

ADAM-518

ADAM-518E

24-Ch T/C Input Module

24-Ch Ethernet T/C Input Module

Preliminary



ADAM-518



ADAM-518E



Features

- 24-CH T/C (K, J, T, E, N, R, S, B with wider temperature range)
- CJC sensor accuracy: $\pm 0.5^{\circ}\text{C}$
- 16 bit resolution
- Sampling Rate:
ADAM-518: 10/100 SPS@8-CH
ADAM-518E: 10/160 SPS@8-CH
- Configurable moving average filter
- ADAM-518: RS-485, Modbus/RTU
- ADAM-518E: Ethernet, Modbus/TCP

24-Ch T/C Input Module Comparison Table

Model		ADAM-518		ADAM-518E		
Supported Protocols		Modbus/RTU		10/100 Base-T Ethernet		
Analog Input	Channels	24 differential and independent configuration channels				
	Input Impedance	20 MΩ				
	Input Type	T/C				
	CJC sensor accuracy	±0.5 °C (Warm-up time: 30 min)				
	Resolution	16-bit				
	Sampling Rate	10/100			10/100/160	
Thermocouple Input Range		T/C Type	Measurement Range (°C)	Reference Accuracy @ 25°C 10 SPS	Temperature Drift °C/°C (ppm/°C) 10 SPS	
		K	-200 ~ +0°C	±0.5 °C	±0.047 °C (±30ppm/ °C)	
			0 ~ +1370°C	±0.5 °C		
		J	-200 ~ +0°C	±0.8 °C	±0.042 °C (±30ppm/ °C)	
			0 ~ +1200°C	±0.5 °C		
		T	-200 ~ -100°C	±1.0 °C	±0.060 °C (±100ppm/ °C)	
			-100 ~ +400°C	±0.6 °C		
		E	-200 ~ +0°C	±0.8 °C	±0.036 °C (±30ppm/ °C)	
			0 ~ +1000°C	±0.5 °C		
		N	-200 ~ -100°C	±1.0 °C	±0.120 °C (±80ppm/ °C)	
			-100 ~ +1300°C	±0.6 °C		
		R	-50 ~ +0°C	±2 °C	±0.214 °C (±120ppm/ °C)	
			0 ~ +500°C	±0.5 °C		
			+500 ~ +1750°C	±0.5 °C	±0.089 °C (±50ppm/ °C)	
		S	-50 ~ +0°C	±0.5 °C	±0.178 °C (±100ppm/ °C)	
			0 ~ +500°C	±0.5 °C	±0.178 °C (±100ppm/ °C)	
	+500 ~ +1750°C	±0.5 °C	±0.071 °C (±40ppm/ °C)			
B	+200 ~ +500°C	±1.2 °C	±0.080 °C (±50ppm/ °C)			
	+500 ~ +1800°C	±0.5 °C				
		CJC Sensor Accuracy		±0.5 °C (Warm-up time: 30 min)		
Power ininput		24V _{DC} (Nominal)				
Power Consumption		1.2W @ 24V _{DC}			2W @ 24V _{DC}	
Connector	Power	1 x 5P / 3.81mm				
	I/O	4 x 13P / 3.81mm				
Watchdog Timer		System (1.6 second) & Communication				
Built-in TVS/ESD Protection		✓				
Burnout Detection		✓				

24-Ch T/C Input Module Comparison Table (Cont.)

Protection		3.000 V _{DC}
Environment	Operating Temperature	-10 ~ 70 °C (14 ~ 158 °F)
	Operating Humidity	5 ~ 95% RH
	Storage Temperature	-25 ~ 85 °C (-13 ~ 185 °F)
Enclosure		Plastic
Mounting		DIN rail
Dimension	With DIN rail kit	143 x 107.2 x 72.4 mm
	Without DIN rail kit	143 x 100 x 66.8 mm
Regulatory / Approvals / Certifications		FCC, CE, RoHS, REACH, WEEE
		FCC CFR Title 47, Part 15, Subpart B Class A ANSI C63.4-2014/ANSI C63.4a-2017 EN 55011:2016+A2:2021 Class A Group 1 BS EN 55011:2016+A2:2021 Class A Group 1 CISPR 11:2015+AMD1:2016+AMD2:2019 Ed 6.2 Class A Group 1 EN 55032:2015+A1:2020 Class A / BS EN 55032:2015+A1:2020 Class A CISPR 32:2015+AMD1:2019 Class A EN IEC 61000-6-4:2019 / BS EN IEC 61000-6-4:2019 EN IEC 61000-6-2:2019 / BS EN IEC 61000-6-2:2019 EN 55035:2017+A11:2020 / BS EN 55035:2017+A11:2020 EN 61000-4-2:2009 / EN IEC 61000-4-3:2020 / EN IEC 61000-4-4:2012 EN 61000-4-5:2014+A1:2017 / EN 61000-4-6:2014+AC:2015 / EN 61000-4-8:2010

Ordering Information

Part Number to Order	Description
ADAM-518-A	24-Ch T/C Input Module
ADAM-518E-A	24-Ch Ethernet T/C Input Module