

# ioLogik E2210

Active Remote I/O with Ethernet and 12 Digital Inputs, 8 Digital Outputs



## Features

- Actively transfer I/O data in real-time over Ethernet
- Easy-to-use Click&Go™ Logic for local output control and messaging
- 12-point 24 VDC digital input with DI/Event counter
- 8-point 24 VDC digital output as pulse output
- 10/100 Mbps Ethernet with Modbus/TCP protocol connecting up to 10 hosts
- SNMP to I/O mapping that works with Network Management System
- Quick programming library for VB, VC, BCB



## Linking Digital Inputs and Outputs to TCP/IP Ethernet Networks

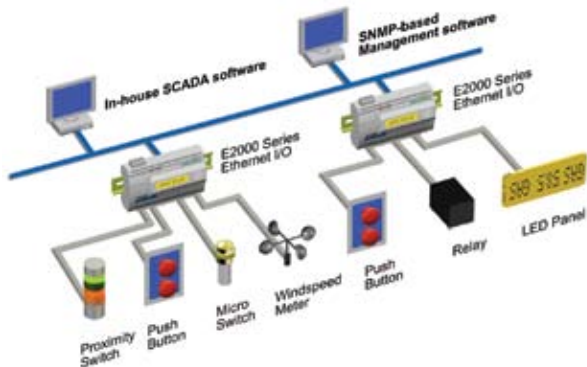
The ioLogik™ E2210 is designed to allow system integrators to acquire and control on/off devices remotely over TCP/IP and Ethernet networks. On/off devices may include proximity switches, mechanical switches, push buttons, optical sensors, LEDs, and light switches. The ioLogik™ E2210 supports multiple protocols over Ethernet, 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. Compared to a traditional field bus and serial interface, an Ethernet-based I/O server is more flexible for remote control and data exchange within a modern IT infrastructure.

## Independent Configuration for Multi-Functional DI and DO Channels

Each digital input can be independently configured for DI or Event Counter mode, and each digital output can be independently configured for DO or Pulse Output mode.

## Typical Application



## Easy On-site Management using LCD Display Module



The optional LCD display module is hot-pluggable and provides PC-free on-site management that substantially reduces configuration effort and time.

1 Active Remote I/O

## 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, Active I/O Messaging, IP-filtering

### 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

**Protocol:** Modbus/RTU

**Built-in Real Time Clock:** Yes

### Power Requirements

**Power input:** 24 VDC nominal, 12 to 48 VDC

**Power consumption:** 282 mA @ 24 VDC (typ.)

**Field power:** 24 VDC nominal, up to 48 VDC

### Mechanical Specifications

**Wiring:** I/O cable max. 14 AWG

### 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

### Digital Input

**Inputs:** 12, source type

**I/O Mode:** DI or Event Counter (up to 900 Hz)

**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)

**Common type:** 12 points / 1 COM

**Isolation:** 3000 VDC

### Digital Output

**Outputs:** 8, sink type

**I/O Mode:** DO or Pulse output (up to 1 KHz)

**On-state voltage:** 24 VDC nominal

**Output current rating:** Max. 200 mA per channel

**Optical isolation:** 3K VDC

**Protection:** Over temperature shutdown: Min. 170°C  
Over current limit: typ. 750 mA/channel

### Agency Approvals

**EMI:** FCC Part 15, CISPR (EN55022) Class A

**EMS:** IEC61000-4-2 (ESD), level 2/3

IEC61000-4-3 (RS), level 2

IEC61000-4-4 (EFT), level 2

IEC61000-4-5 (Surge), level 3

IEC61000-4-6 (CS), level 2

IEC61000-4-8 (PM), level 1

IEC61000-4-11 (Dip)

**Safety:** UL 508 (pending)

**Shock:** IEC60068-2-27

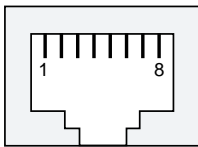
**Freefall:** IEC60068-2-32

**Vibration:** IEC60068-2-6

**Warranty:** 2 years

## Pin Assignment

### Ethernet



PIN	Signals
1	Tx+
2	Tx-
3	Rx+
6	Rx-

### Power / RS-485

Pin	1	2	3	4	5	6
Signal	V+	V-	FG	D+	D-	SG

### I/O (left to right)

Pin	1	2	3	4	5	6	7	8	9	10	11	12
Signal	DI COM	DI0	DI1	DI2	DI3	DI4	DI5	DI6	DI7	DI8	DI9	DI10
Pin	13	14	15	16	17	18	19	20	21	22	23	24
Signal	DI11	DI.GND	DO.PWR	DO0	DO1	DO2	DO3	DO4	DO5	DO6	DO7	DO.GND

## Ordering Information

**ioLogik E2210:** Active remote I/O server (over Ethernet), 12 digital inputs and 8 digital outputs

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

## Wiring Example

