

ioLogik E2260

Active Ethernet I/O with 6 RTD Inputs, and 4 Digital Outputs



Features

- Supports 6 different sensor inputs, including PT, JPT, Ni RTD sensors, and resistor up to 2,200 Ohm
- 6 virtual inputs for Average and Deviation modes
- 4 digital outputs with pulse output
- Adjustable RTD sampling rate up to 12 samples/sec
- Instant event reporting by TCP/UDP/e-mail/SNMP trap with time stamp
- Built-in web console for remote access and configuration
- Easy local control without programming by patented Click&Go logic
- 100 Mbps Ethernet with Modbus/TCP protocol
- Optional LCM kit



Introduction

Link RTD Sensors and Digital Outputs to Ethernet Networks

The ioLogik E2260 is designed for system integrators to acquire and control remote RTD sensors over TCP/IP and Ethernet networks. Types of RTD sensors include PT, JPT, Ni types, and resistor. The ioLogik E2260 supports Ethernet and can run multiple protocols, such as Modbus/TCP, SNMP, HTTP, TCP, and UDP at 100 Mbps for high speed data acquisition. Data can be distributed to up to 10 host computers.

Independent Configurations for Multiple RTD Channels

Each fixed physical RTD input can be independently configured by software to PT, JPT, Ni, and resistor modes. In addition, a special virtual channel can be configured by software to Average or Deviation mode to calculate its fixed RTD channel.

Specifications

LAN

Ethernet: 10/100 Mbps, RJ45

Protection: 1.5 KV magnetic isolation

Protocols: Modbus/TCP, TCP/IP, UDP, DHCP, Bootp, SNMP(MIB for I/O and Network), HTTP, SNTP

Serial

Interface: RS-485 (2-wire): Data+, Data-, GND

Serial Line Protection: 15 KV ESD for all signals

Serial Communication Parameters

Parity: None

Data bits: 8

Stop bits: 1

Flow Control: None

Speed: 1200 to 115200 bps

Protocols: Modbus/RTU

Power Requirements

Power input: 24 VDC nominal, 12 to 48 VDC

DO power: 24 VDC nominal, up to 45 VDC

Mechanical Specifications

Wiring: I/O cable max. 14AWG

Environmental

Operating temperature: -10 to 60°C (14 to 140°F), 5 to 95% RH

Storage temperature: -40 to 85°C (-40 to 185°F), 5 to 95% RH

Agency Approvals

EMC: FCC part 15, CISPR (EN550022) Class A

CE: IEC 61000-6-2/61000-6-4

Safety: UL 508

Shock: IEC 60068-2-27

Freefall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Warranty: 2 years

RTD

Sampling Rate: 12 samples/sec (all channels)

Resolution: 0.1°C

CMR@50/60Hz: 120 dB

Accuracy: 0.1% FSR

Specifications

Optical Isolation: 3,000 Vdc/2,000 Vrms

NMR@50/60Hz: 100 dB

Span Drift: +/- 25ppm/°C

Zero Drift: +/- 3uV/°C

Input Impedance: 1.25M Ohm (Typical)

Input Type: Pt, JPt, Ni, and Resistor

Sensor Type	Degree	Degree	Count
Res. 100 mOhm	1 to 2200 Ohm	1 to 2200 Ohm	10 to 22000
Res. 50 mOhm	1 to 1250 Ohm	1 to 1250 Ohm	20 to 25000
Res. 20 mOhm	1 to 620 Ohm	1 to 620 Ohm	50 to 31000
Res. 10 mOhm	1 to 310 Ohm	1 to 310 Ohm	100 to 31000
PT50, 0.00385	-200 to 850°C	-328 to 1562°F	-2000 to 8500
PT100, 0.00385	-200 to 850°C	-328 to 1562°F	-2000 to 8500
PT200, 0.00385	-200 to 850°C	-328 to 1562°F	-2000 to 8500
PT500, 0.00385	-200 to 850°C	-328 to 1562°F	-2000 to 8500
PT1000, 0.00385	-200 to 350°C	-328 to 662°F	-2000 to 3500
JPT100, 0.003916	-200 to 640°C	-328 to 1184°F	-2000 to 6400

Sensor Type	Degree	Degree	Count
JPT200, 0.003916	-200 to 640°C	-328 to 1184°F	-2000 to 6400
JPT500, 0.003916	-200 to 640°C	-328 to 1184°F	-2000 to 6400
JPT1000, 0.003916	-200 to 350°C	-328 to 662°F	-2000 to 3500
Ni100, 0.00618	-60 to 250°C	-76 to 482°F	-600 to 2500
Ni200, 0.00618	-60 to 250°C	-76 to 482°F	-600 to 2500
Ni500, 0.00618	-60 to 250°C	-76 to 482°F	-600 to 2500
Ni1000, 0.00618	-60 to 180°C	-76 to 356°F	-600 to 1800
Ni120, 0.00672	-80 to 260°C	-112 to 500°F	-800 to 2600

Digital Output

Sink, 200 mA @ 24 VDC (nominal), 45 VDC (Max.)

Optical Isolation: 3,000 Vdc/2,000 Vrms

Pulse out frequency: 100Hz

Over voltage protection: +36 VDC

Over current limit: 400 mA

Over temperature shutdown: 175°C

Pin Assignment

TB1

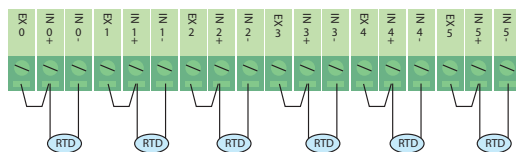
Power Input			RS-485		
1	2	3	4	5	6
V+ (12-48 V)	V-	FG	Data+	Data-	SG

TB2

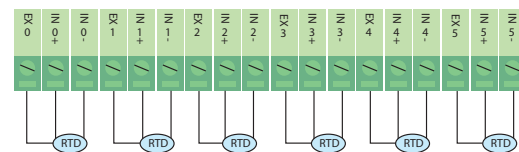
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
EX0	IN0+	IN0-	EX1	IN1+	IN1-	EX2	IN2+	IN2-	EX3	IN3+	IN3-	EX4	IN4+	IN4-	EX5	IN5+	IN5-	DO GND	DO 0	DO 1	DO 2	DO 3	DO PWR

Wiring Example

RTD Input

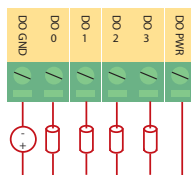


(1) 2-wire RTD



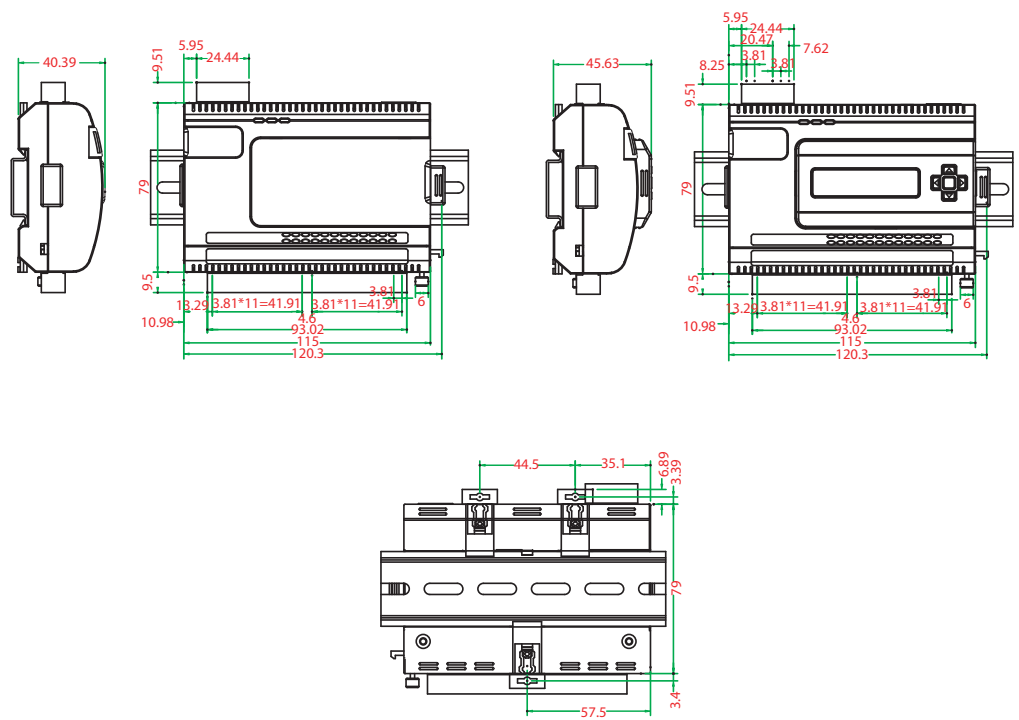
(2) 3-wire RTD

Digital Output



(3) Sink

Dimensions (unit = mm)



Ordering Information

ioLogik E2260: Active Ethernet I/O Server with 6 RTD Inputs and 4 Digital Outputs

LDP1602: LCD Module with text screen (16 x 2 characters) and 5 buttons