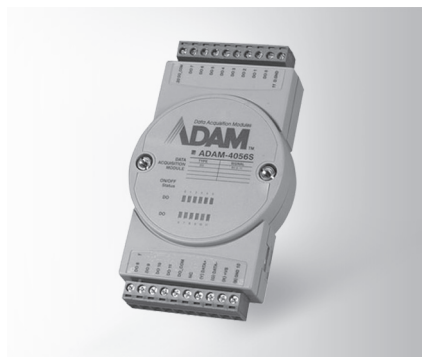# ADAM-4055
ADAM-4056S/4056SO
ADAM-4080

16-ch Isolated Digital I/O Module with Modbus

12-ch Sink/Source Type Isolated Digital Output Modules with Modbus
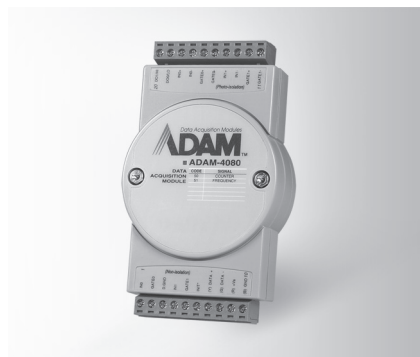
2-ch Counter/Frequency Module

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_{DC}
- **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
- **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_{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)
- **Watchdog Timer** — System (1.6 second) & Communication
- **Support Protocol** — ASCII command and Modbus/RTU
- **Isolation Voltage** — 5000 V_{DC}
- **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_{DC} / Current: 1A (per channel)
- **Digital Output Type** — Source
- **Over Current Detection and Protection**

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 modbus/ RTU (E version)

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-bit)
- **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

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

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

All product specifications are subject to change without notice.

Last updated: 27-Jun-2018