IOLITEI-4XDO

High current isolated digital outputs with EtherCAT bus and DEWESoft software support.

Isolated digital outputs with high current capability can drive motors, pumps or valves as well as trigger pure digital signals. 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 open collector digital outputs
- Up to 50 V, 2 A sink
- EtherCAT bus, daisy-chaining with single cable up to 50 m device-device
- DEWESoft X3 software support

APPLICATIONS

- Valve swtiching without additional relay
- Pump, motor drive (PWM)

DIGITAL OUTPUT SPECIFICATION

	Typ.	Unit
Number of output channels	4	
Update rate from DEWESoft software	1	kS/s
Output type	open collector with active internal pullup to 5 V	
Sink	50 V, 2 A (resistive load, unprotected)	
Source	5 V, max 40 mA, (internally limited)	
Max. switching frequency (PWM mode)	100	kHz
Isolation	channel-ground	
Front connector	DSUB15HD female	

NON-ISOLATED POWER SUPPLY (FRONT CONNECTOR) SPECIFICATION

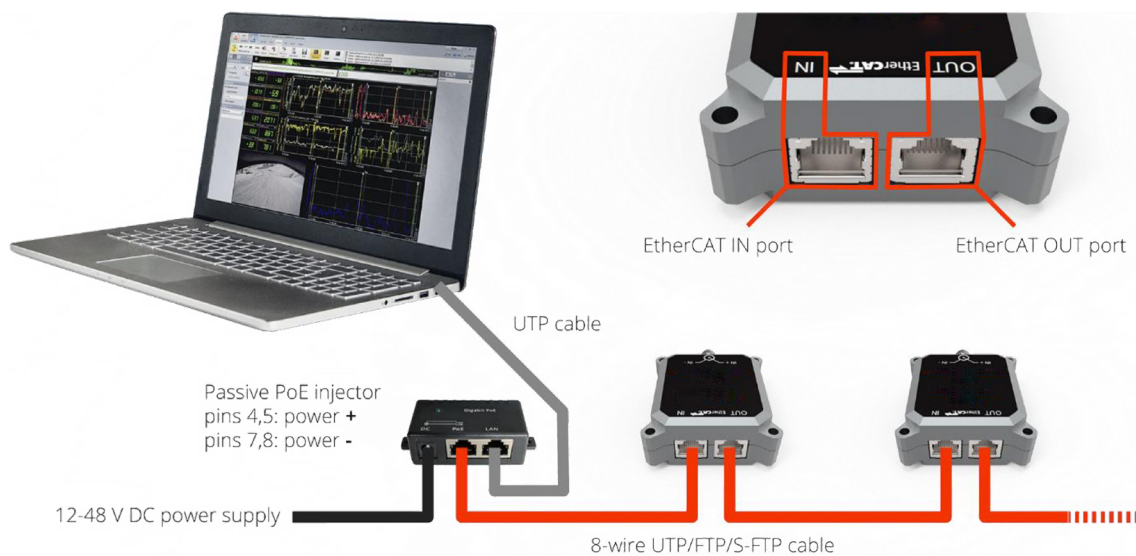|		
Output voltage +5 V	5 V +-10 %	
Max. output current +5 V	300	mA
Output voltage +5 V	12 V +-10 %	
Max. output current +5 V	100	mA
Output voltage +Vin	Vin (device EtherCAT cable power voltage)	
Max. output current +Vin	200	mA
Note: Max. combined load on +5V and +12V pins: 1.5 W reduced by the load already present on +Vin pin		

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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

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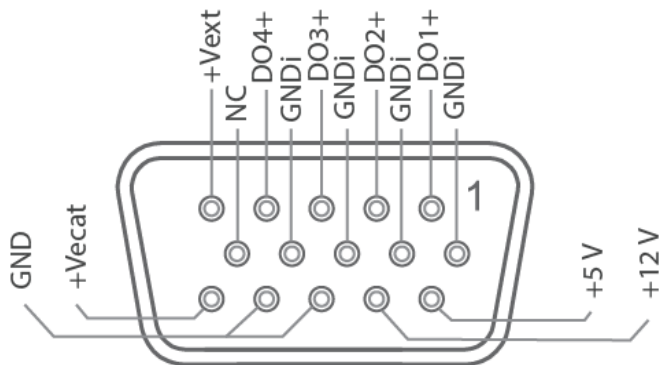
Power supply: Passive PoE power injector is neccessary for merging the EtherCAT signal and power into a single cable.

EtherCAT IN port   EtherCAT OUT port

UTP cable

Passive PoE injector
pins 4,5: power **+**
pins 7,8: power **-**

12-48 V DC power supply

8-wire UTP/FTP/S-FTP 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.

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■ FRONT END CONNECTOR PINOUT

+Vext
NC
DO4+
GNDi
DO3+
GNDi
DO2+
GNDi
DO1+
GNDi

GND
+Vecat

+Vecat

1

+5 V
+12 V

■ MECHANICAL DRAWING

5.1 (.20)

27.8 (1.09)

17.7 (.70)

5 (.20)

62 (2.44)

53.4 (2.10)

70.5 (2.78)

62 (2.44)

⌀ 4.5 (.18)

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