BALLUFF

## I/O modules with 8 IO-Link ports and expandable IO-Link I/O hubs for washdown environment

# IP69-RATED NETWORK MODULES WITH STAINLESS STEEL HOUSING

### For strict hygienic requirements

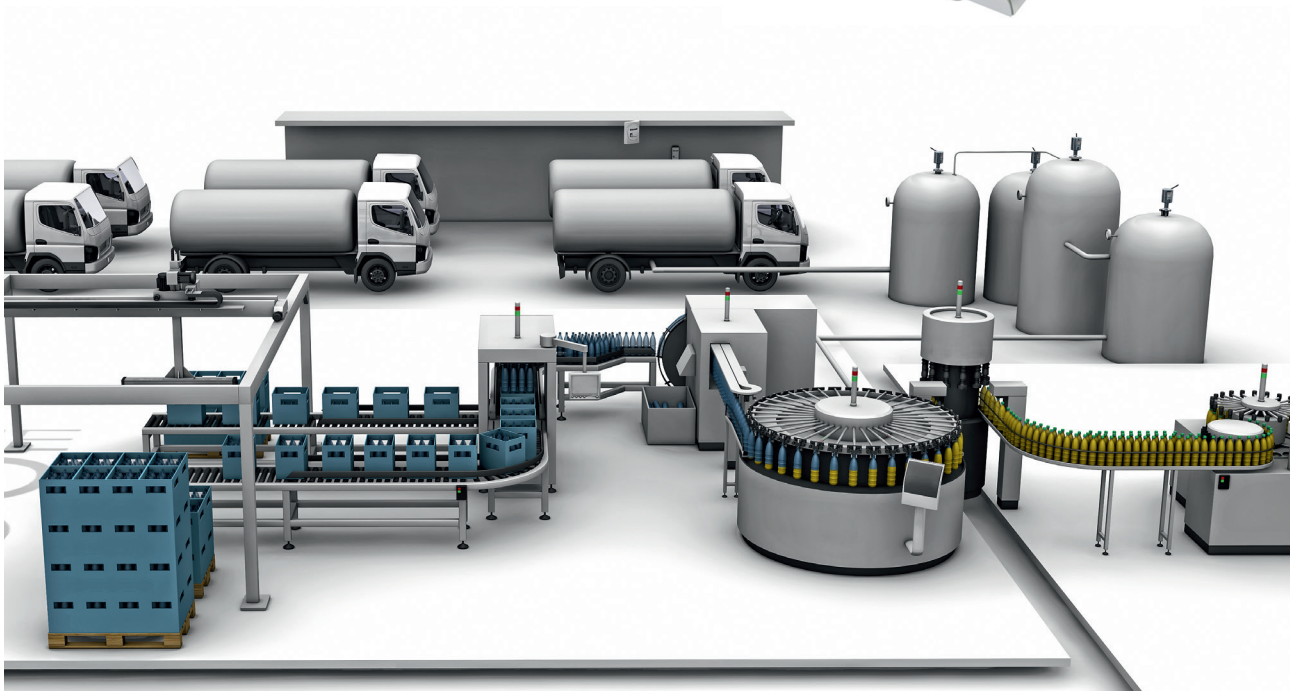
The new family of network modules are developed for the extreme conditions of the foods and pharmaceuticals industries. The corrosion- and cleaning agent resistant modules in stainless steel with their easy to clean washdown design ensure reliable and errorless signal transmission even in demanding environments with stringent requirements.

The family of products include machine mount IO-Link masters with 8 IO-Link ports each port can be configured as dual input or output, or can connect to wide variety of IO-Link sensors or actuator modules as well as IO-Link sensor/actuator hubs. The efficient point-to-point connection of IO-Link enables distributed modular architecture that offers flexibility and future expandability. Network nodes equipped with an IO-Link master communicate directly with the controller or machine control device via Ethernet/IP.

### Features

- 8 IO-Link ports for connecting various IO-Link devices
- Up to 16 configurable I/O points, each point with an LED for error diagnostics
- Large status LEDs for monitoring the ports and network communication
- Integrated webserver for setup configuration and monitoring module information (IP address, settings, parameters,…)
- Expansion port on the IO-Link I/O hubs for connecting an IO-Link valve terminal connector or an IO-Link sensor/actuator hub (and increasing the I/O count up to max. 30)
- IP69 rated and resistant to caustic/corrosive cleaning agents and environments*
- All network modules ECOLAB certified

CE c UL us LISTED EtherNet/IP PROFINET ECOLAB IO-Link



* In accordance with ECOLAB test procedure (test method: F&E/P3-E no. 40-1) for material resistance, documented in Test Report no. 6006-14-GG-14-PR001 of SLG Prüf- und Zertifizierungs-GmbH




| | BNI0096 | BNI009K | BNI009M | BNI009N |
|---|---|---|---|---|
| Communication | EtherNET/IP | EtherNET/IP | Profinet | Profinet |
| Type | 8 × IO-Link, 16 x I/O | 16 × I/O | 8 × IO-Link, 16 x I/O | 16 × I/O |
| Supply voltage UB | 18…30.2 V DC | 18…30.2 V DC | 18…30.2 V DC | 18…30.2 V DC |
| Communication connection | M12, D-coded, female | M12, D-coded, female | M12, D-coded, female | M12, D-coded, female |
| AUX power connection | 7/8“, male | 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 | M12, A-coded, female |
| No. of I/O ports | 8 | 8 | 8 | 8 |
| Max. load current, input/output | 1.6 A/2 A | 1.6 A/2 A | 1.6 A/2 A | 1.6 A/2 A |
| Total current/Modul | < 9 A | < 9 A | < 9 A | < 9 A |
| Degree of protection as per IEC 60529 | IP69 | IP69 | IP69 | IP69 |
| Operating temperature Ta | –5...70 °C | –5...70 °C | –5...70 °C | –5...70 °C |
| Dimensions | 228 × 70 × 44.1 mm | 228 × 70 × 44.1 mm | 228 × 70 × 44.1 mm | 228 × 70 × 44.1 mm |
| Housing material | stainless steel V4A (1.4571) | stainless steel V4A (1.4571) | stainless steel V4A (1.4571) | stainless steel V4A (1.4571) |
| **IO-Link Version 1.1** | | | | |
| Operating modes (3-wire) | COM 1, COM 2, COM 3 | | COM 1, COM 2, COM 3 | |




| | BNI009L | BNI00AP | BNI00AR | BNI00AT |
|---|---|---|---|---|
| Communication | EtherNET/IP | IO-Link | IO-Link | IO-Link |
| Type | 16 × I | 16 × I | 16 × I/O | 16 × I/O |
| Supply voltage UB | 18…30.2 V DC | 18…30.2 V DC | 18…30.2 V DC | 18…30.2 V DC |
| Communication connection | M12, D-coded, female | M12, A-coded, male | M12, A-coded, male | M12, A-coded, male |
| 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 | M12, A-coded, female |
| No. of I/O ports | 8 | 8 | 8 | 8 |
| Max. load current, input/output | 1.6 A | 1.6 A | 1.6 A/2 A | 1.6 A/2 A |
| Total current/Modul | < 9 A | 4 A | 4 A | < 9 A |
| Degree of protection as per IEC 60529 | IP69 | IP69 | IP69 | IP69 |
| Operating temperature Ta | –5...70 °C | –5...70 °C | –5...70 °C | –5...70 °C |
| Dimensions | 228 × 70 × 44.1 mm | 185.6 × 70 × 37.9 mm | 185.6 × 70 × 37.9 mm | 185.6 × 70 × 38.4 mm |
| Housing material | stainless steel V4A (1.4571) | stainless steel V4A (1.4571) | stainless steel V4A (1.4571) | stainless steel V4A (1.4571) |
| **IO-Link Version 1.1** | | | | |
| Operating modes (3-wire) | | COM2 | COM2 | COM2 |