Weld spatter resistant I/O modules with 8 IO-Link ports and expandable IO-Link I/O hubs

Network modules and I/O hubs specially designed with high noise immunity and built with high-end fiberglass reinforced composite

- 8 IO-Link ports for connecting IO-Link devices
- Up to 16 configurable inputs and outputs, each with an LED for error diagnostics
- Highly visible Status LED for monitoring the ports and network communication
- Full service integrated webserver for configuration, diagnostics and monitoring
- Large display with pushbuttons for network configuration (version, IP address, module name, …)
- Expansion port on the IO-Link I/O hubs for connecting an IO-Link valve connector or another IO-Link I/O hub for high I/O density applications (increasing the I/O count up to max. 30 per IO-Link port)
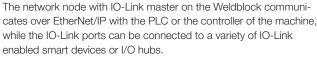
CE   c(UL)us LISTED   IO-Link   EtherNet/IP

New standard for I/O in welding environment

New family of networking modules optimized for extremely noisy electrical environments, such as welding. This family of network modules are constructed with fiberglass reinforced composite (polypropylene sulfide) that inherently resists weld spatter while effectively combats grounding loops and electromagnetic interferences (EMI). These Weldblocks promote machine mount distributed modular architecture with IO-Link.

The network node with IO-Link master on the Weldblock communicates over EtherNet/IP with the PLC or the controller of the machine, while the IO-Link ports can be connected to a variety of IO-Link enabled smart devices or I/O hubs.

The Weldblock family includes expandable IO-Link I/O hubs to offer up to 240 configurable I/O per network node. Weldblocks from Balluff are equipped with a built-in enhanced webserver and port diagnostics to ensure quick troubleshooting.

Communication	Ethernet/IP	Ethernet/IP	Ethernet/IP
Type	8× IO-Link, 16× I/O	4× IO-Link, 16× I/O	16× I/O
	BNI008M	**BNI008Z**	**BNI008P**
Supply voltage U_B	18…30 V DC	18…30 V DC	18…30 V DC
Connection: Communication	M12, D-coded, female	M12, D-coded, female	M12, D-coded, female
AUX power connection	7/8", male	7/8", male	7/8", male
Connection: I/O ports	M12, A-coded, female	M12, A-coded, female	M12, A-coded, female
No. of I/O ports	8	8	8
Configurable No. of I/Os	max. 16 I, max. 16 O	max. 16 I, max. 16 O	max. 16 I, max. 16 O
Max. load current sensors/channel	1.6 A	1.6 A	1.6 A
Max. load current, output	2 A	2 A	2 A
Total current/module	< 9 A	< 9 A	< 9 A
Degree of protection as per IEC 60529	IP 67 (when connected)	IP 67 (when connected)	IP 67 (when connected)
Operating temperature T_a	−5…+70 °C	−5…+70 °C	−5…+70 °C
Dimensions (L×B×H)	224×68×36.9 mm	224×68×36.9 mm	224×68×36.9 mm
Housing material	Polyphenylen Sulfid	Polyphenylen Sulfid	Polyphenylen Sulfid

IO-Link Version 1.1

No. of IO-Link master ports	8× master	4× master	
Operating modes (3-wire)	COM 1, COM 2, COM 3	COM 1, COM 2, COM 3	
max. load current IO-Link device	1,6 A	1,6 A	

Communication	Ethernet/IP	IO-Link	IO-Link
Type	16× I	16× I/O	16× I
	BNI008Y	**BNI0091**	**BNI0090**
Supply voltage U_B	18…30 V DC	18…30 V DC	18…30 V DC
Connection: Communication	M12, D-coded, female	M12, D-coded, female	M12, D-coded, female
AUX power connection	7/8", male	7/8", male	
Connection: I/O ports	M12, A-coded, female	M12, A-coded, female	M12, A-coded, female
No. of I/O ports	8	8	8
Configurable No. of I/Os	16 I	max. 16 I, max. 16 O	max. 16 I
Max. load current sensors/channel	1.6 A	1.6 A	1.6 A
Max. load current, output		2 A	
Total current/module	< 9 A	< 9 A	< 1.6 A
Degree of protection as per IEC 60529	IP 67 (when connected)	IP 67 (when connected)	IP 67 (when connected)
Operating temperature T_a	−5…+70 °C	−5…+70 °C	−5…+70 °C
Dimensions (L×B×H)	224×68×36.9 mm	181×68×36.9 mm	181×68×36.9 mm
Housing material	Polyphenylen Sulfid	Polyphenylen Sulfid	Polyphenylen Sulfid

IO-Link Version 1.1

No. of IO-Link master ports		Device	Device
Operating modes (3-wire)		COM2	COM2

www.balluff.com

Balluff GmbH   Schurwaldstrasse 9   73765 Neuhausen a.d.F.   Germany   Phone +49 7158 173-0   Fax +49 7158 5010   balluff@balluff.de