ioLogik E1242

Remote Ethernet I/O with 2-port Ethernet switch, 4 AIs, 4 DIs, and 4 DIOs

> Built-in 2-port Ethernet switch for daisy-chain topologies
> Free support of Moxa's push-based Active OPC Server Lite
  - Seamlessly connect to any SCADA system
  - Save 80% on network bandwidth
  - I/O response that's seven times faster
> User-defined Modbus/TCP addressing
> MXIO programming library for Windows and WinCE VB/VC.NET and Linux C APIs
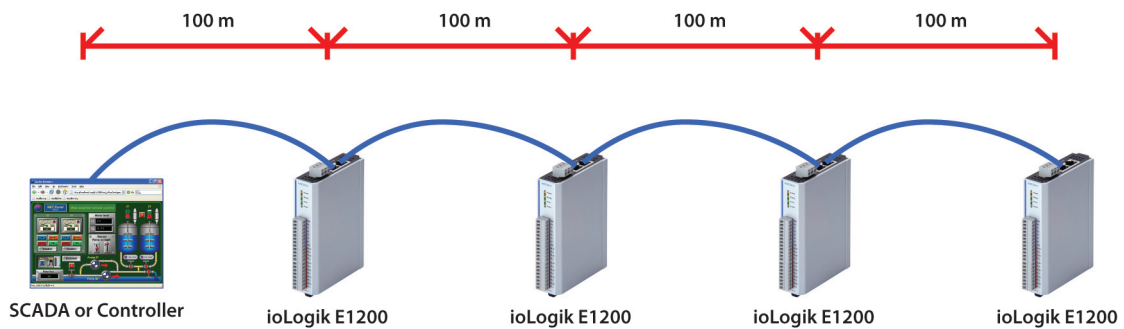> Web configuration with Import/Export function

: Introduction

Daisy-chained Ethernet I/O Connection

A new daisy-chained Ethernet I/O concept is now available. The ioLogik E1242 industrial remote Ethernet I/O has two embedded Ethernet switch ports that allow information to flow to another local Ethernet device or connect to the next ioLogik in the daisy-chain. Applications such as factory automation, security and surveillance systems, and tunnel monitoring, can make use of daisy-chained Ethernet for building multi-drop I/O networks over standard Ethernet cables. Many industrial automation users are familiar with the multi-drop configuration typically used in fieldbus applications. The daisy-chain function on the remote Ethernet I/O ioLogik E1242 not only increases the connection between machines and panels, but also lowers the cost of buying separate Ethernet switches, and at the same time reduces labor fees and cabling by a large percentage. For example, if a production facility contains 700 stations (20 points per station), the wiring cost reduction can reach 15% of the total implementation cost.

| 100 m | 100 m | 100 m | 100 m |

| SCADA or Controller | ioLogik E1200 | ioLogik E1200 | ioLogik E1200 | ioLogik E1200 |

: Specifications

LAN
Ethernet: 2 x 10/100 Mbps switch ports, RJ45
Protection: 1.5 KV magnetic isolation
Protocols: Modbus/TCP, TCP/IP, UDP, DHCP, Bootp, HTTP

Analog Input
Type: Differential input
Resolution: 16 bits
I/O Mode: Voltage / Current
Input Range: 0 to 10 VDC, 4 to 20 mA
Accuracy:
±0.1% FSR @ 25°C
±0.3% FSR @ -10 and 60°C
Sampling Rate (all channels): 12 samples/sec
Input Impedance: 10M ohms (minimum)
Built-in Resistor for Current Input: 120 ohms

Digital Input
Sensor Type: NPN, PNP, and Dry contact
I/O Mode: DI or Event Counter
Dry Contact:
• Logic 0: short to GND
• Logic 1: open
Wet Contact:
• Logic 0: 0 to 3 VDC
• Logic 1: 10 to 30 VDC (DI COM to DI)
Isolation: 3K VDC or 2K Vrms
Counter/Frequency: 250 Hz, power off storage

Digital Output
I/O Mode: DO or Pulse Output
Pulse Wave Width/Frequency: 1 ms/500 Hz
Over-voltage Protection: 45 VDC

Over-current Limit: 600 mA per channel
Over-temperature Shutdown: 175°C (typical), 150°C (min.)
Output Current Rating: Max. 200 mA per channel
Isolation: 3K VDC or 2K Vrms

Power Requirements
Power Input: 24 VDC nominal, 12 to 36 VDC
Power Consumption: 130 mA typical @ 24 VDC

Physical Characteristics
Wiring: I/O cable max. 14 AWG
Dimensions: 27.8 x 124 x 84 mm (1.09 x 4.88 x 3.31 in)
Weight: under 200 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
Safety: UL508
Shock: IEC 60068-2-27
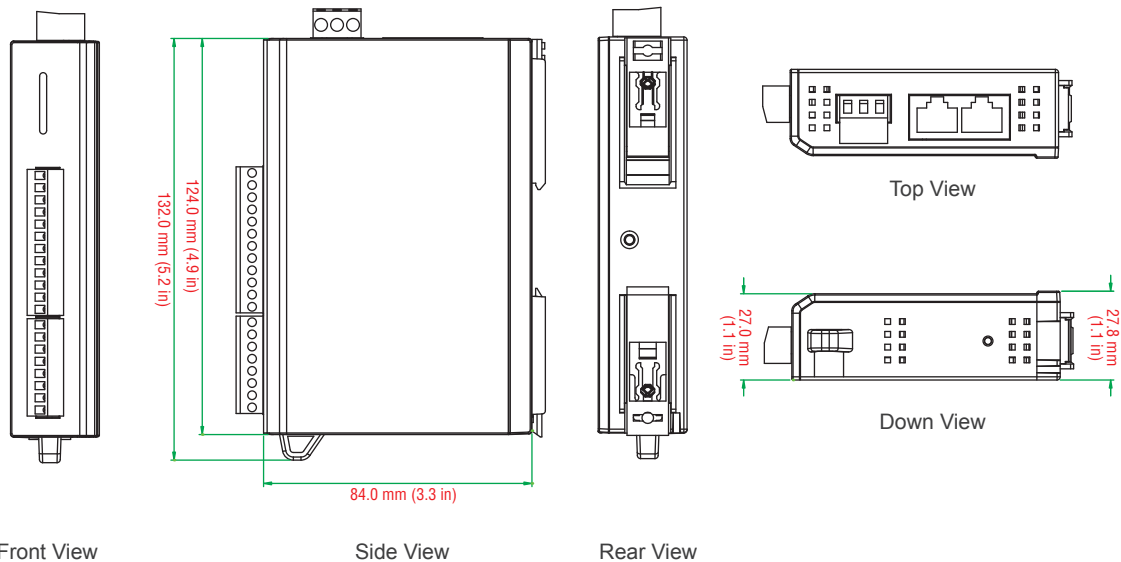**Freefall:** IEC 60068-2-32
Vibration: IEC 60068-2-6
Note: Please check Moxa's website for the most up-to-date certification status.

Warranty
Warranty Period: 5 years
Details: See www.moxa.com/warranty

Dimensions

Front View   Side View   Rear View

132.0 mm (5.2 in)
124.0 mm (4.9 in)
84.0 mm (3.3 in)
27.0 mm (1.1 in)
27.8 mm (1.1 in)

Top View
Down View

: Ordering Information

Available Models
ioLogik E1242: Remote Ethernet I/O with 2-port Ethernet switch, 4 AIs, 4 DIs, and 4 DIOs