

IOL-3000

Analog- and Digital-Signal Fiber-Optic-System



System description

The decentral fiber optic system IOL-3000 transmits digital signals (e.g., contact closures, control-signals) and analog signals via fiber optic cable.

The fiber optic cable is able to transmit up to 8 digital signals (12-24VDC) and/ or 4 analog signals (0-10V or 0-20mA, digitalized via A/D converter with a resolution of 10 Bit) within a point-to-point structure.

Important performance features of the transfer with POF, HCS, multimode or singlemode fiber optic are the electromagnetic ruggedness, the potential separation of transmitter and receiver, as well as ranges up to 40km between two fiber optic systems. LED's and potential-free contacts (optional) of a fault detector relay are able to signal defective states.

In addition to ST and SC the optical connection type E2000 is also available. All systems can communicate via two as well as one fiber with the help of the BIDI-technology with SC port.

Please inquire your requested type if it is not listed in the adjoining chart.

Application



Ordering Information

Transmitter	IOL-3000/ TX-4A-V/_-ST	IOL-3000/ TX-8D4A/_-V_-ST	IOL-3000/ TX-8D/_-ST	IOL-3000/ TX-8D4A-A/_-ST	IOL-3000/ TX-4A-A/_-ST	
Input	4 x Analog	4 x Analog 8 x Digital	8 x Digital	4 x Analog 8 x Digital	4 x Analog	
Input analog	Analog 0 - 10V	Analog 0 - 10V	-	Analog 0 - 20mA Load 1500hm	Analog 0 - 20mA Load 1500hm	
Input digital	-	12 - 24VDC/5mA	12 - 24VDC/5mA	12 - 24VDC/5mA	-	
Ordering-No.	POF (ST)* Multimode (ST)* Singlemode (ST)*	0 3000 1101 0 3000 1121 0 3000 1131	0 3000 1201 0 3000 1221 0 3000 1231	0 3000 1301 0 3000 1321 0 3000 1331	0 3000 1401 0 3000 1421 0 3000 1431	0 3000 1501 0 3000 1521 0 3000 1531

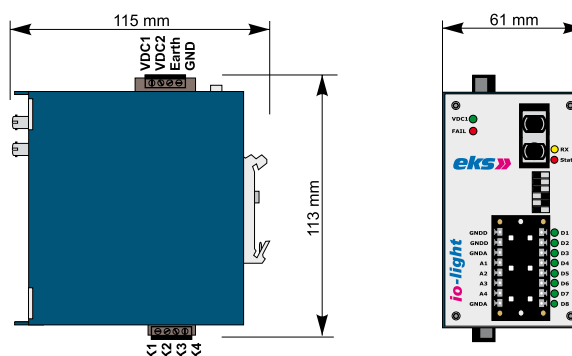
Receiver	IOL-3000/ RX-4A-V	IOL-3000/ RX-8D4A-V	IOL-3000/ RX-8D	IOL-3000/ RX-8D4A-A	IOL-3000/ RX-4A-A	
Output	4 x Analog	4 x Analog 8 x Digital	8 x Digital	4 x Analog 8 x Digital	4 x Analog	
Output analog	Analog 0 - 10V	Analog 0 - 10V	-	Analog 0 - 20mA	Analog 0 - 20mA	
Accuracy	0,2% of range	0,2% of range	-	0,2% of range	0,2% of range	
Output digital	-	24VDC/100mA max. 500mA	24VDC/100mA max. 500mA	24VDC/100mA max. 500mA	-	
Ordering-No.	POF (ST)* Multimode (ST)* Singlemode (ST)*	0 3000 2101 0 3000 2121 0 3000 2131	0 3000 2201 0 3000 2221 0 3000 2231	0 3000 2301 0 3000 2321 0 3000 2331	0 3000 2401 0 3000 2421 0 3000 2431	0 3000 2501 0 3000 2521 0 3000 2531

Fiber	POF 980/1000 μm	Multi-Mode 62,5 (50) /125 μm	Single-Mode 9/125 μm
Fiber Type			
Optical Budget	12 dB	13dB	17 dB
Max. Distance	50 m (180 dB/km)	5 km (1 dB/km)	15 km (0,4 dB/km)
Wavelength	650 nm	1300 nm	1300 nm

Power Supply	Status - LED's
Operating Voltage	Power Supply (green) / Data Receive (yellow) / Status (red) / Digital Signals (green)
Current Consumption	24 VDC (10 VDC .. 30 VDC), other voltages on request
Potential Separation	200 mA
	500 VDC

Environmental	
Operating Temperature	-10°C - +55°C
Storage Temperature	-40°C - +85°C
EMC	EN61000-6-2 / EN55022 Class B +A1 + A2

Mechanical	
Weight	500 g
Housing	stainless steel, powder-coated
Dimensions H x B x T	115 mm x 61 mm x 113 mm



* SC, SC-BIDI and E2000 on request!

** Receiver with eight potentialfree relay contacts (1 x NC / 250VAC / 6A) on request!