COMTROL
Pepperl+Fuchs

IOLB-7014
Part Number: 99640-8

KEY FEATURES AND BENEFITS

- 4 channel analog input IO-Link Block (Class B)
- M12 connectors
- Provides user scale and filters
- Input either voltage or current
- IP65/66/67
- Parameterization using IO-Link for easy installation and configuration
- Data Storage capable for easy device replacement
- IODD files

PRODUCT DESCRIPTION

The IOLB-7014 provides four configurable differential analog inputs. The IOLB-7014 is intended to be connected directly to an IO-Link Master without an additional coupler box.

The small IOLB-7014 form factor of only 126 x 30 x 26.5 mm (h x w x d), which means that they are suitable for use where space is at a premium. The small mass of the IOLB-7014 module facilitates applications with mobile I/O interface (for example, a robot arm).

The robust design of the IOLB-7014 module enables them to be used directly at the machine. Control cabinets and terminal boxes are now no longer required. The module is fully sealed and therefore ideally prepared for wet, dirty or dusty conditions (IP67).

Pre-assembled cables significantly simplify IO-Link and signal wiring. Very few wiring errors are made, so that commissioning is optimized. In addition to pre-assembled IO-Link, power and sensor cables, field- configurable connectors and cables are available for maximum flexibility. Sensors and actuators are connected through M12 connectors.

connect. communicate. control.

IO-LINK BLOCK SPECIFICATIONS

HARDWARE

Communication Interface	IO-Link
Enclosure	
Industrial housing PA6 (polyamide)	
Ingress Protection Rating	
IP65, IP66, IP67 (conforms to EN 60529)	
Connectors	
1 – IO-Link	
4 – Analog Inputs	
Connector type (IO-Link)	
M12, 5-poles, A-coded (male)	
Connector type (Analog inputs)	
M12, 4-poles, A-coded (female)	
Connector Contacts	Plated CuZn
Mounting method	Machine or panel mount
Mounting mechanism	
Two mounting holes on the product for M3 screws	
LED Indicators	
IO-Link Communication status, Power Input L+, Power Input 2L+, Analog Input /Output status	
Dimensions (L x W x H)	126 x 30 x 26.5 mm
	5" x 1.2" x 1"
Weight	125g
	4.4 oz

ELECTRICAL SPECIFICATIONS

Operating Voltage	18 – 30VDC
Nominal Voltage	24VDC
Supply for Module Electronics	
L+ (Pin 1, 3 on IO-Link Connector X1)	
Supply of sensors	
2L+ (Pin 2, 5 on IO-Link Connector X1)	
Electrical isolation	
Yes (between L+ and 2L+)	
Current Consumption (Module Electronics)	
100mA from L+	

IO-LINK COMMUNICATION SPECIFICATIONS

Communication	IO-Link
Operating Mode	COM3 (230.4 Kbps)
Standard	
IEC61131-9	
IO-Link Device ID	
7014 (decimal)	
00 1B 66 (hex)	
IO-Link Connector	1 x M12, 5-poles, A-coded
Specification Version	IO-Link V1.1 Class B
IODD Files	Yes
Features	Data storage
Process Data Input (PDI)	16 Bytes
Process Data Output (PDO)	0 Bytes
Process Image	Inputs: 4 x 16 bit
	Outputs: 4 x 16 bit

ANALOG INPUT SPECIFICATIONS

Number of Analog Inputs	4
Input Connectors	
4 x M12, 5-pole, A-coded socket	
Input Types	Configurable:
	• 0 V ... + 10 V
	• -10 V ... + 10V
	• 0 mA ... 20 mA
	• 4 mA ... 20 mA
Internal Resistance	
> 200K ohms (typ. 85 Ω + diode voltage)	
Resolution	16 bits (incl. Sign)
Input Filter	Configurable
Input filter cut-off frequency	5 kHz
Conversion time	~ 100 microseconds
Measurement Error	
<± 0.3% (relative to the full-scale value)	
Common mode voltage UCM	Max. 35 V

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-25°C to +60°C
Storage temperature	-40°C to +85°C
Operating humidity	10% to 95%
Storage humidity	10% to 95%
Shock and Vibrations	EN 60068-2-6
	EN 60068-2-27

REGULATORY APPROVALS

Emissions	
EN 61000-6-4	
International Standard IEC 61000-6-4	
Immunity	
EN61000-6-2	
International Standard IEC 61000-6-2	
Safety Approvals	UL508
Other	
IP65, IP66, IP67 (conforms to EN 60529)	
2011/65/EU (RoHS2) Directive	
Approvals	CE, UL, RoHS2

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