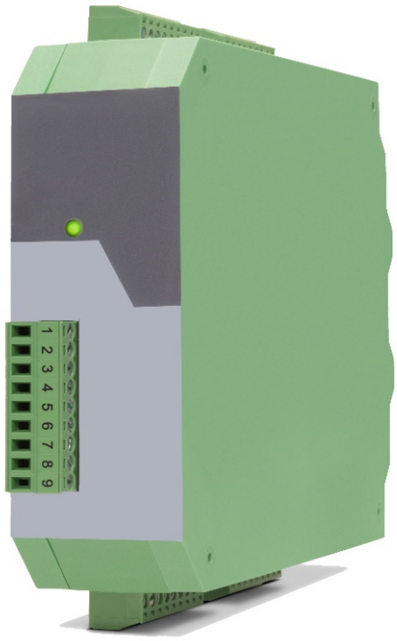
Data Sheet



Signal converter
IO223 and IO223/CO
SSI → IO – Link (V1.1)

Product features:

- 1x SSI input
- Master or Slave operation with clock frequencies up to 2 MHz
- For single turn and multi turn encoders with SSI formats from 10 … 32 Bit
- Useful functions such as bit suppression, round-loop function, scaling, …
- Simple device parameterization possible via IO - Link using various engineering tools
- Adjustable limit value monitoring possible
- Numerous connection options via extension option (IO223/CO)
- (three additional control inputs and two additional control outputs)
- Generation of pending events (e.g. upper limit value exceeded, SSI error bit active, ...) possible
- Auxiliary voltage output 5 and 24VDC for encoder supply
- Compact rail housing to EN60715

Available options:

IO223:	Basic device with SSI input and auxiliary voltage output
IO223/CO:	Basic device with SSI input, auxiliary voltage output and 3x HTL PNP control inputs and 2x PNP control outputs

Technical Specifications:		
Connections:	Connector type:	screw terminal, 1,5 mm² / AWG 16
Power Supply:	Input voltage: Protection circuit: Consumption:	24 VDC (18 … 30 VDC) through IO-Link reverse polarity protection approx. 75 mA (unloaded)
Encoder supply:	Output voltage: Output current:	5 VDC and 24 VDC (approx.1 V lower than the power supply) max. 250 mA IO Link Masterport: min. 200mA Device supply: – 75 mA _____ = 125 mA
SSI interface:	SSI Input- / Output: Number (channels): Configuration: Format: Frequency: Resolution: Load:	TTL differential (RS422) Clock, /Clock, Data, /Data Master or Slave Binary or Gray code 100 kHz - 2 MHz (adjustable) 10 … 32 Bit Ri = ca. 13 kOhm
Control inputs: (with option „CO“)	Number of inputs: Format: Frequency: Reaction time: Transmission Time (IO Link): Load:	3 HTL, PNP (Low 0 … 3 V, High 9 … 30 V) max. 1 kHz 1ms Approx. 1 ms - (Cycle Time IO – Link) max. 2 mA bei 24VDC
Control outputs: (with option „CO“)	Number of outputs: Format: Output current: Reaction time: Transmission Time (IO Link)	2 5 … 30 V (depends on the Com+ voltage), PNP max. 100 mA each output (with external Com+ supply!) min. 1 ms (Depending on „Sampling Time“ and „Average Filter“ setting) Approx. 1 ms – (Cycle Time IO – Link)
IO-Link:	Module / Specification: Bitrate: Port Class: Cycle time: Data width:	Device / IO Link V1.1 COM 3 (230,4 kBit / s) Typ A min. 1 ms 6 Byte (1 x 4 Byte (input data) + 1 Byte „CO“ state) + 1 Byte (diagnosis data))
Indicators:	Number of indicators: Function:	1 LED 1 x green for “ready for operate” state or actual “IO Link state” (with option “CO”)
Housing:	Material: Mounting: Dimensions (w x h x d): (without connectors) Dimensions (w x h x d): (inclusive connectors) Weight: Protection:	Plastic 35 mm top hat rail (according to EN 60715) 34 x 100 x 131 mm / 1.34 x 3.94 x 5.16 inches 34 x 109 x 140 mm / 1.34 x 4.65 x 5.51 inches Approx. 160 g IP20
Ambient temperature:	Operation: Storage:	-20 °C … +60 °C resp. -4 °F … + 140 °F not condensing -25 °C … +70°C resp. -13 °F … + 158 °F
Ambient conditions:	Altitude: Humidity: Degree of pollution:	max. 2000 meter above sea level max. 80% relative humidity to 30 °C / 86 °F 2
Failure rate:	MTBF in years: (continuous operation at 60 °C)	IO223: 88,0 a IO223/CO: 96,7 a
Conformity and standards:	EMC 2014/30/EU: RoHS (Ⅱ) 2011/65/EU RoHS (Ⅲ) 2015/863:	EN 61326-1: 2013 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2020 Class A EN IEC 63000: 2018