

ARK-8018DHI

A 16-bit, 8-channel differential analog input (with a direct link available to the thermocouple) data acquisition module



Specifications and Features

Communication Interface

Communication Method: RS-485
Interface: 2-line
Speed: 300bps~115.2Kbps
Communication Distance: 1200m/9600bps

Power Supply

Power Supply: 10V~30V

Other Functions

Dual Watchdog Timer
TVS over-voltage protection
PTC protection
The chosen 24-bit ADC delivers higher measurement precision
Can be linked to the thermocouple directly

Analog Input Interface

Interface: 8-channel differential signal/6-channel differential signal, 2-channel single-en
Resolution: 16-bit
Sample Rate: 10sps
Voltage Input Range: $\pm 15\text{mV}, \pm 50\text{mV}, \pm 100\text{mV}, \pm 500\text{mV}, \pm 1\text{V}, \pm 2.5\text{V}$
Current Input Range: $\pm 20\text{mA}$
Input Type: Thermocouple
Thermocouple Type: J,K,T,E,R,S,B,N
Analog Error: $\pm 0.05\%$ FSR

General Specifications

Power Consumption: <1.6W
Operating Temperature: $-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Storage Temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Ordering Information

Part Number	Model Number	Description
0070-001730	ARK-8018DHI	A 16-bit, 8-channel differential analog input (with a direct link available to the thermocouple) data acquisition module

ARK-8033DHP

A 3-channel heat-resistance differential input data acquisition module



Specifications and Features

Communication Interface

Communication Method: RS-485
Interface: 2-line
Speed: 300bps~115.2Kbps
Communication Distance: 1200m/9600bps

Power Supply

Power Supply: 10V~30V

Other Function

Dual Watchdog Timer

Analog Input Interface

Channel: 3-channel heat-resistance differential input channel (Pt, Cu)
Connecting: 2/3/4 line RTD
Heat-resistance Type: Pt100a=0.00385 Pt100a=0.003916 Cu50 Cu100
Sample Rate: 10sps
Analog Precision: $\pm 0.05\%$ FSR
Isolation Voltage: 3000V_{DC}

General Specifications

Power Consumption: <1.5W
Operating Temperature: $-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Storage Temperature: $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$

Ordering Information

Part Number	Model Number	Description
0070-001610	ARK-8033DHP	A 3-channel heat-resistance differential input data acquisition module

ARK-8022DHP

A 4-channel digital input and 4-channel analog output module



Specifications and Features

Communication Interface

Communication Method: RS-485
Interface: 2-line
Speed: 300bps~115.2Kbps
Communication Distance: 1200m/9600bps

Analog Input Interface

Resolution: 16-bit
Channel: 4-channel (2-channel for voltage output, 2-channel for current output)
Voltage Output Range: $0\text{V} \sim 10\text{V}$
Current Output Range: $0 \sim 20\text{mA}, 4\text{mA} \sim 20\text{mA}$
Independent output channels.
Analog Precision: $\pm 0.05\%$

Digital Input Interface

Channel: 4-channel
Logic Level O: Max. 1V
Logic Level 1: $4\text{V} \sim 30\text{V}$
Channel Count Frequency: $\approx 100\text{Hz}$
Input Impedance: $3\text{k}\Omega$
Isolation Voltage: 3000V_{DC}

Power Supply

Power Supply: 10V~30V

Other Function

Dual Watchdog Timer

General Specifications

Power Consumption: <3.2W
Operating Temperature: $-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Storage Temperature: $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$

Ordering Information

Part Number	Model Number	Description
0070-001690	ARK-8022DHP	A 4-channel digital input and 4-channel analog output module

ECM-9588E4

It is an Ethernet and serial port data conversion module with two 10/100 Base-T Ethernet ports (one of them works as redundant network port), one standard RS-232 port and three RS-232 (3-line)/RS-485 ports



Specifications and Features

System Resource

CPU: 80188 compliant CPU, 100MHz frequency
SDRAM: 1M byte

COM Port

Serial Port (isolated): 1 x 9-pin standard RS-232 port
Serial Port (RS-232/RS-485): 3 x RS-232 (3-line)/RS-485 port
Baud Rate: Up to 115.2Kbps
Driver Capacity: RS-485 supports 255 nodes
485 Communication Distance: 1200m/9600bps

Network Port

Port Quantity and Type: 2 x 10/100 Base-T Ethernet port, one of which works as redundant network port
Maximum Communication Distance: 100M
Protocol Support: TCP, UDP

Power Supply

Power Supply: 10V~30V

General Specifications

Power Consumption: <3W
Operating Temperature: $-10^{\circ}\text{C} \sim +65^{\circ}\text{C}$
Storage Temperature: $+20^{\circ}\text{C} \sim 80^{\circ}\text{C}$

Ordering Information

Part Number	Model Number	Description
0070-001740	ECM-9588E4	Ethernet-enabled communication controller with two 10/100 Base-T Ethernet ports, one standard RS-232 port and three RS-232 (3-line)/RS-485 ports