

3、AI518 Series Temperature Controller



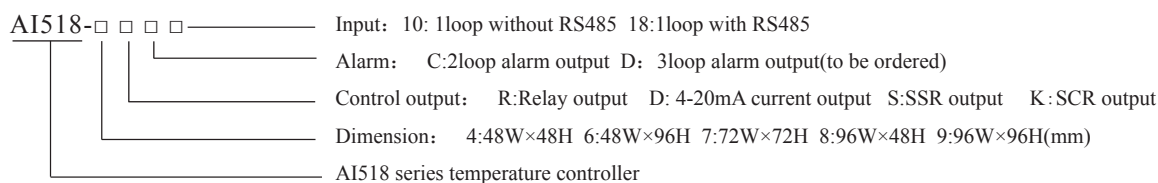
■ Photos and Features



Features:

- ★ Optional input of TC/RTD/analog signal,universal software.
- ★ Two freedom degree PID arithmetic with auto-tuning function
- ★ Optional various control output and 4~20mA linear output
- ★ 2 loop alarm,many kinds of alarm type are optional.
- ★ Rich sizes, big LED display.
- ★ RS485 communication,ModBUS-RTU protocol.
- ★ Industrial level of EMC test and higher reliability.

■ Model Illustration



■ Ordering Information

Model	Control output	Analog output	Communi- cation	Input	Accuracy	Code
AI518-□-SC10	Voltage output	No	No	Series include types of input signal TC input RTD input	±0.5%FS	A0480AI01
AI518-□-RC10	Relay output	No				A0480AI01
AI518-□-KC10	SCR output	No				A0540AI01
AI518-□-DC10	Current output	Switchable analog				A0600AI01
AI518-□-SC18	Voltage output	No	RS485	Standard analog input（0～10V、 4～20mA、0～50mV、0～400Ω）		A0730AI01
AI518-□-RC18	Relay output	No				A0730AI01
AI518-□-KC18	SCR output	No				A0790AI01
AI518-□-DC18	Current output	Switchable analog				A0850AI01

Note: 4-20mA output can switch analog output/PID control output in the menu.The factory is PID control output without neted.

■ Specifications

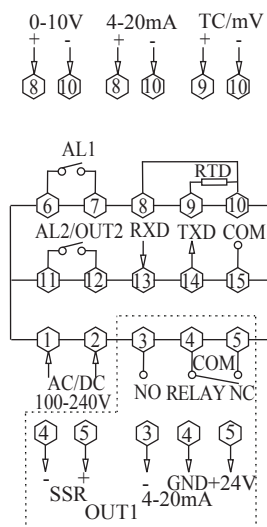
Display	Digits	4 digits	Communication	Communicaiton protocol	RS-485 ModBUS-RTU	
	Max	Refer input signal table		Baud	4800bps,9600bps	
Input signal	Input type	TC,RTD universal input Standard analog input Refer input signal specification table			IP range	0-255
					Delay	No
			Accuracy	0.5%FS	Power supply	Voltage
	Power consumption	≤5W				
	Resolution	Display± 0.1℃	Protection level	Panel	IP54	
Sampling rate	2.5 times/second	Body		-		
Analog output	Output points	1 loop	Environment	Working environment	0~50℃ <85%RH	
	Type	4~20mA		Storage environment	-20~60℃ <85%RH	
	Range & load	Load resistance 600Ωmax	Structure	Vibration,pile	10~55Hz X\Y\Z 0.75mm	
	Output accuracy	0.5%FS		Screw torque	0.74n.m~0.9n.m	
	Resolution	0.01mA 12 digits	Safe	Dielectric strength	2000V AC 50/60Hz 1 minute	
Auxiliary voltage output	Voltage supply	DC 24V		Insulation impedance	100MΩ DC 500V	
	Capacity	30mA max	EMC	ESD	3 level	
Relay output	Load	3A/250V AC		Pulse train anti-interference	4level each mode±4000Vp.p	
	Electrical	10W times		Lightning surge	3 level N-L ±2000V	
	Mechanical	100W times		Frequency drop	3 level	

Input Specifications

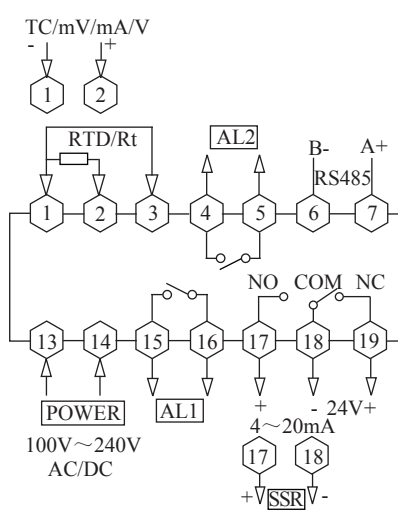
Number	Symbol	Input type	Measuring range	Resolution	Accuracy	Input resistance
0		K type TC	-50~1200℃	1℃	±0.5%F.S±3digits	>100KΩ
1		J type TC	0~1200℃	1℃	±0.5%F.S±3digits	>100KΩ
2		E type TC	0~850℃	1℃	±0.5%F.S±3digits	>100KΩ
3		T type TC	-50~400℃	1℃	±0.5%F.S±3digits	>100KΩ
4		B type TC (to be ordered)	600~1800℃	1℃	±0.5%F.S±3digits	>100KΩ
5		R type TC (to be ordered)	500~1600℃	1℃	±0.5%F.S±3digits	>100KΩ
6		S type TC (to be ordered)	-10~1600	1℃	±0.5%F.S±3digits	>100KΩ
7		N type TC	-50~1200℃	1℃	±0.5%F.S±3digits	>100KΩ
8		PT100	-199.9~650.0℃	0.1℃	±0.5%F.S±3digits	(0.2mA)
9		CU50	-50.0~150.0℃	0.1℃	±0.5%F.S±3digits	(0.2mA)
10		CU100	-50.0~150.0℃	0.1℃	±0.5%F.S±3digits	(0.2mA)
11		Linear voltage 0~50mV	0~50mV	1digit	±0.5%F.S±3digits	>100KΩ
12		Linear current 4~20mA	4~20mA	1digit	±0.5%F.S±3digits	<150Ω
13		Linear voltage 0~10V	0~10V	1digit	±0.5%F.S±3digits	>100KΩ
14		Linear resistance 0~400Ω	0~400Ω	1digit	±0.5%F.S±3digits	>(0.2mA)

Connections

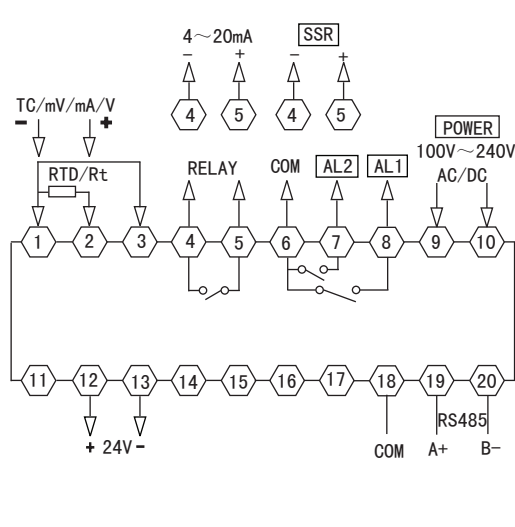
AI518-4 connection



AI518-7 connection

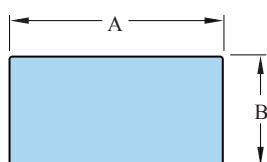


AI518-6/8/9 connection

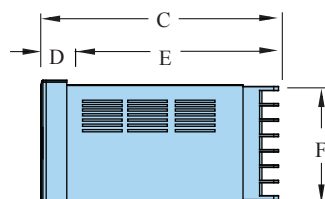


Dimensions

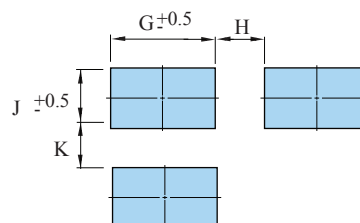
Panel size



Lateral size



Hole size



Model	A	B	C	D	E	F	G	H(Min)	J	K(Min)
4:(48*48)	48	48	97.5	6.5	91	45	45.5	25	45.5	25
6:(96*48)	48	96	97.5	9	88.5	89.5	45	25	92	25
7:(72*72)	72	72	97.5	9	88.5	67	67.5	25	67.5	25
8:(48*96)	96	48	97.5	9	88.5	44.5	92	25	45	25
9:(96*96)	96	96	97.5	9	88.5	91.5	92	25	92	25
80:(80*160)	160	80	96	13	83	75.5	155.5	30	76	30
16:(160*80)	80	160	96	13	83	155	76	30	155.5	30