ioLogik E2242

Active Ethernet I/O with 4 analog inputs and 12 configurable DIOs



- > 4 fixed differential analog input channels
- > 12 configurable digital input/output channels
- > DI counter saved automatically when power shuts off
- > Instant event messaging by TCP/UDP/email/SNMP-Trap
- > PC-based configuration utility and web console
- > Easy-to-use Click&Go™ Logic for local output control
- > Windows/WinCE VB/VC.NET and Linux C APIs
- > I/O control over Modbus/TCP and SNMP protocol
- > NIST traceable calibration









: Introduction

Better I/O Matrix for Monitoring—Moxa's ioLogik E2242 is tailormade for use with remote monitoring and alarm systems. This Active Ethernet I/O product provides 4 analog inputs and 12 configurable DIOs for a 1:3 ratio of analog IOs to digital IOs perfectly adapted to water tank monitoring and environmental monitoring applications. in which 1 analog input is used to trigger 3 digital outputs as High-High, High, and Low alarms. Moxa's ioLogik E2242 lets you set up your monitoring system without the need for a local PC or RTU.

* 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: 4 analog inputs with differential input

Resolution: 16 bits I/O Mode: Voltage / Current

Input Range: ±150 mV, 0 to 150 mV, ±500 V, 0 to 500 mV, ±5 V, 0

to 5 V, ±10 V, 0 to 10 V, 0 to 20 mA, 4 to 20 mA

Accuracy:

±0.1% FSR @ 25°C ±0.3% FSR @ -10 and 60°C

Sampling Rate (all channels): 100 samples/sec

Input Impedance: 200K ohms (min.)

Built-in Resistor for Current Input: 102 ohms

DI/DO Configurable Channels

Channels: 12 I/O Mode:

• DI or Event Counter (up to 900 Hz)

• DO or Pulse Output (up to 100 Hz)

Digital Input

Channels: Up to 12, source/sink selectable Sensor Type: NPN, PNP, and Dry contact I/O Mode: DI or event counter (up to 900 Hz)

Dry Contact:

• Logic 0: short to GND; • Logic 1: Open

Wet Contact: (For Source Type)

• Logic 0: 0 to 3 VDC; • Logic 1: 10 to 30 VDC

Common Type: 6 points per COM Isolation: 3K VDC or 2K Vrms

Counter/Frequency: 900 Hz, power off storage Digital Filtering Time Interval: Software selectable

Over-voltage Protection: 36 VDC Poweroff Counter Memory: 48 bytes

Digital Output

Channels: Up to 12, sink type, 36 VDC, 200 mA I/O Mode: DO or Pulse Output (up to 100 Hz) Pulse Wave Width/Frequency: 10 ms/100 Hz

Over-voltage Protection: 45 VDC Over-current Limit: 400 mA (typical) Over-temperature Shutdown: 175°C (min.) Output Current Rating: Max. 200 mA per channel Isolation: 2K Vrms or 3K VDC (Magnetic)

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: 215 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

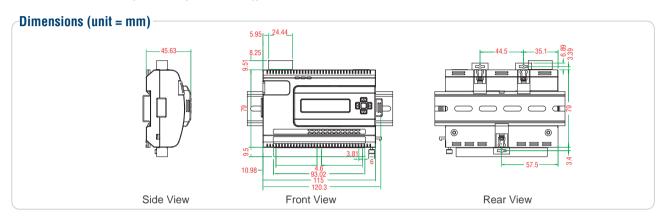
EMS: IEC 61000-4, IEC 61000-6 Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32

Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6

Warranty

Warranty Period: 2 years

Details: See www.moxa.com/warranty



: Pin Assignment

I/O (left to right)

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Ain0+	Ain0-	Ain1+	Ain1-	Ain2+	Ain2-	Ain3+	Ain3-	DI.COM1	0010	D101	D102	D103	D104	D105	GND	GND	9010	D107	D108	6010	D1010	D1011	DI.COM2

Ordering Information

ioLogik E2242: Active Ethernet I/O with 4 analog inputs and 12 configurable DIOs

LDP1602: LCD module with 16 x 2 text display and 5 buttons