



IOLITE-1xAO

Low latency analog output with EtherCAT interface and DEWESoft software support.

Low latency, high precision analog output with excellent dynamic performance. Under 100 microseconds of EtherCAT-to-analog delay possible (on a real-time EtherCAT controller).



FEATURES

- 18 bit DAC, 92 dB SNR
- <100 us delay (EtherCAT-to analog output)
- EtherCAT bus, daisy-chaining with single cable up to 50 m device-device
- DEWESoft X3 software support

APPLICATIONS

- Analog voltage controlled valves
- EtherCAT control systems

ANALOG OUTPUT SPECIFICATION

	Typ.	Unit
DAC resolution	18	bit
Sample rate in DEWESoft software	1	kS/s
Update time in DEWESoft software	20-30	ms
Full scale output range	+10	V
Analog output bandwidth	50	kHz
Accuracy	0.1 % +- 1mV (0 to 20 mA load)	
Measurement ranges	+10, +5, +1, +0.2	V
Temperature gain drift	+10	ppm/K
Temperature offset drift	+ 5	uV/K
SNR (1000 S/s output rate, sine wave, 250 Hz, +-9 V)	92	dB
THD	-90	dB
Output impedance	0.45	Ohm DC
Maximum output current	20	mA
Settling time (0.05 % of set value, -10 V to 10 V step)	30	us
Max. slew rate (@1000 ohm load)	2.5	V/us
Max. capacitive load (2% overshoot)	10	nF
Maximum load	500	ohm
Output connector	BNC	

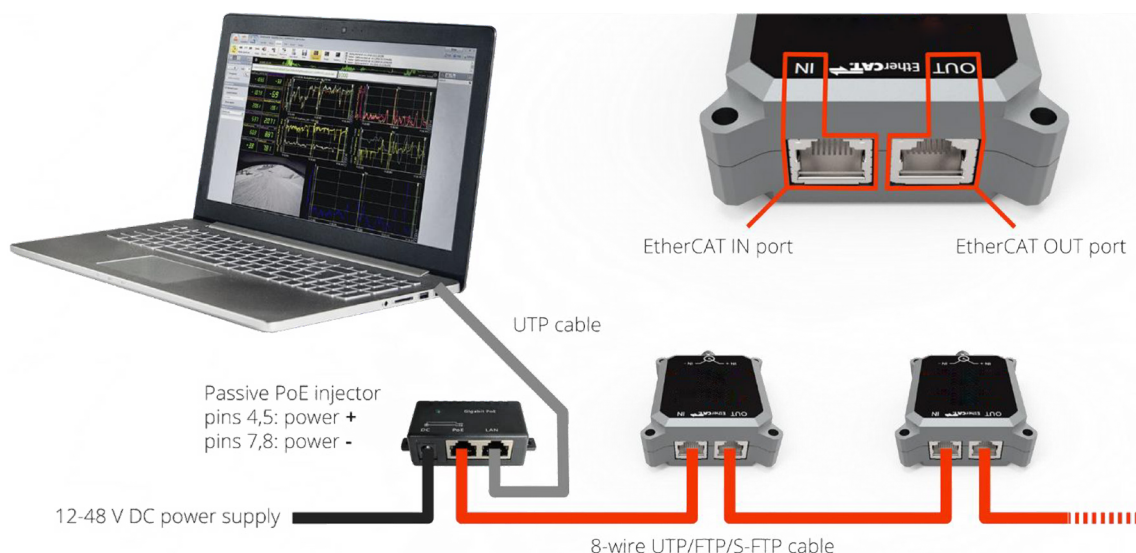
GENERAL SPECIFICATION

Digital interface	EtherCAT
Data interface connectors	RJ45 (single cable for data, power and sync)
Power consumption	2 W
Supply voltage	12-48 V
Operating temperature	-20 ... 60 degC
IP rating	IP20
Weight	130 g
Dimensions	82 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 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

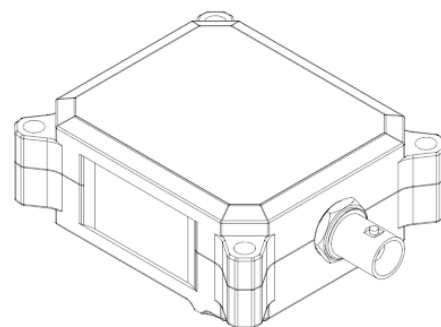
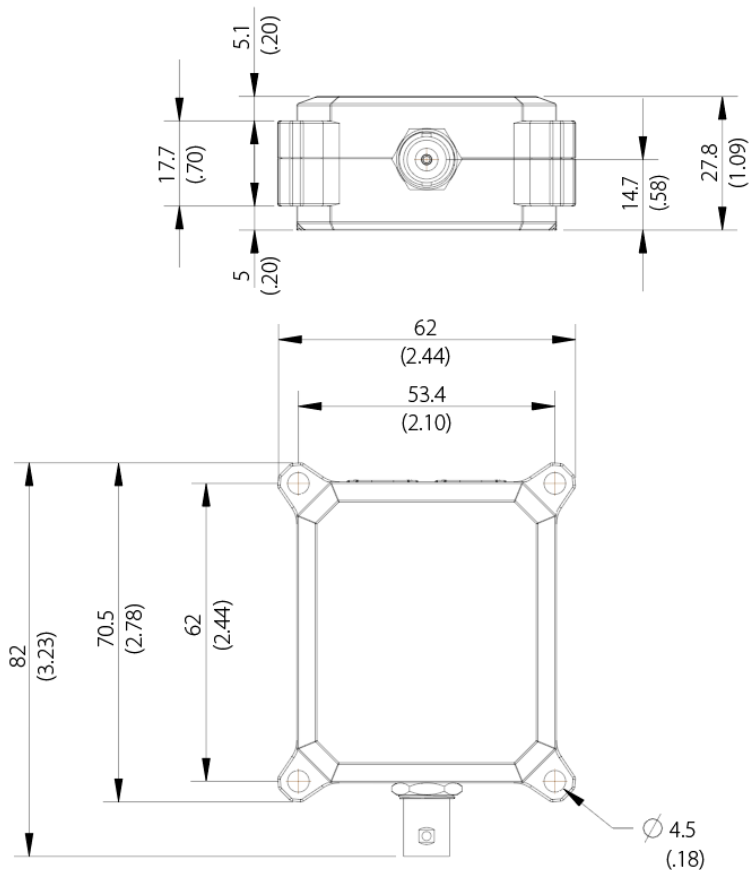
Note: This table applies if device consumes its typical power supply as specified in general specification. The max. nr. of devices from a single power supply can change if devices uses more/less power (depending primarily on sensor excitation and front end power supply load).

FRONT END CONNECTOR PINOUT





MECHANICAL DRAWING



The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification.

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