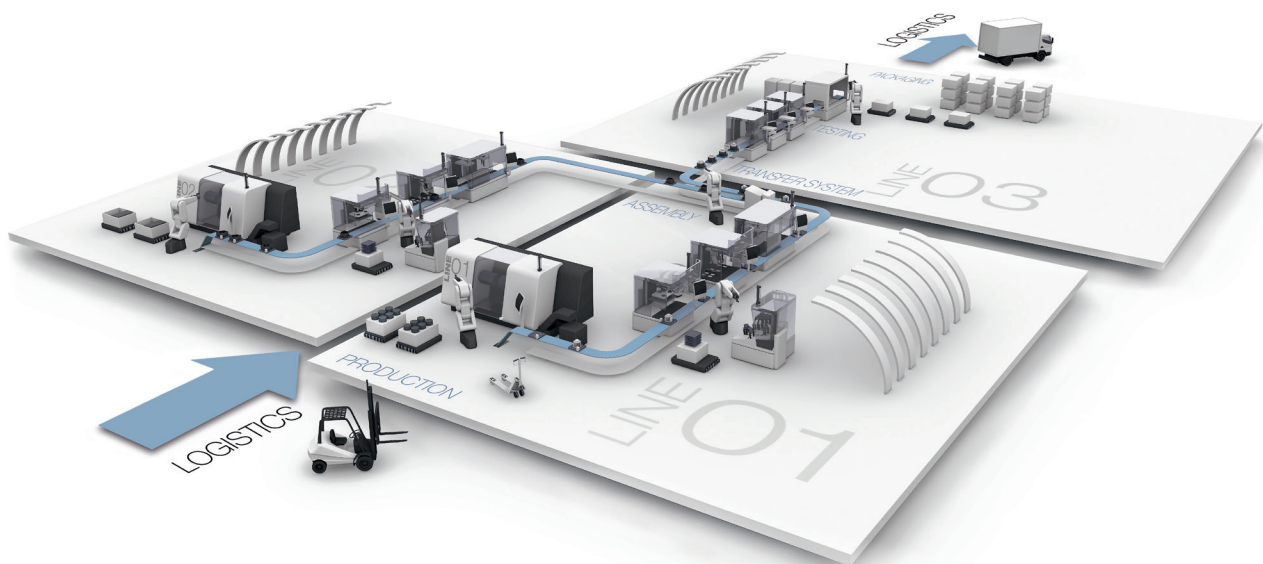
This block offers four Class A IO-Link ports and four Class B IO-Link ports. The Class A

ports can be connected to 3- or 4-pin IO-Link devices using appropriate cables. Pin 2 can be used for an actuator power on these ports and it is powered through the device power (Us). Pin 2 on these ports can be used as a digital in/out. Class B ports are primarily used for devices requiring isolated actuator power (Ua), for example in robotic grippers or valve manifolds, and are connected using 5-pole cables. The 3-pin Class A devices can also be connected to the Class B master port on this master using a 3-pole cable.

Like other Balluff IO-Link master blocks, the BNI00CY offers advanced features. Its built-in display allows configuring of network parameters and aids during troubleshooting. Connect to its embedded web server to remotely configure the block and connected IO-Link devices. In difficult EMI and welding environments, this block keeps performing.

Features

- Filters multiple types of EMI
- PPS composite body resists weld spatter
- 4x Class A, 4x Class B IO-Link master ports
- Built-in enhanced web server
- Display for configuring network parameters
- Up to 9A of output power with 2A per channel





IO-LINK MASTERS

	BNI00CY
Interface	EtherNet/IP
Operating voltage U_b	18...30.2 VDC
Connection (supply voltage IN)	7/8"-Male, 4-pin
Connection (supply voltage OUT)	7/8"-Female, 4-pin
Connection slots	8x M12x1-Female, 5-pin, A-coded
Digital inputs	16x PNP, Type 3
Digital outputs	16x PNP, Type 3
Output current max.	2A max on pin 2 and pin 4 of Class A ports
Current sum I_A , actuator	9.0 A
Auxillary interfaces	8x IO-Link v1.1
Port -class	4x Type A (Class A) + 4x Type B (Class B)



CABLES

SENSOR CABLES
(3-POLE)

SENSOR CABLES
(4-POLE)

SENSOR CABLES
(5-POLE)

POWER CABLES

ETHERNET/IP

ETHERNET/IP

	SENSOR CABLES (3-POLE)	SENSOR CABLES (4-POLE)	SENSOR CABLES (5-POLE)	POWER CABLES	ETHERNET/IP	ETHERNET/IP
1 m	BCC05LE	BCC05LU	BCC08A4		BCC0E91	BCC09NM
2 m	BCC0C56	BCC05LY	BCC08A6	BCC0JZ0	BCC0E90	BCC09NN
5 m	BCC0EUP	BCC05M1	BCC08A9	BCC0JZ1	BCC0E8Z	BCC09NP
10 m	BCC0F60	BCC05M3	BCC08AC	BCC0JZ2	BCC0E8P	BCC09NR
Cable	TPE yellow	TPE yellow	TPE yellow	PUR black	TPE Shielded teal	TPE Shielded teal
Connection 1	M12x1-Female, straight, 5-pole, A-coded	M12x1-Female, straight, 5-pole, A-coded	M12x1-Female, straight, 5-pole, A-coded	M12x1-Female, straight, 4-pole, T-coded	M12x1-Male, Straight, 4-pole, D-coded	M12x1-Male, Straight, 4-pole, D-coded
Connection 2	M12x1-Male, straight, 3-pole, A-coded	M12x1-Male, straight, 4-pole, A-coded	M12x1-Male, straight, 5-pole, A-coded	M12x1-Male, straight, 4-pole, T-coded	RJ45-Male, Straight, 4-pole	M12x1-Male, Straight, 4-pole, D-coded