

# DMU-3010

## 8-ch AI, 8-ch DI, 4-ch DO Ethernet I/O Module



RoHS  
COMPLIANT  
2002/95/EC

CE FCC

### Features

- Industrial Modbus/TCP protocol
- Mixed I/O in the Module
- Advantech Domain Focused Configuration Tool
- Remote maintenance through Ethernet
- Supports online device auto-scan or manual configure function
- Auto push data to specification target function
- Supports High/Low Alarm function
- Supports cable burn-out check
- Supports pulse/ accumulator input

### Introduction

The DMU-3010 is an Ethernet I/O module that supports the Modbus TCP protocol, and delivers various onboard I/Os including analog input, digital input, and digital output, providing flexible options to satisfy versatile application requirements. It also features the powerful Advantech Domain Focused Configuration Tool for engineers to quickly develop their applications.

### Specifications

#### General

- **Dimensions (W x H x D)** 120 x 120 x 44 mm (4.72" x 4.72" x 1.73")
- **LAN** 10/100Base-T
- **Connector** 1 x RJ-45 (LAN)  
4 x Plug-in screw terminal block (I/O & Power)
- **Watchdog** System (1.6 sec)
- **Supported Protocols** Modbus/TCP
- **Power Input** 10 ~ 30 V<sub>DC</sub>
- **Power Consumption** 3 W @ 24 V<sub>DC</sub>

#### Analog Input

- **Channels** 8
- **Input Type** V, mA\*1, RTD\*2
- **Voltage Range** 0 ~ 10 V
- **Current Range** 0 ~ 20 mA, 4 ~ 20 mA
- **RTD Type**
  - Pt 100 (3-wire): -50 ~ 150°C  
0 ~ 100°C  
0 ~ 200°C  
0 ~ 400°C  
-50 ~ 200°C
  - Pt 1000 (3-wire): -40 ~ 160°C
  - IEC RTD 100 ohms (=0.0385)
  - JIS RTD 100 ohms (=0.0392)
- **Input Impedance** 2 MΩ (voltage)
- **Accuracy** ±0.1%, (voltage); ±0.2% (current); ±0.5°C (RTD); or Better
- **Span Drift** ±25 ppm/°C
- **Zero Drift** ±6 μV/°C
- **Resolution** 16-bit
- **Sampling Rate** 10 samples/second
- **CMR @ 50/60 Hz** 90 dB
- **NMR @ 50/60 Hz** 60 dB
- **Over Voltage Protection** ±35 V<sub>DC</sub>

#### Built-in TVS/ESD Protection

- **Isolation Protection** 2500 V<sub>DC</sub>  
Channels 0~7 support V, mA  
Channel 4~7 also support RTD input

#### Digital Input

- **Channels** 8
- **Dry Contact** Logic level 0: Open  
Logic level 1: Close to Ground
- **Supports 200 Hz pulse/accumulator input**
- **Isolation Protection** 2500 V<sub>DC</sub>

#### Digital Output

- **Channels** 4  
Open Collector to 30V  
30mA max load.
- **Power Dissipation** 300 mW for each channel
- **PWM Period** 20 ms ~ 3600 sec
- **PWM Minimum Duty On** 2 ms
- **Isolation Protection** 2500 V<sub>DC</sub>

#### Environment

- **Humidity** 5 ~ 95% RH
- **Operation Temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage Temperature** -40 ~ 70°C (-40 ~ 158°F)

### Ordering Information

- **DMU-3010-AE** 8-ch AI, 8-ch DI, 4-ch DO Ethernet IO Module