ADAM-4053

16-ch Digital Input Module

ADAM-4055

16-ch Isolated Digital I/O Module with Modbus

ADAM-4080

2-ch Counter/Frequency Module

ADAM-4053

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ADAM-4080

Specifications

General

- **Connectors** — 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- **Power Consumption** — 0.4 W @ 24 V DC typ. / 0.7 W @ 24 V DC max.
- **Watchdog Timer** — System (1.6 second)
- **Supported Protocols** — ASCII command and Modbus/RTU

Digital Input

- **Channels** — 16
- **Input Level**

  Dry contact:
  - Logic level 0: Closed to GND
  - Logic level 1: Open

  Wet contact:
  - Logic level 0: 2 V
  - Logic level 1: 4 ~ 30 V or floating
  - Support DO type: Sink (NPN) only

- **Effective Distance** — 500 m max. (dry contact only)

Specifications

General

- **Connectors** — 2 x plug-in terminal blocks (#14 ~ 28 AWG)
- **Power Consumption** — 1 W @ 24 V DC typ. / 1.7 W @ 24 V DC max.
- **Watchdog Timer** — System (1.6 second) & Communication
- **Supported Protocols** — ASCII command and Modbus/RTU
- **Isolation Voltage** — 2,500 V_{DC}
- **LED Indicators** — Yes

Digital Input

- **Channels** — 8 / Dry/Wet Contact decided by switch or jumper
- **Input Level**

  Dry Contact:
  - Logic level 0: Open
  - Logic level 1: Closed to GND

  Wet Contact:
  - Logic level 0: 0 ~ 3 V max. or floating
  - Logic level 1: 10 ~ 50 V
  - Support DO type: Sink (NPN) and Source (PNP)

- **Overvoltage Protection** — 70 V_{DC}

Digital Output

- **Channels** — 8, open collector to 40 V (200 mA max. load)
- **Power Dissipation** — Channel: 1 W max. / Total: 2.2 W (8 Channels)

Specifications

General

- **Connectors** — 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- **Power Consumption** — 2.0 W @ 24 V_{DC}
- **Watchdog Timer** — System (1.6 second)
- **Supported Protocols** — ASCII command
- **LED Indicators** — 5-digit readout, Ch 0 or Ch 1 (programmable)

Counter Input

- **Channels** — 2 independent counters (32-bit + 1-bit overflow)
- **Input Frequency** — 50 kHz max.
- **Input Pulse Width** — >10 μs.
- **Input Mode** — Isolated or non-isolated
- **Isolated Input Level** — Logic level 0: 1 V max. / Logic level 1: 3.5~30 V
- **Isolation Voltage** — 2,500 V_{RMS}
- **Non-isolated Input Level** — Programmable threshold: Logic level 0: 0.8 Vmax. / Logic level 1: 2.4 ~ 5.0 V
- **Maximum Count** — 4,294,967,295 (32 bits)
- **Preset Type** — Absolute or relative
- **Programmable Digital Noise Filter** — 2 μs ~ 65 ms
- **Alarm** — Alarm comparators on each counter
- **Frequency Measurement Range** — 5 Hz ~ 50 kHz
- **Programmable Built-in Gate Time** — 1 or 0.1 second

Digital Output

- **Channels** — 2, open collector to 30 V, 30 mA max. load
- **Power Dissipation** — 300 mW for each channel

Common Specifications

General

- **Power Input** — Unregulated 10 ~ 30 V_{DC}

Environment

- **Humidity** — 5 ~ 95% RH
- **Operating Temperature** — -10 ~ 70°C (14 ~ 158° F)
- **Storage Temperature** — -25 ~ 85°C (-13 ~ 185° F)

Ordering Information

- **ADAM-4053** — 16-ch Digital Input Module
- **ADAM-4055** — 16-ch Isolated Digital I/O Module with Modbus
- **ADAM-4080** — 2-ch Counter/ Frequency Modules

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