

# 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

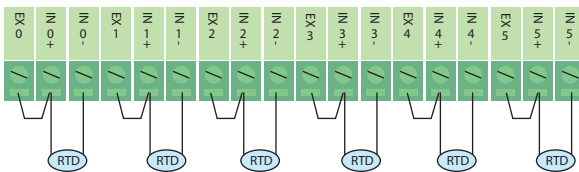
Power Input			RS-485		
1	2	3	4	5	6
V+ (12-48 V)	V-	FG	Data+	Data-	SG

### TB2

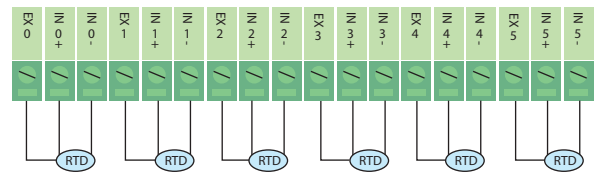
1	2	3	4	5	6	7	8	9	10	11	12	12	14	15	16	17	18	19	20	21	22	23	24
EX0	IN0+	IN0-	EX1	IN1+	IN1-	EX2	IN2+	IN2-	EX3	IN3+	IN3-	EX4	IN4+	IN4-	EX5	IN5+	IN5-	DO GND	DO 0	DO 1	DO 2	DO 3	DO PWR

## Wiring Example

### RTD Input

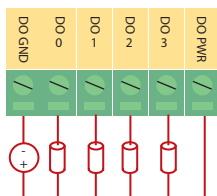


(1) 2-wire RTD



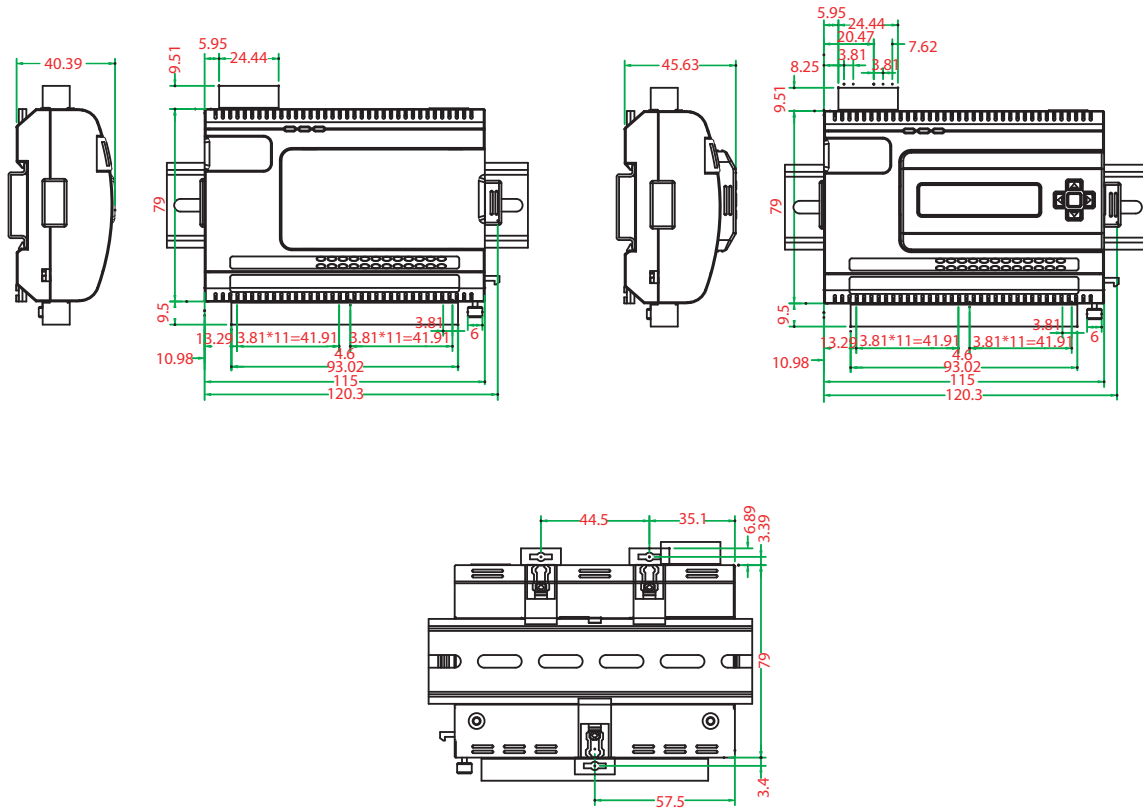
(2) 3-wire RTD

### 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