

# ADAM-5018

# ADAM-5018P

# ADAM-5024

## 7-channel Thermocouple Input Module

## 7-channel Thermocouple Input Module with Independent Input Range

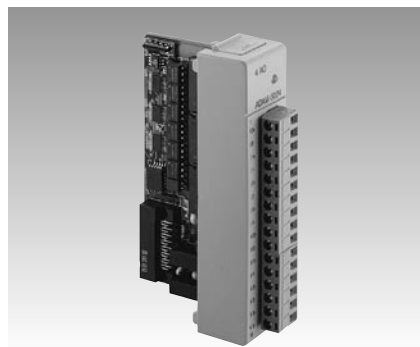
## 4-channel Analog Output Module



ADAM-5018



ADAM-5018P



ADAM-5024



### Specifications

#### General

- **Certifications** CE, FM
- **Connectors** 1 x Plug-in screw terminal (# 14-22 AWG)
- **Power Consumption** 0.5 W (typical)  
0.63 W (max.)

#### Thermocouple Input

- **Accuracy**  $\pm 0.1\%$  or better
- **Bandwidth** 13.1 Hz @ 50 Hz  
15.72 Hz @ 60 Hz
- **Channels** 7 differential
- **CMR @ 50/60 Hz** 92 dB min
- **Input Impedance** 2 M $\Omega$
- **Input Range**  $\pm 15$  mV,  $\pm 50$  mV,  $\pm 100$  mV,  $\pm 500$  mV,  
 $\pm 1$  V,  $\pm 2.5$  V,  $\pm 20$  mA
- **Input Type** mV, V, mA, thermocouple
- **Resolution** 16-bit
- **Sampling Rate** 10 samples/sec. (total)
- **Span Drift**  $\pm 25$  PPM/ $^{\circ}$ C
- **T/C Type and Temperature Range**

J	0 $^{\circ}$	~	760 $^{\circ}$ C
K	0 $^{\circ}$	~	1370 $^{\circ}$ C
T	-100 $^{\circ}$	~	400 $^{\circ}$ C
E	0 $^{\circ}$	~	1000 $^{\circ}$ C
R	500 $^{\circ}$	~	1750 $^{\circ}$ C
S	500 $^{\circ}$	~	1750 $^{\circ}$ C
B	500 $^{\circ}$	~	1800 $^{\circ}$ C
- **Zero Drift**  $\pm 0.3$   $\mu$ V/ $^{\circ}$ C

#### Protection

- **Fault and Overvoltage Protection** Withstands overvoltage  
Up to  $\pm 35$  V
- **Isolation Voltage** 3,000 V<sub>DC</sub>

### Ordering Information

- **ADAM-5018** 7-channel Thermocouple Input Module

### Specifications

#### General

- **Certifications** CE
- **Connectors** 1 x Plug-in screw terminal (# 14-22 AWG)
- **Power Consumption** 0.5 W (typical)  
0.63 W (max.)

#### Thermocouple Input

- **Accuracy Bandwidth**  $\pm 0.1\%$  or better  
13.1 Hz @ 50 Hz  
15.72 Hz @ 60 Hz
- **Channels** 7 differential with Independent Input Range
- **CMR @ 50/60 Hz** 92 dB min
- **Input Impedance** 2 M $\Omega$
- **Input Range and Types**

Thermocouple			
J	0	~	760 $^{\circ}$ C
K	0	~	1370 $^{\circ}$ C
T	-100	~	400 $^{\circ}$ C
E	0	~	1000 $^{\circ}$ C
R	500	~	1750 $^{\circ}$ C
S	500	~	1750 $^{\circ}$ C
B	500	~	1800 $^{\circ}$ C
- **Current mode**  $\pm 20$  mA, 4-20 mA
- **Voltage**  $\pm 15$  mV,  $\pm 50$  mV,  
 $\pm 100$  mV,  $\pm 500$  mV  
 $\pm 1$  V,  $\pm 2.5$  V
- **Resolution** 16-bit
- **Sampling Rate** 10 samples/sec. (total)
- **Span Drift**  $\pm 25$  PPM/ $^{\circ}$ C
- **Zero Drift**  $\pm 0.3$   $\mu$ V/ $^{\circ}$ C

#### Protection

- **Fault and Overvoltage Protection** Withstands over voltage  
Up to  $\pm 35$  V
- **Isolation Voltage** 3,000 V<sub>DC</sub>
- **Filter function** Yes
- **Built-in Dual Watchdog Timer**
- **Built-in TVS/ESD Protection**

### Ordering Information

- **ADAM-5018P** 7-channel Thermocouple Input Module with Independent Input Range

### Specifications

#### General

- **Certifications** CE, FM
- **Connectors** 1 x Plug-in screw terminal (# 14-22 AWG)
- **Power Consumption** 1.4 W (typical)  
2.9 W (max.)

#### Analog Output

- **Accuracy**  $\pm 0.1\%$  of FSR for current output  
 $\pm 0.2\%$  of FSR for voltage output
- **Channels** 4
- **Current Load Resistor** 0 ~ 500  $\Omega$  (source)
- **Output Type** mA, V
- **Output Range** 0 ~ 20 mA, 4 ~ 20 mA,  
0 ~ 10 V
- **Programmable Output Slope** 0.125 ~ 128.0 mA/sec.
- **Resolution** 12-bit
- **Resolution**  $\pm 0.015\%$  of FSR
- **Span Temperature Coefficient**  $\pm 25$  PPM/ $^{\circ}$ C
- **Zero Drift** Voltage:  $\pm 30$   $\mu$ V/ $^{\circ}$ C  
Current:  $\pm 0.2$   $\mu$ V/ $^{\circ}$ C

#### Protection

- **Isolation Voltage** 3,000 V<sub>DC</sub>

### Ordering Information

- **ADAM-5024** 4-channel Analog Output Module