ioLogik E2212

Active Ethernet I/O Server with 8 DI, 8 DO, and 4 DIO

Features

- Selectable digital I/O combination by software
- Accepts PNP or NPN sensors
- Instant event reporting by TCP/UDP/e-mail/SNMP trap
- Easy local control without programming by patented Click&Go logic
- Windows VB and Windows/WinCE/Linux C API Coming Soon!
- Peer-to-Peer I/O without controller
- Power fail counter storage memory

Introduction

Flexible digital input/output configuration within one Ethernet DIO

The ioLogik E2212 provides system integrators with the flexibility to handle various field demands with 8 fixed input channels, 8 fixed output channels, and 4 channels that can be configured by software for input or output operation. You can configure the I/O channels to suit your needs, for combinations such as 12 inputs/8 outputs, 8 inputs/12 outputs or 10 inputs/10 outputs.

Single Ethernet DIO that accepts 3 types of sensors

Unlike traditional Ethernet I/O products, the ioLogik E2212 can connect to dry contact, PNP, and NPN sensors at the same time. You may decide on the sensor type depending on your wiring approach.

Specifications

LAN

Ethernet: 10/100 Mbps, RJ45

Protection: 1.5KV 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 Bit(s): 1

Flow Control: None

Speed: 1200 to 115200 bps

Protocol: Modbus/RTU

Power Requirements

Power Input: 24 VDC nominal, min. 12 VDC, Max. 48 VDC

DO Power: 24 VDC nominal, up to 30 VDC

Mechanical Specifications

Wiring: I/O cable max. 14 AWG

Environment

Operation 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

Channels: 8 fixed points

Sensor Type: 2 6-point groups for NPN/PNP type

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

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: 6 points /1 COM

Isolation: 3K VDC

Specifications

Low Speed Counter/Frequency: 900 Hz, power off storage
Over Voltage Protection: +36 VDC
Counter Memory: 48 Bytes

Digital Output

Channels: 8 fixed points sink, 48 VDC, 200 mA
Magnetic Isolation: 2 KVrms/3K VDC
Pulse Wave Width: 10 ms/100 Hz
Over Voltage Protection: +50 VDC
Over Current Limit: 600 mA (typical)
Over Temperature Shutdown: 160°C (min.)

DI/DO Selectable Channels

Channels: 4
I/O Mode: DI or Event Counter (Up to 900Hz)
DO or Pulse Output (Up to 100Hz)
Magnetic Isolation: 2 KVrms/3K VDC

Agency Approvals

EMI: FCC part 15, CISPR (EN55022) Class A
EMS: IEC 61000-4-2 (ESD), Level 2/3
IEC 61000-4-3 (RS), Level 2
IEC 61000-4-4 (EFT), Level 2
IEC 61000-4-5 (Surge), Level 3
IEC 61000-4-6 (CS), Level 2
IEC 61000-4-8 (PM), Level 1
IEC 61000-4-11 (DIP)
IEC 61000-6-2
IEC 61000-6-4 (EMC)
Safety: UL 508
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6
Warranty: 2 years

Pin Assignment

Power & RS-485

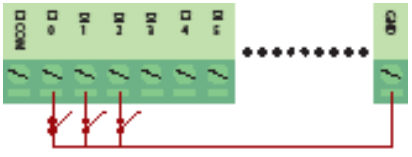
(Power Input)			(RS-485)		
1	2	3	4	5	6
V+ (12-48 V)	V-	FG	Data+	Data-	SG

I/O (left to right)

1	2	3	4	5	6	7	8	9	10	11	12	12	14	15	16	17	18	19	20	21	22	23	24
DI COM1	DI 0	DI 1	DI 2	DI 3	DI 4	DI 5	DI COM2	DI 6	DI 7	DIO 8	DIO 9	DIO 10	DIO 11	GND	DO 0	DO 1	DO 2	DO 3	DO 4	DO 5	DO 6	DO 7	DO PWR

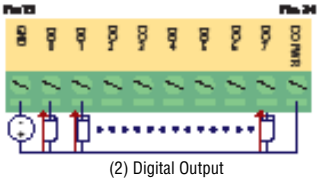
Wiring Example

Digital Input (Dry Contact)



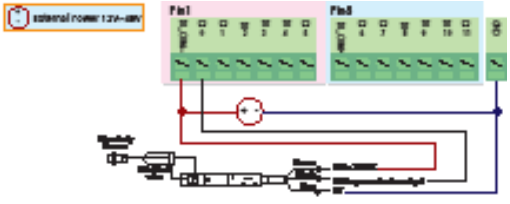
(1) Dry Contact

Digital Output



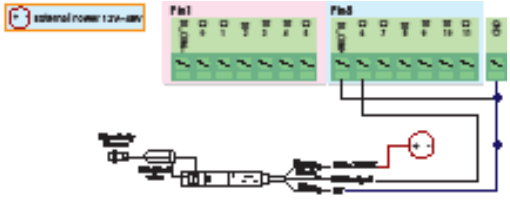
(2) Digital Output

Digital Input (Wet Contact)



(3) Wet Contact with NPN Sensor

Digital Output



(4) Wet Contact with PNP Sensor

Ordering Information

ioLogik E2212: Active Ethernet I/O server
LDP1602: LCD module with 16 x 2 text and 5 button