

RIO-2010

Modbus/TCP Remote Digital I/O module



- ✚ 16x opto-isolated digital inputs
- ✚ 8x relay outputs
- ✚ 3x Maxim 1-Wire interface
- ✚ One 10/100Mbps Ethernet interface
- ✚ One isolated RS-485 interface
- ✚ Supports Modbus/TCP, Modbus RTU/ASCII
- ✚ Ready-to-use Web-based control & monitor
- ✚ DIN-rail mount

Hardware Specifications

Network Interface

Type: 1x 10/100Mbps, RJ-45 connector

Protection: 1.5KV magnetic isolation

RS-485 interface

Isolation protection: 2500Vrms

Direction control: auto, by hardware

Connector: terminal block

Baud Rate: 1200 to 460800 bps

Parity: None, Even, Odd, Mark, Space

Data Bits: 5, 6, 7, 8

Stop Bit: 1, 1.5, 2

Digital Inputs

Channels: 16

Isolation protection: 2500Vrms

Logical high: 5~24Vdc

Logical low: 0~1.5Vdc

LED indicators: yes

Relay Outputs

Channels: 8

Contact rating: 30VDC@1A or 125VAC@0.5A

LED indicators: yes

Maxim 1-Wire Interface

Channels: 3,

Connector: 3-pin header (VDD, DQ, GND)

General

CPU: 32-bit, M3 series

Power input: 9~48VDC

Dimensions(WxHxD): 182x 118x 35.82mm

Operation temperature: 0~70°C

Access Control Guidelines

Default Access Ports:

- ✧ **Modbus/TCP port:** 502
- ✧ **Telnet Console port:** 5001
- ✧ **Http port:** 5003

Access through Modbus Protocols

- ✧ Modbus/TCP via LAN interface
- ✧ Modbus/ASCII, Modbus/RTU via RS-485 interface

Supported Modbus Functions

- ✧ Function code 01(0x01): Read Coils
- ✧ Function code 02(0x02): Read Discrete Input
- ✧ Function code 03(0x03): Read Holding Registers
- ✧ Function code 05(0x05): Write Single Coil
- ✧ Function code 15(0x0F): Write Multiple Coils

Access through Http GET/POST Protocols

- ✧ Refer to user's manual for detailed info.



- ✓ AJAX-enabled demo page for up-and-running Web-based monitoring and controls
- ✓ Source code included on CD
- ✓ Customized page can be uploaded to the RIO-2010

Access through Telnet/Serial Console

- ✧ Commands: Artila's proprietary commands
- ✧ Support getter and setter commands
- ✧ Refer to user's manual for detailed info.

Windows Utility Functionalities

- ✧ Broadcast search
- ✧ Configuration
- ✧ User Web page conversion