

# ADAM-5017UH

# ADAM-5018

# ADAM-5018P

## 8-ch Ultra High Speed Analog Input Module

## 7-ch Thermocouple Input Module

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



ADAM-5017UH



ADAM-5018



ADAM-5018P



### Specifications

#### General

- **Certifications** CE
- **Connectors** 1 x Plug-in screw terminal (# 14 ~ 22 AWG)
- **Enclosure** ABS+PC
- **Power Consumption** 2.2 W (max.)

#### Analog Input

- **Accuracy**  $\pm 0.1\%$  or better
- **Bandwidth** 200 kHz
- **Channels** 8 differential
- **Differential Non-linear**  $\pm 1$  LSB
- **Input Impedance** Voltage: 2 M $\Omega$   
Current: 120  $\Omega$   
(Build-in 12  $\Omega$ . register for Current Input)
- **Integral Non-linear**  $\pm 1$  LSB
- **Input Range**  $\pm 10$  V,  $+0 \sim 10$  V,  
 $0 \sim 20$  mA,  $+4 \sim 20$  mA
- **Low pass filter** Configured by User
- **Resolution** 12-bit
- **Sampling Rate** Depends on base unit  
ADAM-5000/485 & 5000E:  
100 Samples/sec max (Total): one ADAM-5017UH installed  
ADAM-5000/TCP:  
100 Samples/sec max (Total) :one ADAM-5017UH installed  
ADAM-5510 :  
200K Samples/sec max (Single Channel): one ADAM-5017UH installed  
ADAM-5550 :  
1K Samples/sec per channel: one ADAM-5017UH installed  
\*Depending on the performance of client server or controller
- **Signal Input Bandwidth** 200 kHz for both voltage and current inputs

#### Protection

- **Isolation Voltage** 3,000 V<sub>DC</sub>
- Note:**  
1) The voltage difference between any two pins must not exceed 15 V  
2) Distinct range settings allowed on each channel  
Note: Not support ADAM-5510KW series

### Ordering Information

- **ADAM-5017UH** 8-ch Ultra High Speed Analog Input Module

### Specifications

#### General

- **Certifications** CE, FM
- **Connectors** 1 x Plug-in screw terminal (# 14 ~ 22 AWG)
- **Enclosure** ABS+PC
- **Power Consumption** 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
- **Zero Drift**  $\pm 6$   $\mu$ V/ $^{\circ}$  C
- **T/C Type and Temperature Range**

J	0 $^{\circ}$	~	760 $^{\circ}$ C
K	0 $^{\circ}$	~	1,370 $^{\circ}$ C
T	-100 $^{\circ}$	~	400 $^{\circ}$ C
E	0 $^{\circ}$	~	1,000 $^{\circ}$ C
R	500 $^{\circ}$	~	1,750 $^{\circ}$ C
S	500 $^{\circ}$	~	1,750 $^{\circ}$ C
B	500 $^{\circ}$	~	1,800 $^{\circ}$ 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-ch Thermocouple Input Module
- **ADAM-5018SK** C/JC Kit for ADAM-5018

### Specifications

#### General

- **Certifications** CE, FCC class A
- **Connectors** 1 x Plug-in screw terminal (# 14 ~ 22 AWG)
- **Enclosure** ABS+PC
- **Power Consumption** 0.63 W (max.)

#### Thermocouple Input

- **Accuracy** Voltage mode:  $\pm 0.1\%$  or better  
Current mode:  $\pm 0.2\%$  or better
- **Bandwidth** 13.1 Hz @ 50 Hz  
15.72 Hz @ 60 Hz
- **Channels** 7 (differential, each channel can be configured with different range)
- **CMR @ 50/60 Hz** 92 dB min
- **Input Impedance** 20 M $\Omega$ . (Build-in 120  $\Omega$ . Register for Current Input)
- **Input Range and Types**

Thermocouple			
J	0	~	760 $^{\circ}$ C
K	0	~	1,370 $^{\circ}$ C
T	-100	~	400 $^{\circ}$ C
E	0	~	1,000 $^{\circ}$ C
R	500	~	1,750 $^{\circ}$ C
S	500	~	1,750 $^{\circ}$ C
B	500	~	1,800 $^{\circ}$ C
Current			
Voltage		$\pm 20$ mA, 4 ~ 20 mA	
		$\pm 15$ mV (0.2%), $\pm 50$ mV, $\pm 100$ mV, $\pm 500$ mV	
		$\pm 1$ V, $\pm 2.5$ V	
		16-bit	
<b>Resolution</b>		10 samples/sec. (total)	
<b>Sampling Rate</b>		$\pm 25$ PPM/ $^{\circ}$ C	
<b>Span Drift</b>		$\pm 6$ $\mu$ V/ $^{\circ}$ C	
<b>Zero Drift</b>		200 V <sub>DC</sub>	
<b>High Common Mode</b>			
- **Resolution** 16-bit
- **Sampling Rate** 10 samples/sec. (total)
- **Span Drift**  $\pm 25$  PPM/ $^{\circ}$  C
- **Zero Drift**  $\pm 6$   $\mu$ V/ $^{\circ}$  C
- **High Common Mode** 200 V<sub>DC</sub>

#### Protection

- **Fault and Overvoltage Protection** Withstands overvoltage up to  $\pm 35$  V
- **Isolation Voltage** 3,000 V<sub>DC</sub>
- **Filter function** Yes
- **Built-in TVS/ESD Protection**

**Note:** Not support ADAM-5510KW series

### Ordering Information

- **ADAM-5018P** 7-ch Thermo. Input Module w/ Ind. Input Range

19	Embedded Controllers
20	PC-based Controllers
21	PAC
22	Motion Control
23	RS-485 I/O
24	Ethernet I/O
25	Building Automation
26	Self-service Terminals
27	eHome Platforms