

# ADAM-4055

# ADAM-4056S/4056SO

# ADAM-4080

16-ch Isolated Digital I/O Module with Modbus

12-ch Sink/Source Type Isolated Digital Output Modules with Modbus

2-ch Counter/Frequency Module



ADAM-4055



ADAM-4056S/4056SO



ADAM-4080



## Specifications

### General

- Connectors 2 x plug-in terminal blocks (#14 ~ 28 AWG)
- Power Consumption 1 W @ 24 V<sub>DC</sub>
- Watchdog Timer System (1.6 second) & Communication
- Supported Protocols ASCII command and Modbus/RTU
- Isolation Voltage 2,500 V<sub>DC</sub>
- 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
- Overvoltage Protection 70 V<sub>DC</sub>

### 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)

## Common Specifications

### General

- Power Input Unregulated 10 ~ 30 V<sub>DC</sub>

### Environment

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

## Specifications

### General

- Connectors 2 x Plug-in terminal blocks (#14~22 AWG)
- Watchdog Timer System (1.6 second) & Communication
- Support Protocol ASCII command and Modbus/RTU
- Isolation Voltage 5000 V<sub>DC</sub>
- LED Indicators Yes

### ADAM-4056S

- Digital Output Channels 12
- Open collector to 40V (200mA max. load)
- Power Dissipation Channel: 1 W max
- Total: 4 W (12 Channels)
- Digital Output Type Sink

### ADAM-4056SO

- Digital Output Channels 12
- VCC: 10 ~ 35 V<sub>DC</sub>
- Current: 1A (per channel)
- Digital Output Type Source
- Over Current Detection and Protection

## Ordering Information

- ADAM-4055 16-ch Isolated Digital I/O Module with Modbus
- ADAM-4056S 12-ch Sink Type Isolated Digital Output Module with Modbus
- ADAM-4056SO 12-ch Source Type Isolated Digital Output Module with Modbus
- ADAM-4080 2-ch Counter/Frequency Modules

## Specifications

### General

- Connectors 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- Power Consumption 2.0 W @ 24 V<sub>DC</sub>
- Watchdog Timer System (1.6 second)
- Supported Protocols ASCII command

### Counter Input

- Channels 2 independent counters (32-bit + 1-bit overflow)
- Input Frequency 50 kHz max.
- Input Pulse Width >10  $\mu$ s.
- 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<sub>RMS</sub>
- 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-bit)
- Preset Type Absolute or relative
- Programmable Digital Noise Filter 2  $\mu$ s ~ 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