

# ioLogik R2110

**RS-485 remote I/O with 12 digital inputs and 8 digital outputs**



- > 12-channel 24 VDC digital inputs with DI Event Counter mode, and software selectable filtering time
- > 8-channel 24 VDC digital outputs with pulse output mode and software selectable pulse width
- > LED indicators for all I/O channels
- > Over-temperature protection (up to 175°C)
- > Over-current protection (400-mA/channel)
- > Easy-to-use, quick programming library for VB, VC++, BCB, .NET
- > Firmware upgradable over RS-485



## Specifications

### Serial Communication

**Interface:** RS-485-2w: 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

**Baudrate:** 1200 to 115200 bps

**Protocol:** Modbus/RTU

### Digital Input

**Channels:** 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 per COM

**Isolation:** 3K VDC or 2K Vrms

### Digital Output

**Channels:** 8, sink type, 36 VDC, 200 mA

**I/O Mode:** DO or Pulse Output (up to 50 Hz)

**Output Current Rating:** Max. 200 mA per channel

**Isolation:** 3K VDC or 2K Vrms

**Output Frequency:** 50 Hz

### Power Requirements

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

**Power Consumption:** 282 mA typical @ 24 VDC

### Physical Characteristics

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

**Dimensions:** 115 x 79 x 45.63 mm (4.53 x 3.11 x 1.8 in)

**Weight:** 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

**Shock:** IEC 60068-2-27

**Freefall:** IEC 60068-2-32

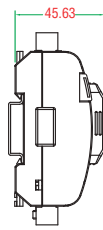
**Vibration:** IEC 60068-2-6

### Warranty

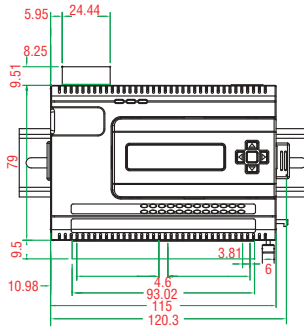
**Warranty Period:** 2 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

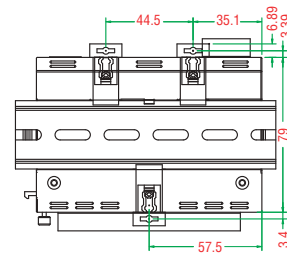
## Dimensions (unit = mm)



Side View



Front View



Rear View

## Pin Assignment

### 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

## Ordering Information

**ioLogik R2110:** RS-485 remote I/O with 12 digital inputs and 8 digital outputs

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