



Signal Converter IO220 and IO220/CO

4x analog input → IO – Link (V1.1)

Product Features:

- 2x analog input for current (0...20mA or 4...20mA) and 2x analog input for voltage (-10V ... +10V)
- High-precision reference output +10 V for potentiometer (> 1 kOhm)
- Simple device parameterization via various IO-Link engineering tools
- Adjustable limit value monitoring for each input possible
- Numerous connection options via expansion option "CO" (three additional control inputs and two additional control outputs)
- Generation of pending events (e.g. threshold value exceeded, line break, ...)
- Compact DIN rail housing according to EN60715

Available Options:

| | |
|------------------|---|
| IO220: | Basic device with 4 analog inputs (16 bit) and reference output |
| IO220/CO: | Basic device with 4 analog inputs (16 bit) and reference output as well as 3x HTL PNP control inputs and 2x PNP control outputs |

| Technical Specifications: | | |
|---|---|---|
| Connections: | Connector type: | screw terminal, 1,5 mm ² / AWG 16 |
| Power Supply: | Input voltage: | 24 VDC (18 ... 30 VDC) through IO-Link |
| | Protection circuit: | reverse polarity protection |
| | Consumption: | approx. 90 mA (unloaded) |
| Reference output: | Output voltage: | +10 V |
| | Accuracy: | ± 0,1 % |
| | Load: | max. 10 mA / ≥ 1 kOhm |
| Analog inputs: | Number of inputs: | 4 |
| | Configuration: | 2x current and 2x voltage input |
| | Voltage input: | -10 ... +10 V (Ri ≈ 1 MOhm) |
| | Current input: | 0 ... 20 mA / 4 ... 20 mA (Ri ≈ 100 Ohm) |
| | Resolution / Accuracy: | 16 Bit / ± 0,2 % (25 °C) |
| Control inputs: (with option „CO“) | Number of inputs: | 3 |
| | Format: | HTL, PNP (Low 0 ... 3 V, High 9 ... 30 V) |
| | Frequency: | max. 1 kHz |
| | Reaction time: | 1 ms |
| | Transmission Time (IO Link): | Approx. 1 ms – (Cyclus Time IO – Link) |
| | Load: | max. 2 mA at 24VDC |
| Control outputs: (with option „CO“) | Number of outputs: | 2 |
| | Format: | 5 ... 30 V (depends on the Com+ voltage), PNP |
| | Output current: | max. 100 mA each output (with external Com+ supply!) |
| | Reaction time: | min. 1 ms |
| | Transmission Time (IO Link): | (Depending on „Sampling Time“ and „Average Filter“ setting) Approx. 1 ms – (Cyclus Time IO – Link) |
| IO-Link: | Module / Specification: | Device / IO Link V1.1 |
| | Bitrate: | COM 3 (230,4 kBit / s) |
| | Port Class: | Typ A |
| | Cyclus time: | min. 1 ms |
| | Data width: | 11 Byte (4 x 2 Byte (input data) + 1 Byte („CO“ state) + 2 Byte (diagnose data)) |
| Indicators: | Number of indicators: | 1 LED |
| | Function: | 1 x green for “ready for operate” state or actual “IO Link state” (with option “CO”) |
| Housing: | Material: | Plastic |
| | Mounting: | 35 mm top hat rail (according to EN 60715) |
| | Dimensions (w x h x d): (without connectors) | 34 x 100 x 131 mm / 1.34 x 3.94 x 5.16 inches |
| | Dimensions (w x h x d): (inclusive connectors) | 34 x 109 x 140 mm / 1.34 x 4.65 x 5.51 inches |
| | Weight: | approx. 160 g |
| | Protection: | IP20 |
| Ambient temperature: | Operation: | -20 °C ... +60 °C not condensing |
| | Storage: | -25 °C ... +70°C |
| Environmental conditions: | Altitude: | max. 2000 meter above sea level |
| | Humidity: | max. 80% relative humidity to 30°C |
| | Degree of pollution: | 2 |
| Failure rate: | MTBF in years: | IO220: 102,7 a |
| | (continuous operation at 60 °C) | IO220/CO: 92,9 a |
| Conformity and standards: | EMV 2014/30/EU: | EN 61326-1: 2013 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2020 Class A |
| | RoHS (II) 2011/65/EU | |
| | RoHS (III) 2015/863: | EN IEC 63000: 2018 |