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

RoHS COMPLIANT 2002/95/EC CE FCC

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** Unregulated10-30V_{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, ±5V, ±10V, ±15V, ±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
- **Input Impedance** Voltage: >10MΩ; Current:120Ω
- **Accuracy** ±0.1%, (voltage); ±0.2% (current); ±0.2°C (RTD) or better
- **Span Drift** ±68 ppm/°C (Voltage)
- **Zero Drift** ±6 μV/°C (Voltage)
- **Resolution** 16-bit
- **Sampling Rate** 10 samples/second
- **Burn-out Detection** 4~20mA and RTD
- **Protection** 50/60 Hz Noise rejection
  2,500 V_{DC} Isolation
  ±30V_{DC} Overvoltage

Digital Input /Output

- **Channels:** 8-ch DI
  4-ch DI/DO shared (DIO0~DIO3 can be set as DI/DO by Utillity)

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** 2500 V_{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

- **Storage 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

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