**ADAM-4017/4017+**

**ADAM-4018/4018+**

**ADAM-4019+**



**8-ch Analog Input Modules with Modbus®**

**8-ch Thermocouple Input Modules with Modbus**

**8-ch Universal Analog Input Module with Modbus**



|  |  |  |
| --- | --- | --- |
| **ADAM-4017/4017+** | **ADAM-4018/4018+** | **ADAM-4019+** |



**Specifications**

**General**

|  |  |  |
| --- | --- | --- |
| **** | **Power Consumption** | 1.2 W @ 24 VDC |
| **** | **Watchdog Timer** | ADAM-4017: |
|  |  | System (1.6 second) |
|  |  | ADAM-4017+: |
|  |  | System (1.6 second) & |
|  |  | Communication |
| **** | **Support Protocol** | ASCII command |
|  |  | (ADAM-4017) |
|  |  | ASCII command and |
|  |  | Modbus/RTU |
|  |  | (ADAM-4017+) |

**Analog Input**

|  |  |  |
| --- | --- | --- |
| **** | **Channels** | ADAM-4017: |
|  |  | 6 differential, and 2 |
|  |  | single-ended |
|  |  | ADAM-4017+: |
|  |  | 8 differential |
| **** | **Channel Independent** | ADAM-4017+ only |
|  | **Configuration** |  |
| **** | **Input Impedance** | Voltage: 20 MΩ |
|  |  | Current: 120 Ω |
|  |  | (4017+ only) |
| **** | **lnput Type** | mV, V, mA |

* **lnput Range**

ADAM-4017 ±150 mV, ±500 mV, ±1 V,

±5 V, ±10 V, ±20 mA

ADAM-4017+ ±150 mV, ±500 mV, ±1 V,

±5 V, ±10 V, ±20 mA,

4 ~ 20 mA

**Specifications**

**General**

|  |  |  |  |
| --- | --- | --- | --- |
| **** | **Power Consumption** | 0.8 W @ 24 VDC |  |
| **** | **Watchdog Timer** | ADAM-4018: |  |
|  |  | System (1.6 second) |  |
|  |  | ADAM-4018+: |  |
|  |  | System (1.6 second) & |  |
|  | **Support Protocol** | Communication |  |
| **** | ASCII command |  |
|  |  | (ADAM-4018) |  |
|  |  | ASCII command and |  |
|  |  | Modbus/RTU |  |
|  |  | (ADAM-4018+) |  |

**Analog Input**

|  |  |  |  |
| --- | --- | --- | --- |
| **** | **Channels** | ADAM-4018: 6 differential, |  |
|  |  | and 2 single-ended |  |
|  | **Channel Independent** | ADAM-4018+: 8 differential |  |
| **** | ADAM-4018+ only |  |
|  | **Configuration** | Voltage: 20 MΩ |  |
| **** | **Input Impedance** |  |
|  |  | Current: 120 Ω |  |
|  | **lnput Type** | (4018+ only) |  |
| **** | ADAM-4018 |  |
|  |  | Thermocouple, mV, V, mA |  |
|  |  | ADAM-4018+ |  |
|  | **Voltage/Current** | Thermocouple, mA |  |
| **** | ADAM-4018 ±15 mV, |  |
|  | **Input Range** | ±50 mV, ±100 mV, ±500 mV, |  |
|  |  | ±1 V, ±2.5 V, ±20 mA |  |
|  |  | ADAM-4018+ |  |
|  |  | ±20 mA, 4 ~ 20 mA |  |

* **T/C Types 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 |  |  |
| ** Burn-out Detection** | All T/C (ADAM-4018+ only) |

**Specifications**

**General**

|  |  |  |
| --- | --- | --- |
| **** | **Power Consumption** | 1.0 W @ 24 VDC |
| **** | **Watchdog Timer** | System (1.6 second) & |
|  |  | Communication |
| **** | **Support Protocol** | ASCII command and |
|  |  | Modbus/RTU |

**Analog Input**

|  |  |  |  |
| --- | --- | --- | --- |
| **** | **Channels** | 8 differential channels |  |
|  |  | for individual input type |  |
| **** | **Channel Independent** | Yes |  |
|  | **Configuration** |  |  |
| **** | **Input Impedance** | Voltage: 20 MΩ |  |
|  | **Input Type** | Current: 120 Ω |  |
| **** | T/C, mV, V, mA |  |
| **** | **Voltage/Current** | ±1 V, ±2.5 V, ±5 V, |  |
|  | **Input Range** | ±10 V, ±100 mV, |  |
|  |  | ±500 mV, ±20 mA, |  |
|  |  | 4 ~ 20 mA |  |

* **T/C Types 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 |  |  |  |
| ** Burn-out Detection** | 4 | ~ 20 mA & all T/C |



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Common Specifications** | **** | **Isolation Voltage** | 3000 VDC |  |
| **General** |  | **** | **Overvoltage Protection** | ±35 VDC |  |
|  | **** | **CMR @ 50/60 Hz** | 120 dB |  |
| **** | **Power Input** | Unregulated 10 ~ 30 VDC |  |
| **** | **NMR @ 50/60 Hz** | 100 dB |  |
| **** | **Connectors** | 2 x Plug-in terminal block | **** | **Span Drift** | ±25 ppm/° C |  |
|  |  | (#14 ~ 22 AWG) | **** | **Zero Drift** | ±6 μV/° C |  |
| **Analog Input** |  | **** | **Built-in TVS/ESD Protection** |  |
| **** | **Accuracy** | Voltage mode: ±0.1% or | **Environment** |  |  |
|  |  | better | **** | **Humidity** | 5 ~ 95% RH |  |
|  |  | Current mode: ±0.2% | **** | **Operating Temperature** | -10 ~ 70° C |  |
|  | **Resolution** | or better |  |  | (14 ~ 158° F) |  |
| **** | 16-bit | **** | **Storage Temperature** | -25 ~ 85°C |  |
| **** | **Sampling Rate** | 10 sample/second (total) |  |  | (-13 ~ 185° F) |  |
|  |  |  |  |  |  |  |



**Ordering Information**

** ADAM-4017** 8-ch Analog Input

Module

* **ADAM-4017+**8-ch Analog Input Module with Modbus
* **ADAM-4018**8-ch Thermocouple Input Module
* **ADAM-4018+**8-ch Thermocouple Input

Module with Modbus

** ADAM-4019+** 8-ch Universal Analog Input Module with Modbus

**RS-485 I/O Modules**