ADAM-6117
ADAM-6118

8-ch Isolated Analog Input Real-time Ethernet Module

8-ch Thermocouple Input Real-time Ethernet Module

NEW

ADAM-6117

NEW

ADAM-6118

Specifications

Analog Input

- **Channels** 8 (differential)
- **Input Impedance** > 10 MΩ (voltage)
  120 Ω (current)
- **Input Type** mV, V, mA
- **Input Range** ±150 mV, ±500 mV, ±1 V
  ±5 V, ±10 V, 0-20 mA, 4-20 mA, ±20 mA
- **Span Drift** ± 30 ppm/° C
- **Zero Drift** ± 6 μV/° C
- **Resolution** 16-bit with accuracy ±0.1% or better of FSR (voltage)
  ±0.2% or better of FSR (current)
- **Sampling Rate** 10 sample/second (total)
- **CMR @ 50/60 Hz** 92 dB
- **NMR @ 50/60 Hz** 60 dB
- **High Common Mode** 200 V_{DC}

Ordering Information

- **ADAM-6117EI** 8-ch Isolated AI EtherNet/IP Module
- **ADAM-6117PN** 8-ch Isolated AI PROFINET Module

Specifications

Analog Input

- **Channels** 8 (differential)
- **Input Impedance** > 1 MΩ (voltage)
- **Input Type** mV, V, mA, Thermocouple
- **Temperature Range** Type: J (-210 ~ 1,200° C), Type K (-270 ~ 1,372° C),
  Type T (-270 ~ 400° C), Type E (-270 ~ 1,000° C),
  Type R (0 ~ 1,768° C), Type S (0 ~ 1,768° C),
  Type B (300 ~ 1,820° C)
- **Span Drift** ± 30 ppm/° C
- **Zero Drift** ± 6 μV/° C
- **Resolution** 16-bit with accuracy ±0.1% or better (voltage or T/C)
  ±0.2% or better (current)
- **Sampling Rate** 10 sample/second (total)
- **CMR @ 50/60 Hz** 92 dB
- **NMR @ 50/60 Hz** 60 dB
- **High Common Mode** 200 V_{DC}

Ordering Information

- **ADAM-6118EI** 8-ch Thermocouple Input EtherNet/IP Module
- **ADAM-6118PN** 8-ch Thermocouple Input PROFINET Module

Common Specifications

General

- **LAN** 10/100Base-T(X)
- **Power Consumption** 3 W @ 24 V_{DC}
- **Connectors** 2 x RJ-45 LAN, (Daisy Chain
  Plug-in screw terminal block (I/O and power)
- **Watchdog** System (1.6 second) and Communication (programmable)
- **Power Input** 10 ~ 30 V_{DC}

Protection

- **Isolation Protection** 2,500 V_{DC}
- **Built in TVS/ESD Protection**
- **Power Reversal Protection**

Environment

- **Operating Temperature** -10 ~ 70° C (14 ~ 158° F)
- **Storage Temperature** -20 ~ 80° C (-4 ~ 176° F)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)

ADAM-6150
ADAM-6151/6156
ADAM-6160

15-ch Isolated Digital I/O Real-time Ethernet Module
16-ch Isolated Digital Input/ Digital Output Real-time Ethernet Module
6-ch Relay Real-time Ethernet Module

NEW

ADAM-6150/6151/6156

NEW

ADAM-6160

Specifications

Digital Input

- **Channels** ADAM-6150: 8
ADAM-6151: 16
- **Dry Contact** Logic level 0: close to GND
Logic level 1: open
- **Wet Contact** Logic level 0: 0 ~ 3 V_{DC}
Logic level 1: 10 ~ 30 V_{DC}
- **Input Impedance** 10 kΩ
- **Transition Time** From logic level 0 to 1: 0.2 ms
From logic level 1 to 0: 0.2 ms

Digital Output

- **Channels** ADAM-6150: 7
ADAM-6156: 16
- **Output Voltage Range** 8 ~ 35 V_{DC}
- **Normal Output Current** 100 mA (per channel)

Ordering Information

- **ADAM-6150EI** 15-ch Isolated DI/O EtherNet/IP Module
- **ADAM-6151EI** 16-ch Isolated DI EtherNet/IP Module
- **ADAM-6156EI** 16-ch Isolated DO EtherNet/IP Module
- **ADAM-6150PN** 15-ch Isolated DI/O PROFINET Module
- **ADAM-6151PN** 16-ch Isolated DI PROFINET Module
- **ADAM-6156PN** 16-ch Isolated DO PROFINET Module

Specifications

Relay Output

- **Channels** 6 Form C

Switching Capacity and Lifetime of the Contact (For Resistive Load)

- **VDE** 30,000 operations (5 A @ 250 V_{AC}, 10 operations/minute at 85° C)
70,000 operations (5 A @ 30 V_{DC}, 10 operations/minute at 85° C)
- **UL** 60,000 operations (5 A @ 250 V_{AC})
100,000 operations (5 A @ 30 V_{DC})
- **Mechanism** 20,000,000 operations (no load, 300 operations/min)
- **Breakdown Voltage** 500 V_{AC} (50/60 Hz)
- **Contact Resistance** 30 mΩ (maximum)
- **Insulation Resistance** 1 GΩ (minimum) at 500 V_{DC}

Ordering Information

- **ADAM-6160EI** 6-ch Relay EtherNet/IP Module
- **ADAM-6160PN** 6-ch Relay PROFINET Module

Common Specifications

General

- **LAN** 10/100Base-T(X)
- **Power Consumption** ADAM-6150: 2.4 W @ 24 V_{DC}
ADAM-6151: 2.4 W @ 24 V_{DC}
ADAM-6156: 2.7 W @ 24 V_{DC}
ADAM-6160: 3.5 W @ 24 V_{DC}
- **Connectors** 2 x RJ-45 LAN, (Daisy Chain)
Plug-in screw terminal block (I/O and power)
- **Watchdog** System (1.6 second) and Communication (programmable)
- **Power Input** 10 ~ 30 V_{DC}

Protection

- **Over Voltage Protection** ±35 V_{DC}
- **Isolation Protection** 2,500 V_{DC}
- **Power Reversal Protection**

Environment

- **Operating Temperature** -10 ~ 70° C (14 ~ 158° F)
- **Storage Temperature** -20 ~ 80° C (-4 ~ 176° F)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)
0 ~ 95% RH (non-condensing)