



ERI3174-0002

I/O
connectionConnector
assignment

ERI3174-0002 | 4-channel analog input ± 10 V or 0/4...20 mA, parameterisable, differential input, 16 bit

The ERI3174 IO-Link box has four analog inputs which can be individually parameterised, so that they process signals either in the $-10 \dots +10$ V or the 0/4...20 mA range. The voltage or input current is digitised with a resolution of 16 bits, and is transmitted (electrically isolated) to the higher-level automation device. The four input channels have differential inputs and possess a common, internal ground potential. The input filter and therefore the conversion times are configurable in a wide range. If required, the inputs can be scaled differently, and automatic limit monitoring is also available.

The IO-Link box modules with zinc die-cast housing are ready for use in harsh industrial and process environments. With the fully sealed design and metal surfaces the ERI series is ideal for applications requiring enhanced load capacity and protection against weld spatter, for example.

Technical data	ERI3174-0002
Communication	IO-Link
Data transfer rates	230.4 kbaud (COM 3)
Specification version	IO-Link V1.1, Class B
Number of inputs	4
Input connections	M12, screw type
Interfaces	1 x M12 plug, A-coded
Signal type	$-10/0 \dots +10$ V 0/4...20 mA
Internal resistance	> 200 k Ω typ. 85 Ω + diode voltage
Common-mode voltage U_{CM}	max. 35 V
Resolution	16 bit (incl. sign)
Measuring error	$< \pm 0.3$ % (relative to full scale value)
Input filter limit frequency	5 kHz
Conversion time	~ 100 μ s
Input filter	configurable
Sensor supply	from additional power supply 2L+, DC, freely selectable up to 30 V
Current consumption	typ. 100 mA from L+
Bit width in the process image	4 x 16 bit input, 4 x 8 bit status
Electrical isolation	L+/2L+: yes
Special features	current or voltage parameterisable (0/4...20 mA, $-10/0 \dots +10$ V)
Operating/storage temperature	$-25 \dots +60$ °C/ $-40 \dots +85$ °C
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 65/66/67 (conforms to EN 60529)/variable
Approvals	CE, UL

Related products	
EP6228	EtherCAT Box, industrial housing, 8-channel IO-Link master, IP 67
EP6224	EtherCAT Box, industrial housing, 4-channel IO-Link master, IP 67
EL6224	EtherCAT Terminal, IO-Link master, IP 20
KL6224	Bus Terminal, IO-Link master, IP 20