

ADAM-4017/4017+ ADAM-4018/4018+ ADAM-4019+

8-channel Analog Input Modules with Modbus®

8-channel Thermocouple Input Module with Modbus®

8-channel Universal Analog Input Module with Modbus®



ADAM-4017/4017+



ADAM-4018/4018+



ADAM-4019+



Specifications

General

- Power Consumption 1.2 W @ 24 V_{DC}

Analog Input

- Channels Six differential, two single-ended (4017) eight differential (4017+)
- Ch. Independent Conf. ADAM-4017+ only
- Input Impedance Voltage: 20 MΩ Current: 120 Ω
- Input Type mV, V, mA
- Input Range ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 4~20mA (4017+ only)
- Modbus® ADAM-4017+ only
- Overvoltage Protection ±35 V
- Sampling Rate 10 samples/sec. (total)
- Span Drift ±25 ppm/° C
- TVS/ESD Protection Built-in
- Zero Drift ±6 μV/° C

Specifications

General

- Power Consumption 0.8 W @ 24 V_{DC}
- T/C-Burnout Detector Yes (4018+ only)

Analog Input

- Channels Six differential, two single-ended (4018) eight differential (4018+)
 - Ch. Independent Conf. ADAM-4018+ only
 - Input Impedance Voltage: 20 MΩ Current: 120 Ω
 - Input Range ±15 mV, ±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V, ±20 mA (4018+)
 - Input Types Thermocouple, mV, V, mA (4018) (4018+ Supports T/C & 4~20 mA only)
 - Modbus® ADAM-4018+ only
 - Overvoltage Protection ±35 V
 - Sampling Rate 10 samples/sec. (total)
 - Span Drift ±25 ppm/° C
 - T/C Type and Temperature Ranges
- | | | | |
|---|---------------|---|---------------|
| J | 0 ~ 760° C | R | 500 ~ 1750° C |
| K | 0 ~ 1370° C | S | 500 ~ 1750° C |
| T | -100 ~ 400° C | B | 500 ~ 1800° C |
| E | 0 ~ 1000° C | | |
- TVS/ESD Protection Built-in
 - Zero Drift ±6 μV/° C

Specifications

General

- Power Consumption 1.0 W @ 24 V_{DC}

Analog Input

- Accuracy ±0.1% of voltage input
 - Bandwidth 13.1 Hz @ 50 Hz, 15.72 Hz @ 60 Hz
 - Burn-out Detection +4~20mA & all T/C
 - Channels 8 differential channels for individual input type 92 dB min.
 - CMR @ 50/60 Hz
 - Resolution 16 bits
 - Input Range +/-1V, +/-2.5V, +/-5V, +/-10V, +/- 100mV, +/-500mV, +/-20mA, +4~20mA
 - Input Impedance Voltage: 20 MΩ Current: 120 Ω
 - Input Type T/C, mV, V, mA
 - Isolation Protection 3000 V_{DC}
 - Overvoltage Protection ±35 V
 - T/C Type and Temperature Range
- | | |
|---|---------------|
| J | 0 ~ 760° C |
| K | 0 ~ 1370° C |
| T | -100 ~ 400° C |
| E | 0 ~ 1000° C |
| R | 500 ~ 1750° C |
| S | 500 ~ 1750° C |
| B | 500 ~ 1800° C |
- Span Drift ±25 ppm/°C
 - Zero Drift ±6 μV/°C

Common Specification

General

- Dimensions 70 x 122 x 30 mm
- Connectors 2 x Plug-in terminal block (#14~22 AWG)
- Enclosure ABS+PC
- Mounting DIN 35 rail, stack, wall
- Power Input Unregulated 10~30 V_{DC}
- Watchdog Timer 1.6 sec. (system)

Environment

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

Ordering Information

- ADAM-4017 8-channel Analog Input Module
- ADAM-4017+ 8-channel Differential Analog Input Module w/Modbus®
- ADAM-4018 8-channel Thermocouple, mV, V, mA Input Module
- ADAM-4018+ 8-channel Differential, mA and Thermocouple Input Module w/Modbus®
- ADAM-4019+ 8-channel Universal Analog Input Module w/Modbus®

ADAM 4000/4100 Series

Common Specifications

Communication

- RS-485 (2-wire) to host
- Speeds: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps (ADAM-4080, ADAM-4080D only support up to 38400 bps)
- Max. communication distance: 4000 feet (1.2 km)
- Power and communication LED indicator
- ASCII command/response protocol
- Communication error checking with checksum
- Asynchronous data format:
 - Advantech protocol: 1 start bit, 8 data bits, 1 stop bit, no parity
 - Modbus protocol: 1 start bit, 8 data bits, 1 or 2 stop bit, parity check (none, odd, even) (ADAM-4100 series only)
- Up to 256 multidrop modules per serial port
- Online module insertion and removal
- Transient suppression on RS-485 communication lines

Dimensions

