ioLogik E2240

Active Ethernet I/O with 8 analog inputs and 2 analog outputs

- 8-channel analog inputs for voltage, current signal
- 2-channel analog outputs for voltage, current actuator control
- Instant event messaging by TCP/UDP/email/SNMP-trap
- Easy-to-use Click&Go™ Logic for local output control
- PC-based configuration utility and web console
- Windows/WinCE VB/VC.NET and Linux C APIs
- I/O control over Modbus/TCP and SNMP protocol
- NIST-traceable calibration

The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.

Introduction

Combination of analog input and output

The ioLogik E2240 comes with a combination of analog inputs and analog outputs in one module, and supports a wide range of sensors and actuators, including pH, conductivity, pressure, flow, and valves.

Specifications

LAN

Ethernet: 1 x 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, CGI, SNTP

Serial Communication

Interface: RS-485-2w: 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
Baudrate: 1200 to 115200 bps
Protocol: Modbus/RTU

Analog Input

Channels: 8 analog inputs with differential input
Resolution: 16 bits
I/O Mode: Voltage / Current
Input Range: ±150 mV, ±500 mV, ±5 V, ±10 V, 0 to 20 mA, 4 to 20 mA
Data Format: 16-bit integer (2's complement)
Accuracy:
±0.1% FSR @ 25°C
±0.3% FSR @ -10 and 60°C
Sampling Rate (all channels):
• 10 samples/sec for voltage
• 6 samples/sec for current
Input Impedance: 900K ohms (min.)
Built-in Resistor for Current Input: 106 ohms
CMR @ 50/60 Hz: 95 dB min.
Zero Drift: ±9 μV/°C
Span Drift: ±25 ppm/°C
Isolation: 3K VDC or 2K Vrms

Analog Output

Channels: 2
Resolution: 12 bits
Output Range: 0 to 10 V, 4 to 20 mA
Drive Voltage: 15 VDC for current output
Accuracy:
±0.1% FSR @ 25°C,
±0.3% FSR @ -10 and 60°C
Zero Drift: ±9 μV/°C
Span Drift: ±25 ppm/°C
Load Resistor: Less than 250 ohms

Power Requirements

Power Input: 24 VDC nominal, 12 to 48 VDC
Power Consumption: 282 mA typical @ 24 VDC

Physical Characteristics

Wiring: I/O cable max. 14AWG
Dimensions: 115 x 79 x 45.63 mm (4.53 x 3.11 x 1.8 in)
Weight: 210 g

Environmental Limits

Operating Temperature: -10 to 60°C (14 to 140°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

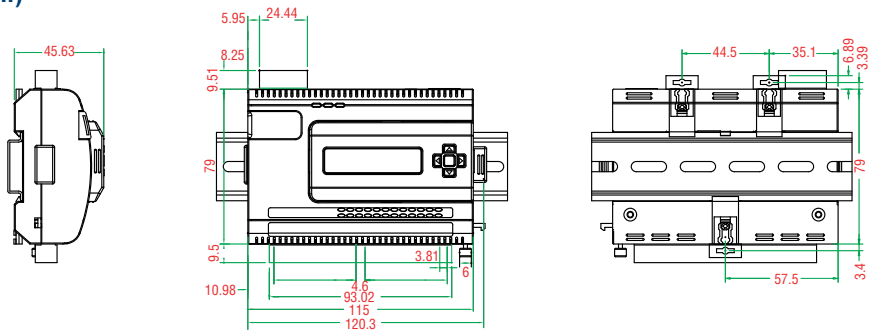
Regulatory Approvals

EMI: FCC Part 15, CISPR (EN55022) class A
EMS: IEC 61000-4, IEC 61000-6
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6

Warranty

Warranty Period: 2 years
Details: See www.moxa.com/warranty

Dimensions (unit = mm)



Side View | Front View | Rear View

Pin Assignment

I/O (left to right)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Vin0+	Vin0-	Vin1+	Vin1-	Vin2+	Vin2-	Vin3+	Vin3-	Vin4+	Vin4-	Vin5+	Vin5-	Vin6+	Vin6-	Vin7+	Vin7-	Vout0+	Vout0-	Iout0+	Iout0-	Vout1+	Vout1-	Iout1+	Iout1-

Ordering Information

ioLogik E2240: Active Ethernet I/O with 8 analog inputs and 2 analog outputs
LDP1602: LCD module with 16 x 2 text display and 5 buttons