ADAM-4118

Robust 8-ch Thermocouple Input Module

Analog Input

- **Channels:** 8 differential
- **Channel Independent Configuration:** Yes
- **Input Impedance:** 20 MΩ
- **Input Type:** Thermocouple, mv, V, mA
- **Input Range:**
    - **Voltage:**
        - ±15mV, ±50mV, ±100mV, ±500mV,
        - 0~15mV, 0~50mV, 0~100mV, 0~500mV,
        - ±1V, ±2.5V, 0~1V, 0~2.5V
    - **Current:**
        - ±20 mA, 0~20mA, 4 ~ 20mA
- **Thermocouple Types and Temperature Ranges:**
    - **J:** 0 ~ 760°C
    - **K:** 0 ~ 1,370°C
    - **T:** -100 ~ 400°C
    - **E:** 0 ~ 1,000°C
    - **R:** 500 ~ 1,750°C
    - **S:** 500 ~ 1,750°C
    - **B:** 500 ~ 1,800°C
    - **N:** -270 ~ 1300°C
- **Accuracy:**
    - **Voltage mode:** ±0.1% or better
    - **Current mode:** ±0.2% or better
- **Resolution:** 16-bit
- **Sampling Rate:** 10/100 sample/second
- **Overvoltage Protection:** ±60 VDC
- **CMR @ 50/60 Hz:** 92 dB
- **Span Drift:** ± 25 ppm/°C (Typical)
- **Zero Drift:** ± 6 μV/°C
- **Built-in TVS/ESD Protection**
- **Burnout Detection**

General

- **Certification:** CE, FCC
- **Connectors:** 2 x plug-in terminal blocks (#14 ~ 28 AWG)
- **Power Input:** Unregulated 10 ~ 48 VDC
- **Power Consumption:** 0.5 W @ 24 VDC
- **Isolation Voltage:** 3000VDC
- **Watchdog Timer:** System (1.6 s) & Communication
- **Supported Protocols:** ASCII command and Modbus/RTU
- **Interface:** RS-485, Micro USB

Environment

- **Operating Humidity:** 5 ~ 95% RH
- **Operating Temperature:** -40 ~ 85°C (-40 ~ 185°F)
- **Storage Temperature:** -40 ~ 85°C (-40 ~ 185°F)