ADAM-4017/4017+
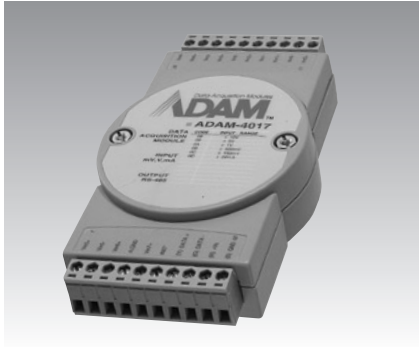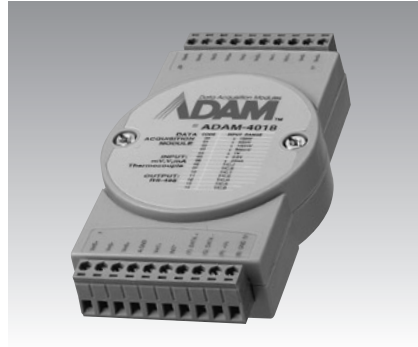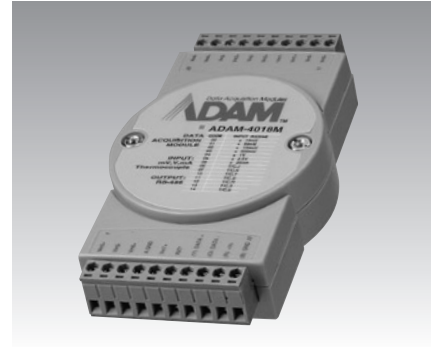# ADAM-4018/4018+
ADAM-4018M

8-channel Analog Input Module with Modbus

8-channel Thermocouple Input Module with Modbus

8-channel Analog Input Data Logger

ADAM-4017/4017+ CE

ADAM-4018/4018+ CE

ADAM-4018M CE FM

Specifications

Analog Input

- **Effective Resolution** — 16-bit
- **Channels** — Six differential, two single-ended (4017) eight differential (4017+)
- **Channel Independent Configuration** — ADAM-4017+ only
- **Modbus** — ADAM-4017+ only
- **Input Type** — mV, V, mA
- **Input Range** — ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 4~20mA (4017+ only)
- **Isolation Voltage** — 3000 V_{DC}
- **Fault and Overvoltage Protection** — Withstands overvoltage up to ±35 V
- **Sampling Rate** — 10 samples/sec. (total)
- **Input Impedance** — 20 MΩ
- **Bandwidth** — 13.1 Hz @ 50 Hz, 15.72 Hz @ 60 Hz
- **Accuracy** — ±0.1% or better
- **Zero Drift** — ±6 mV/° C
- **Span Drift** — ±25 ppm/° C
- **CMR @ 50/60 Hz** — 92 dB min.

Built-in Watchdog Timer

- **Power Requirements** — Unregulated +10 ~ +30 V_{DC}
- **Power Consumption** — 1.2 W @ 24 V_{DC}
- **Built-in TVS/ESD Protection**

Ordering Information

- **ADAM-4017-D2** — 8-channel Analog Input Module
- **ADAM-4017+** — 8-channel Differential Analog Input Module w/Modbus

Specifications

Analog Input

- **Effective Resolution** — 16-bit
- **Channels** — Six differential, two single-ended (4018) eight differential (4018+)
- **Ch. Independent Conf.** — ADAM-4018+ only
- **Modbus** — ADAM-4018+ only
- **Input Type** — Thermocouple, mV, V, mA (4018) (4018+ Supports T/C & 4~20 mA only)
- **Input Range** — ±15 mV, ±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V, ±20 mA (4018); 4~20 mA (4018+)

- **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		

- **Isolation Voltage** — 3000 V_{DC}
- **Fault and Overvoltage Protection** — Resists overvoltage up to ±35 V
- **Sampling Rate** — 10 samples/sec. (total)
- **Input Impedance** — 20 MΩ
- **Bandwidth** — 13.1 Hz @ 50 Hz, 15.72 Hz @ 60 Hz
- **Accuracy** — ±0.1% for voltage input
- **Zero Drift** — ±3 mV/° C
- **Span Drift** — ±25 ppm/° C
- **CMR @ 50/60 Hz** — 92 dB min.

Built-in Watchdog Timer and Individual wire burned-out detection (4018+ only)

- **Power Requirements** — Unregulated +10 ~ +30 V_{DC}
- **Power Consumption** — 0.8 W @ 24 V_{DC}
- **Built-in TVS/ESD Protection**

Ordering Information

- **ADAM-4018-D2** — 8-ch. Th.couple Input Module
- **ADAM-4018+** — 8-ch. Differential, mA and Thermocouple Input Module w/Modbus

Specifications

Analog Input

- **Effective Resolution** — 16-bit
- **Channels** — Six differential, two single-ended
- **Input Type** — Thermocouple, mV, V, mA
- **Input Range** — ±15 mV, ±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V, ±20 mA

- **T/C Type and Temperature Range**

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		

- **Isolation Voltage** — 3000 V_{DC}
- **Sampling Rate** — 10 samples/sec. (total)
- **Input Impedance** — 1.8 MΩ
- **Bandwidth** — 13.1 Hz @ 50 Hz, 15.72 Hz @ 60 Hz
- **Accuracy** — ±0.1% for voltage input
- **Zero Drift** — ±3 mV/° C
- **Span Drift** — ±25 ppm/° C
- **CMR @ 50/60 Hz** — 92 dB min.

Storage

- **Capacity (128 KB flash memory)** — 38,000 samples (total)
- **Storage Mode** — Write to end of memory & cyclic
- **Logging Mode** — Internal log or event log (high/low)
- **Sampling Interval** — 2 secs. ~ 18 hours

Built-in Watchdog Timer

- **Power Requirements** — Unregulated +10 ~ +30 V_{DC}
- **Power Consumption** — 1.8 W @ 24 V_{DC}

Ordering Information

- **ADAM-4018M** — 8-channel Analog Input Data logger — mV, V, mA, or thermocouple