

ioLogik R2110

RS-485 Remote I/O Server with 12 Digital Inputs, 8 Digital Outputs



Features

- > 12-point 24 VDC digital input with DI/Event Counter mode, software selectable filtering time
- > 8-point 24 VDC digital output with Pulse Output mode, software selectable pulse width
- > LED indicators for all I/O channels
- > Over temperature protection (up to 170°C)
- > Over-current protection (750 mA/channel)
- > Easy-to-use, quick programming lib for VB, VC++, BCB
- > Easy firmware upgrade over RS-485



Specifications

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

Power Requirements

Power Input: 24 VDC nominal, min 12 VDC, max 48 VDC

Power Consumption: 195 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

I/O Mode: DI or Event Counter (up to 50 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 50 Hz)

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

Output frequency: 50 Hz

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

Power and RS-485

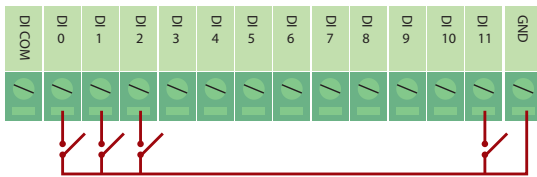
Pin	1	2	3	4	5	6
Signal	V+	V-	FG	D+	D-	SG

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	D/0	D/1	D/2	D/3	D/4	D/5	D/6	D/7	D/8	D/9	D/10	D/11	DI.GND	DO.PWR	D00	D01	D02	D03	D04	D05	D06	D07	DO.GND

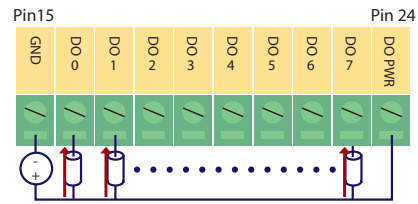
Wiring Example

Digital Input (Dry Contact)



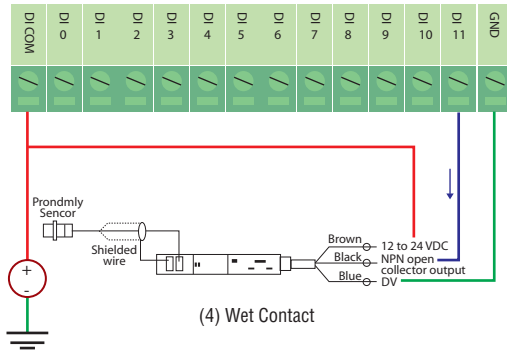
(1) Dry Contact

Digital Output



(2) Digital Output

Digital Input (Wet Contact)



(4) Wet Contact

Ordering Information

ioLogik R2210: RS-485 remote I/O server with 12 digital inputs and 8 digital outputs

LDP1602: LCD module with 16 x 2 text and 5 button

