

DMU-5010

12-ch DI/O, 4-ch AI, 4-ch
RTD Modbus TCP Module

NEW



Features

- Ethernet-based I/O
- Mixed I/O in single module
- Active I/O message by data stream
- Industrial Modbus/TCP protocol
- Easily update firmware through Ethernet
- Support burn-out detection
- Support Ethernet Daisy Chain
- Wide operating temperature range
- High anti-interference performance

Introduction

DMU-5010 is an Ethernet I/O module that supports Modbus TCP protocol and Ethernet daisy chain. DMU-5010 delivers various onboard I/Os including analog input, digital input, and digital output, providing flexible options to satisfy versatile application requirements. With high anti-interference performance, DMU-5010 is suitable for harsh environment applications. You can easily configure the module by the Advantech Domain Focused Configuration Tool.

Specifications

General

- **Enclosure** SECC
- **Mounting** DIN-rail, Wallmount
- **Dimensions (WxHxD)** 43 x 125 x 105 mm (1.69" x 4.92" x 4.13")
- **LAN** 10/100Base-T
- **Connector** 1x40 Plug-in screw terminal block (#14-22 AWG)(Power and I/O)
2 x RJ-45(LAN)
- **Watchdog** System (1.6 second) and Communication (programmable)
- **Supported Protocols** Modbus/TCP
- **Power Input** Unregulated 10-30V_{DC} w/power reversal protection
- **Power Consumption** 7.2W@ 24V_{DC}

Analog Input

- **Channels** 8
- **Input Type** mV, V, mA(Ch0-Ch3), mV, V, mA, RTD(Ch4-Ch7)
- **Input Range** 0-5V, 0-10V, 0-15V, $\pm 5V$, $\pm 10V$, $\pm 15V$, $\pm 20mA$, 0-20mA, 4-20mA
- **RTD Types & Temp Range** Pt 100 (2-wire and 3-wire):
-50 ~150°C
0 ~ 100°C
0 ~ 200°C
0 ~ 400°C
-200 ~ 200°C
IEC RTD 100 ohms (± 0.0385)
JIS RTD 100 ohms (± 0.0392)
Pt-1000(2-wire and 3-wire): -40°C ~160°C
Voltage: >10M Ω ; Current: 120 μA
- **Input Impedance** $\pm 0.1\%$, (voltage); $\pm 0.2\%$ (current); $\pm 0.2^\circ C$ (RTD) or better
- **Accuracy** ± 68 ppm/ $^\circ C$
 ± 6 $\mu V/^\circ C$
- **Span Drift** 16-bit
- **Resolution** 10 samples/second
- **Sampling Rate** 4-20mA and RTD
- **Burn-out Detection**

- **Protection** 50/60 Hz Noise rejection
2,500 V_{DC} Isolation
 $\pm 30V_{DC}$ Overvoltage

Digital Input /Output

- **Channels:** 8-ch DI
4-ch DI/DO shared (DI00-DI03 can be set as DI/DO by Utility)

Digital Input

- **Input Level** Dry contact: Logic level 0 (Off): open
Logic level 1 (On): close to GND
Wet contact: Logic level 0 (Off): +10V to +30V
Logic level 1(On): +3V max
Note: The Digital Input Level 0 and 1 status can be inverted by utility

- **Supports 200Hz Frequency/counter input** 2 channels max
Counter (32 bit) 200Hz
Frequency 0.1Hz~200Hz

- **Supports Digital Noise filter**
- **Isolation Protection** 2500V_{DC}

Digital Output

- **Output** Open Collector to 30V
30mA max load.
- **Power Dissipation** 300mW for each channel
- **PWM Period** 2ms~3600sec
- **PWM Minimum Duty On** 0.2ms
- **Isolation Protection** 2500 V_{DC}

Environment

- **Humidity** 5-95% RH
- **Operation Temperature** -20 ~ 70°C (-4 ~ 158°F)
- **Storage Temperature** -30 ~ 80°C (-22 ~ 176°F)

Ordering Information

- **DMU-5010-AE** 8-ch DI, 4-ch DO, 8-ch AI, 4-ch RTD Modbus TCP Module