



IOLITEI-4XDI

Robust isolated digital inputs with EtherCAT interface and DEWESoft software support.



Robust, isolated digital inputs are suitable for reading data off digital sensors as well as for demanding test automation tasks. Three power supply voltages (5V, 12V and device voltage supply level) available on the front connector. EtherCAT interface, signal and power over the same cable.

FEATURES

- 4 isolated TTL/CMOS digital inputs
- EtherCAT bus, daisy-chaining with single cable up to 50 m device-device
- DEWESoft X3 software support

APPLICATIONS

- Digital sensor interface
- Digital inputs in control cabinets

DIGITAL INPUT SPECIFICATION

	Typ.	Unit
Number of input channels	4	
Max. sample rate	20	KS/s
Input type	TTL / CMOS Voltage levels	
Input low level	< 1	V
Input high level	> 2	V
Input high current @5 V Vin:	3	mA
Input high current @30 V Vin:	3	mA
Overvoltage protection	30 (continuous) 65 (peak)	V
Isolation	channel-channel, channel-ground	
Front connector	DSUB15HD male	

NON-ISOLATED POWER SUPPLY (FRONT CONNECTOR) SPECIFICATION

Output voltage +5 V	5 V +10 %	
Max. output current +5 V	300	mA
Output voltage +12 V	12 V +10 %	
Max. output current +12 V	100	mA
Output voltage +V _{ecat}	V _{ecat} (device EtherCAT cable power voltage)	
Max. output current +V _{ecat}	200	mA

Note: Max. combined load on +5V and +12V pins: 1.5 W reduced by the load already present on +Vin pin

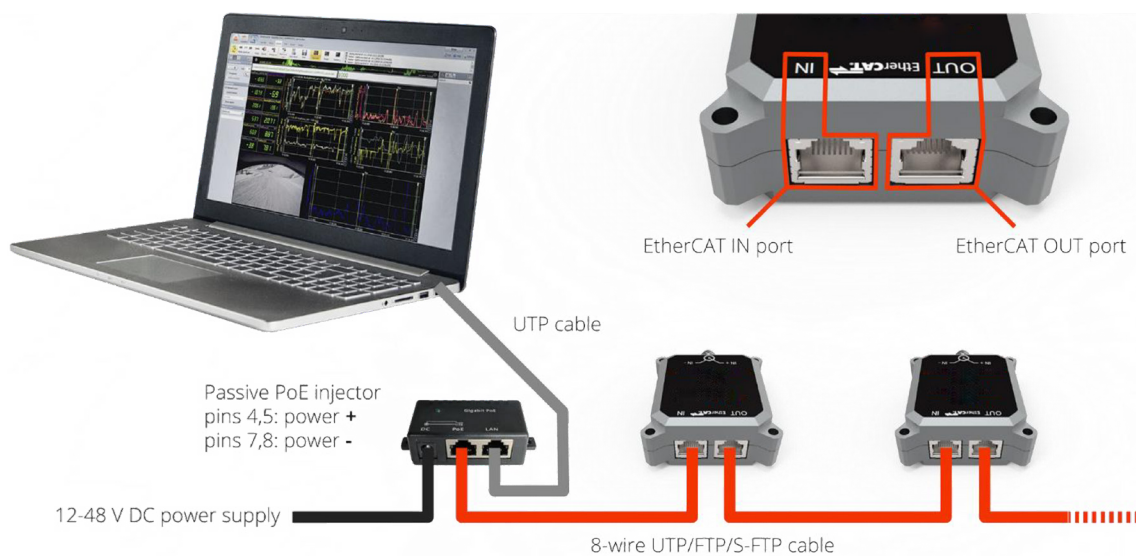
GENERAL SPECIFICATION

Digital interface	EtherCAT
Data interface connectors	RJ45 (single cable for data, power and sync)
Power consumption	2.5 W
Supply voltage	12-48 V
Operating temperature	-20 ... 60 degC
IP rating	IP20
Weight	130 g
Dimensions	71 x 62 x 28 mm
Housing material	Aluminium

Software support: DEWESoft X3, any standard EtherCAT master

Installation: Devices are daisy chained with a standard network cable. It is recommended that the cable is shielded (SFTP, CAT5e) and has a minimum 24 AWG wire thickness. The cable must have 4 wire pairs. The maximum distance node-to-node is 50 m.

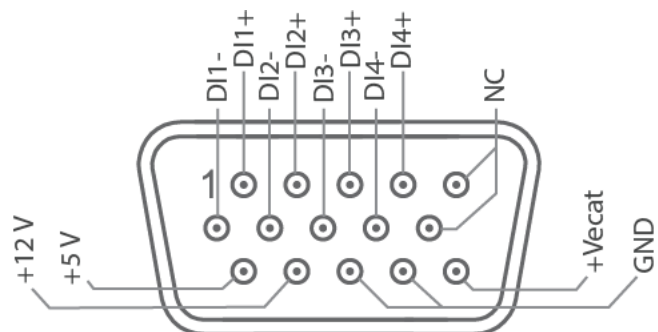
Power supply: Passive PoE power injector is necessary for merging the EtherCAT signal and power into a single cable.



Power supply voltage	Cable length device-to-device	Cable size	Max. number of devices from a single power supply
24 V	1 m	AWG 24	6
24 V	50 m	AWG 24	3
48 V	1 m	AWG 24	12
48 V	50 m	AWG 24	7

Note: This table applies if device consumes its typical power supply as specified in general specification. The max. nr. of devices from a single power supply can change if devices uses more/less power (depending primarily on sensor exciation and front end power supply load).

FRONT END CONNECTOR PINOUT



MECHANICAL DRAWING

