

# 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