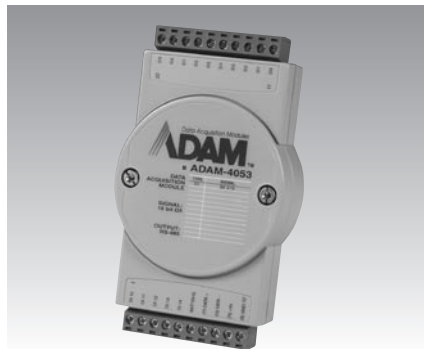


ADAM-4053 ADAM-4055 ADAM-4080

16-ch Digital Input Module

16-ch Isolated Digital I/O Module with Modbus

2-ch Counter/Frequency Module



ADAM-4053



ADAM-4055



ADAM-4080



Specifications

General

- **Connectors** 2 x Plug-in terminal blocks (#14 ~ 22 AWG)
- **Power Consumption** 1 W @ 24 V_{DC}
- **Watchdog Timer** System (1.6 second)
- **Supported Protocols** ASCII command

Digital Input

- **Channels** 16
- **Input Level**
Dry contact: Logic level 0: close to GND
Logic level 1: open
Wet contact: Logic level 0: +2 V max.
Logic level 1: +4 ~ 30 V
- **Effective Distance (dry contact only)** 500 m max.

Specifications

General

- **Connectors** 2 x Plug-in terminal blocks (#14 ~ 28 AWG)
- **Power Consumption** 1 W @ 24 V_{DC}
- **Watchdog Timer** System (1.6 second) & Communication
- **Supported Protocols** ASCII command and Modbus/RTU

- **Isolation Voltage** 2500 V_{DC}
- **LED Indicators** Yes

Digital Input

- **Channels** 8
- **Input Level**
Dry Contact: Logic level 0: open
Logic level 1: close to GND
Wet Contact: Logic level 0: +3 V_{max}
Logic level 1: +10 ~ 50 V
(Note: Digital Input levels 0 and 1 can be inverted)
- **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 block (#14 ~ 22 AWG)
- **Power Consumption** 2.0 W @ 24 V_{DC}
- **Power Input** Unregulated 10 ~ 30 V_{DC}
- **Humidity** 5 ~ 95% RH
- **Operating Temperature** -10 ~ 70° C (14 ~ 158° F)
- **Storage Temperature** -25 ~ 85° C (-13 ~ 185° F)
- **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) 50 kHz max.
- **Input Frequency** >10 μs.
- **Input Pulse Width** Isolated or non-isolated
- **Input Mode** Logic level 0: +1 V max.
Logic level 1: 3.5~30 V
- **Isolated Input Level** 2500 V_{RMS}
- **Isolation Voltage** Programmable threshold:
Logic level 0: +0.8 V_{max}.
Logic level 1: 2.4 ~ 5.0 V
- **Non-isolated Input Level** 4,294,967,295 (32 bits)
- **Maximum Count** Absolute or relative
- **Preset Type** 2 μs ~ 65 ms
- **Programmable Digital Noise Filter**
- **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** 30 V, 30 mA max. load
- **Power Dissipation** 300 mW for each channel

Common Specifications

- **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