

# 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



### : 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:**  $\pm 150$  mV,  $\pm 500$  mV,  $\pm 5$  V,  $\pm 10$  V, 0 to 20 mA, 4 to 20 mA

**Data Format:** 16-bit integer (2's complement)

**Accuracy:**

$\pm 0.1\%$  FSR @ 25°C

$\pm 0.3\%$  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:**  $\pm 9$   $\mu$ V/°C

**Span Drift:**  $\pm 25$  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:**

$\pm 0.1\%$  FSR @ 25°C,

$\pm 0.3\%$  FSR @ -10 and 60°C

**Zero Drift:**  $\pm 9$   $\mu$ V/°C

**Span Drift:**  $\pm 25$  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

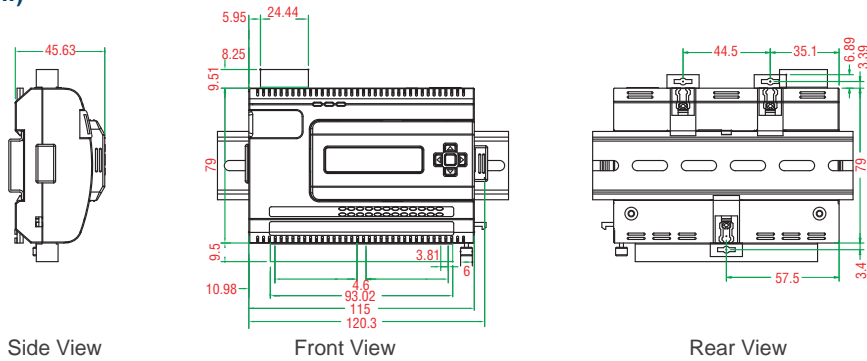
Vibration: IEC 60068-2-6

## Warranty

Warranty Period: 2 years

Details: See [www.moxa.com/warranty](http://www.moxa.com/warranty)

## Dimensions (unit = mm)



## : 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