

**Converting analog signals into IO-Link signals and saving costs in the process**

# IO-LINK CONVERTER FOR ANALOG IN- AND OUTPUT SIGNALS

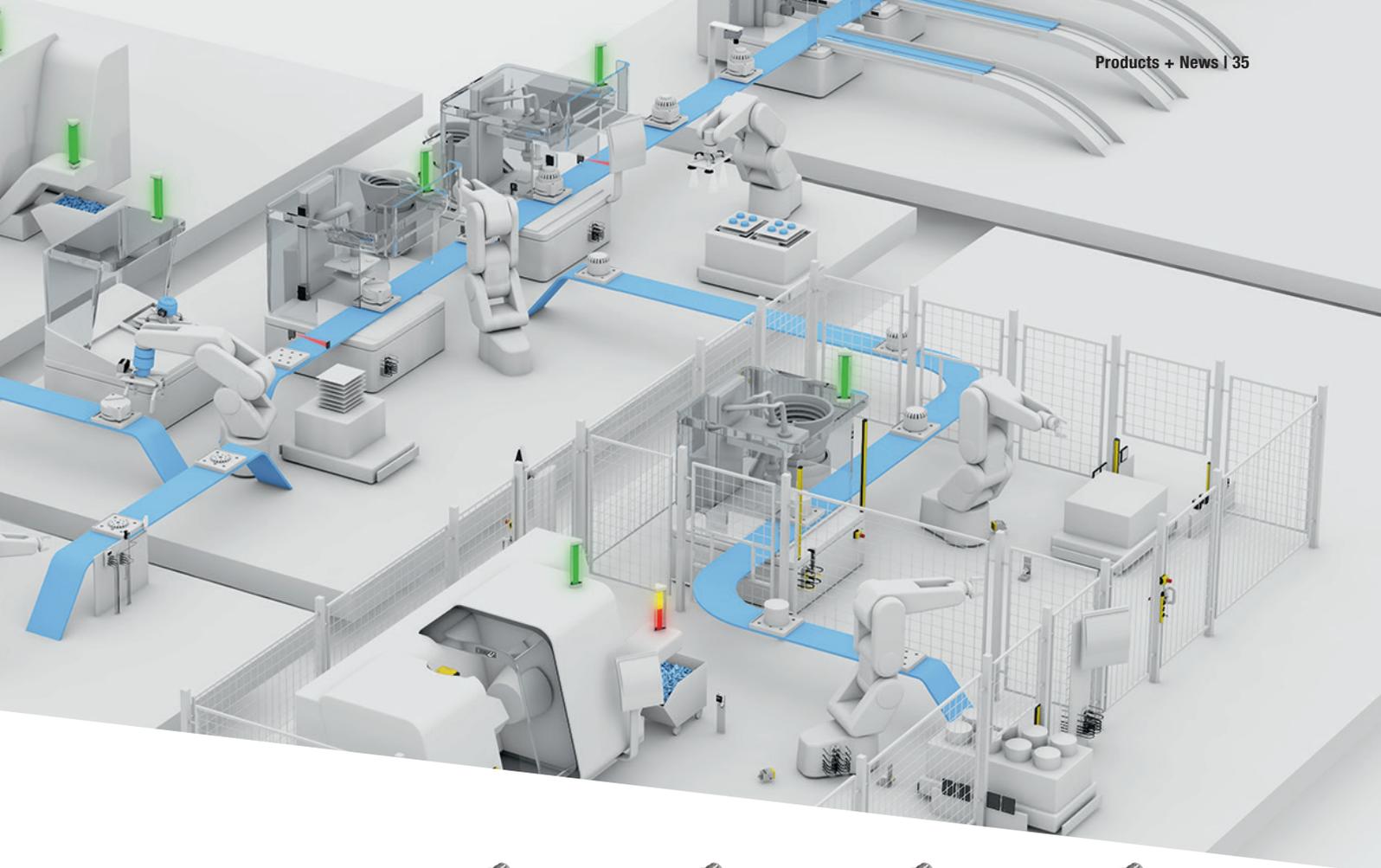
In most equipment and machines, analog signals make up around ten percent of the total data volume but connecting and incorporating analog input signals is an expensive proposition. The installation requires shielded cables and the controller needs expensive multi-channel input modules.

Our IO-Link converters are the remedy. They provide considerable cost reduction potential for systems with limited analog value occurrence. Instead of expensive shielded cables, you can simply use unshielded 3-conductor cables. The signal neutrality of IO-Link master modules combined with the IO-Link converters gives you maximum signal variance compatibility.

Using our IO-Link converters, you can mix different input/output/current- and voltage signals on one module.

## Features

- Convert analog in-/output signals into IO-Link
- Configurable voltage/current, Pt sensor or thermocouple
- Various current/voltage interfaces available (0...10 V, 5...10 V, -10...+10 V, 0...5 V, -5...+5 V, 0...20 mA, 4...20 mA)
- Configurable resolution (10...16 bits)
- High protection rating for harsh conditions



IO-LINK  
ANALOG  
CONVERTER



|                                    | BNI00C9                                             | BNI00C8           | BNI00C6                     | BNI00C7                        |
|------------------------------------|-----------------------------------------------------|-------------------|-----------------------------|--------------------------------|
| Interface                          | IO-Link                                             |                   |                             |                                |
| Type                               | 1 × analog input                                    | 1 × analog output | 1 × analog in-/output       | 1 × analog input (temperature) |
| Operating voltage $U_B$            | 18...30.2 V DC, per EN 61131-2                      |                   |                             |                                |
| Connection IO-Link                 | 1 × M12 male, 4 pin, A-coded                        |                   |                             |                                |
| Connection analog port             | 1 × M12 female, 5 pin, A-coded                      |                   |                             |                                |
| Voltage interfaces                 | 0...10 V, 5...10 V, -10...+10 V, 0...5 V, -5...+5 V |                   |                             |                                |
| Current interfaces                 | 0...20 mA, 4...20 mA                                |                   |                             |                                |
| Current draw without load          | ≤ 60 mA                                             |                   |                             |                                |
| Max. load current (Pin1) sensors   | ≤ 200 mA                                            | –                 | ≤ 200 mA                    | ≤ 200 mA                       |
| Max. load current (Pin1) actuators | –                                                   | ≤ 1.4 A           | ≤ 1.4 A                     | –                              |
| Resolution                         | Configurable (10...16 Bit)                          |                   |                             |                                |
| Degree of protection per IEC 60529 | IP67*                                               |                   |                             |                                |
| Operating temperature $T_a$        | -5...70 °C                                          |                   |                             |                                |
| Storage temperature                | -25...+70 °C                                        |                   |                             |                                |
| Dimensions (Ø × L)                 | M18 × 135.5 mm                                      |                   |                             |                                |
| Weight                             | Approx. 105 g                                       |                   |                             |                                |
| Housing material                   | Stainless steel (1.4305), PTFE                      |                   |                             |                                |
| IO-Link version                    | 1.1                                                 |                   |                             |                                |
| Operating modes (3-wire)           | COM2 (38.4 kBaud)                                   |                   |                             |                                |
| Process data length                | 3 byte input                                        | 2 byte output     | 3 byte input, 2 byte output | 3 byte input                   |
| Process data cycle time            | 10 ms                                               |                   |                             |                                |

\* when connected