

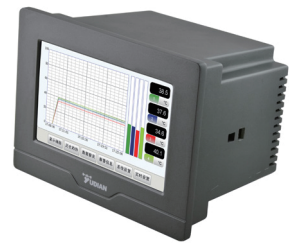
Touch Screen Multi Channel PID Temperature Controller and Recorder

PRODUCT INTRODUCTION

AI series touch screen multi channels PID temperature controller and recorder inherit Yudian's various typical technologies. It has the function of measurement, display, alarm and data recording and can support Max 4 channels input. There are three size dimensions for selection, 5 inch, 7 inch and 9 inch. Every size can support 2-4 channels input. Thickness of 9-inch recorder is only 38mm which can be easily installed in various types of equipment.

FUNCTIONS AND FEATURES

- With 0.2%FS accuracy, support multiple thermocouple input such as K, S, E, J, B, N, T, WRe5-WRe26 and etc, or two-wire Pt100 input. The output signal of PID controller is SSR voltage. Supports max 4 channels control, and each channel works independently.
- Every input channel has digital filtering, and the filter strength can be adjusted or canceled independently
- Advanced artificial intelligence adjustment, auto-tuning, self-adaption, precise and stable controlling ability. With SSR output, controlling period can be adjusted from 0.48 to 5 seconds.
- Low power consumption with up to 12 months free warranty. ARM chip in dual CPU mode is used to process graphical man-machine interface and data logging function; individual single chip CPU ensures real time control and sampling, fulfilling strict industrial site requirements; has passed the anti-interface test of 4KV/5KHz burst of pulses.
- Provide data recording and alarm logging functions in the form of reports along with real time trend curve, bar graph and history trend curve. Supports downloading data through USB for further processing on the computer.
- Embedded web server with Ethernet socket providing remote monitoring and operation through WWW browser.
- There are five internal slots, available for customizing functions by freely installing various modules of analog and digital inputs and outputs.
- By connecting Yudian temperature modules, switch modules I/O or PLC through expansion port, up to dozens of measurement and monitoring circuits can be integrated, when the instrument's own module combination can't meet customers' requirements.



5 inch



7 inch



9 inch

MODEL SELECTION AND SPECIFICATIONS

AI – □ □ □ □ □ □ – □								Specifications	
Model	35028							5 inch, 0.2%FS accuracy, 2 channels PID control , alarm, communication and recording	
	35048							5 inch, 0.2%FS accuracy, 4 channels PID control, alarm, communication and recording	
	37028							7 inch, 0.2%FS accuracy, 2 channels PID control , alarm, communication and recording	
	37048							7 inch, 0.2%FS accuracy, 4 channels PID control, alarm, communication and recording	
	39028							9 inch, 0.2%FS accuracy, 2 channel PID control, alarm, communication and recording	
	39048							9 inch, 0.2%FS accuracy, 4 channel PID control, alarm, communication and recording	
Input 1, 2 (IN1,IN2)		J1						2 channels thermocouple or mV signal input	
		J2						2 channels 2-wire RTD input	
Input 3, 4 (IN3,IN4)		J1						2 channels thermocouple or mV signal input	
		J2						2 channels 2-wire RTD input	
Output 1, 2 (OP1, OP2)			G5					dual SSR output	
Output 3, 4 (OP3, OP4)			G5					dual SSR output	
Alarm (ALM)				L0				relay contact output (250VAC/2A)	
				L3				dual channel N/O relay contact output (250VAC/2A)	
Ethernet interface				W				support PC monitoring by software	

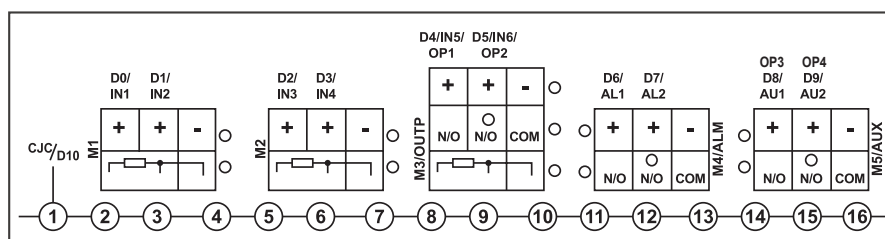
EXAMPLE:

AI-37048 J2 J2 G5 G5 L3
 ① ② ③ ④ ⑤ ⑥

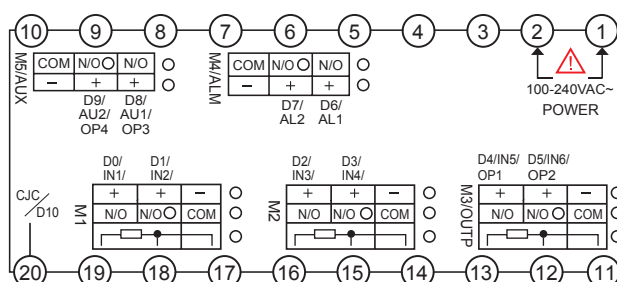
- ① Main model is AI-37048, 7 inch, 0.2%FS accuracy, 4 channels PID temperature controller and recorder.
- ② J2 module in Input 1,2, which means 2 channels thermocouple input.
- ③ J2 module in Input 3,4, which means 2 channels thermocouple input.
- ④ G5 module in the Output 1,2, which means 2 channels SSR output.
- ⑤ G5 module in the Output 3,4, which means 2 channels SSR output.
- ⑥ L3 module in the ALM, which means 2 channels alarm relay output

Wiring Graph

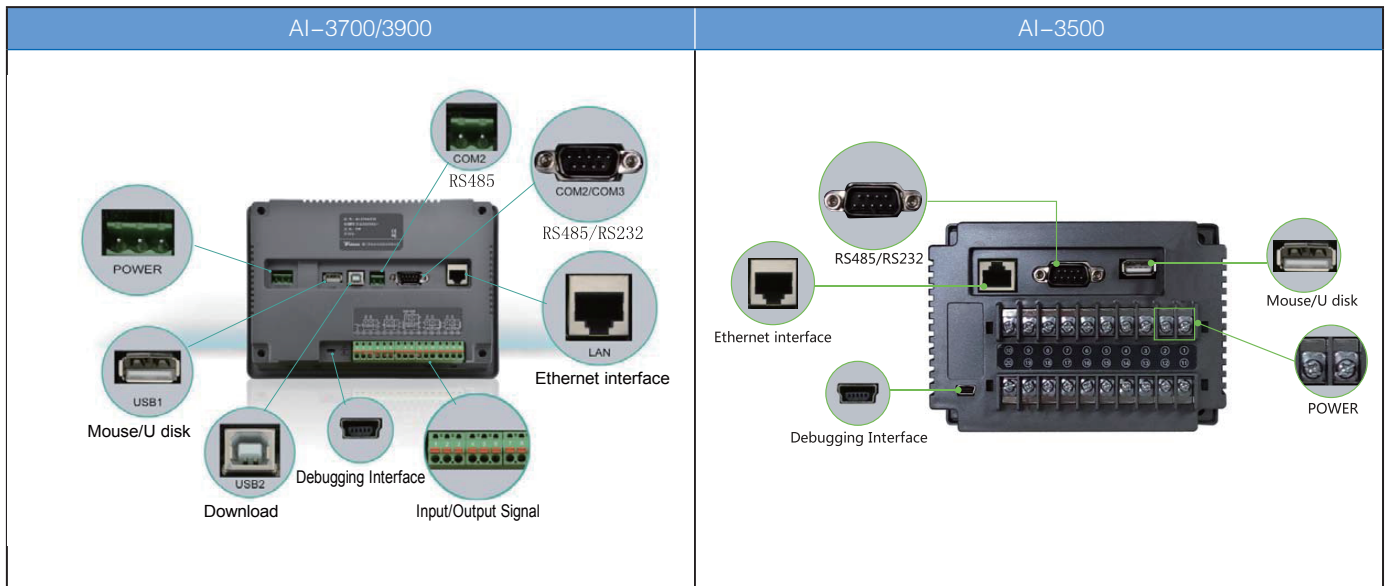
AI-37028/37048/39028/39048



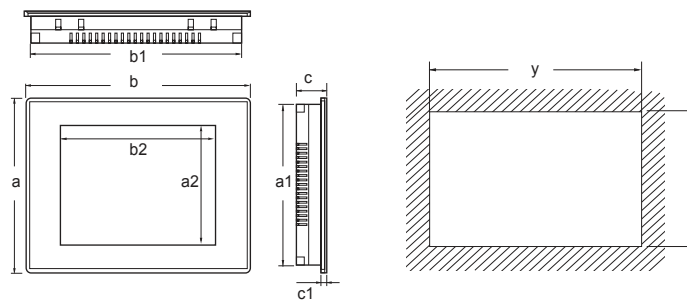
AI-35028/35048



INTERFACE



DIMENSION



	Screen diagonal (mm)			Enclosure front (W×H×D) (mm)						Mounting Cutout (mm)	
		a2	b2	a	b	c	a1	b1	c1	x	y
3700 series (3170)	7inch	86	154	150	203	40	137	190	6	139	192
3900 series (3190)	9 寸	112	198	170	231	38	158	219	6	160	221

INSTALLATION

