

ioLogik E2210

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



2006
ENGINEERS'
CHOICE
AWARDS



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



: Introduction

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.

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.

: 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 Messages: Yes

Security: 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, min. 12 VDC, Max. 48 VDC

Power Consumption: 282 mA @ 24 VDC (typ.)

DO Power: 24 VDC nominal, up to 36 VDC

Mechanical Specifications

Wiring: I/O cable max. 14 AWG

Environment

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

Specifications

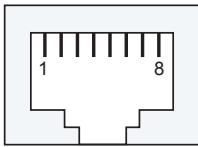
I/O Mode: DI or Event Counter (up to 900 Hz)
Dry Contact: Logic 0: short to GND, Logic 1: open
Wet Contact: Logic 0: 0 to 3 VDC,
 Logic 1: 10 to 30 VDC (DI COM to DI)
Common Type: 12 points / 1 COM
Isolation: 3K VDC
Digital Output
Outputs: 8, sink type
I/O Mode: DO or Pulse Output (up to 1 KHz)
On-state 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)
 EN61000-6-2
 EN61000-6-4(EMC)
Safety: UL 508
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 and RS-485

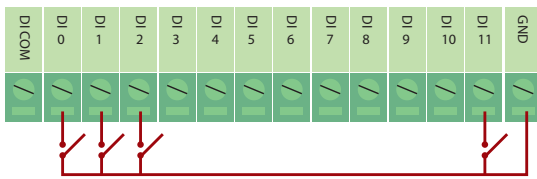
Pin	1	2	3	4	5	6
Signal	V+	V-	FG	D+	D-	SG

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
DI.COM	DI0	DI1	DI2	DI3	DI4	DI5	DI6	DI7	DI8	DI9	DI10	DI11	DI.GND	DO.PWR	DO0	DO1	DO2	DO3	DO4	DO5	DO6	DO7	DO.GND

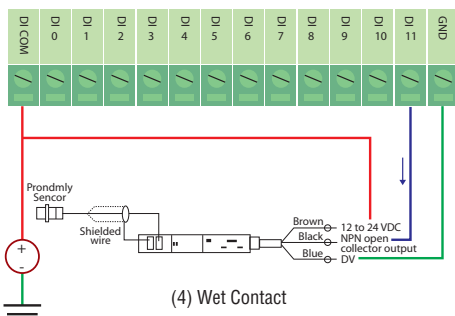
Wiring Example

Digital Input (Dry Contact)



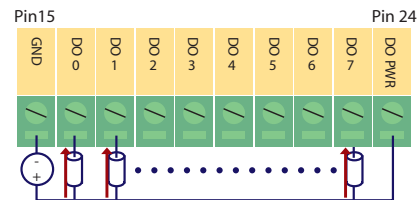
(1) Dry Contact

Digital Input (Wet Contact)



(4) Wet Contact

Digital Output



(2) Digital Output

Ordering Information

ioLogik E2210: Active Ethernet I/O server with 12 digital inputs and 8 digital outputs
LDP1602: LCD module with 16 x 2 text and 5 button