

TTM-i4N TOHO PID Temperature Controller

The TOHO TTM-i4N is a cost-effective and highly versatile temperature controller designed to meet market demands. Drawing upon decades of experience, research, and development, TOHO has unveiled this budget-friendly solution. The TTM-i4N builds upon the architecture of TOHO's flagship TTM-200 series, incorporating updated technologies, TOHO's renowned quality, and a fresh, modern design aesthetic.

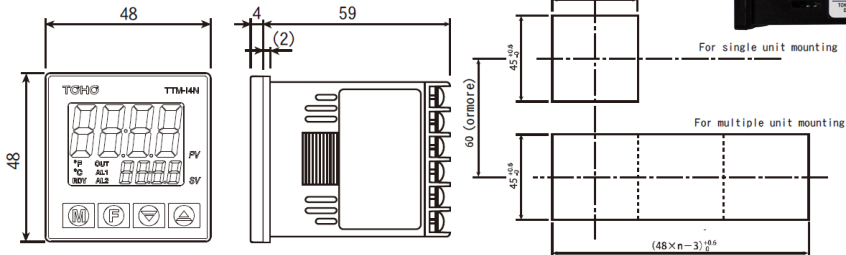
These instruments combine top-notch features at an affordable price point. Powered by a high-speed processor, the TTM-i4N achieves impressive 250ms sample rates, along with ultra-fuzzy logic and PID control, resulting in the most precise temperature control possible.

Furthermore, these units have three outputs as standard, making them ideal for dual alarms or configuring heat/cool motorized valve control. With a built-in timer, ramp function and dozens of alarm configurations the TOHO TTM-i4N is a comprehensive and cost-effective solution for a wide range of temperature control applications.

- Equipped with ultra-fuzzy control
- Large display for a clear view
- Compact design only 59mm deep
- Built in timer with 9 different functions
- Single ramp up in °C/minute (soft start)
- Heat/Cool motorized valve control (selectable)
- 56 Alarm configurations



Output 2/Event 2	NO	①	⑥	C	Event 1, Output 2/Event 2	
Output 1	NO	+	②	⑦	NO	Event 1
	C	-	③	⑧	b	
Power supply			④	⑨	B	RTD input
				⑤	⑩	



Technical Details

Input types	Thermocouple	K, J, R, T, N, S, B (JIS C 1602-1995)
	RTD	Pt100, JPt100 (JIS C 1604-1997)
Sampling Cycle		250ms
Display precision (the ambient temperature 23±10°C)	Thermocouple	Input value ±(0.3% + 1 digit) or ±2°C, whichever is larger (the ambient temperature 23±10°C). However, the condition shall be ±3°C in the -100 to 0°C range, and ±4°C in the -200 to -100°C range. Not specified for temperatures not higher than 400°C for thermocouple B.
	RTD	Input value ±(0.3% + 1 digit) or 0.9°C, whichever is larger (the ambient temperature 23±10°C). At ambient temperatures of 0 to 50°C, ±(0.5% + 1 digit) or 1.5°C, whichever the higher.
Relay contact output	Control output	250VAC, 3A (resistance load) Contact 1a, Minimum load 5VDC, 100mA
	Event 1 output	250VAC, 2.4A (resistance load) Contact 1a, Minimum load 5VDC, 10mA
SSR driving voltage output	Control output	12VDC, Load resistance: 600Ω or more
Power supply voltage		100 to 240VAC, 50/60Hz

Environmental conditions	Standard environmental conditions	Temperature range: 23°C ±10°C Humidity range: 45 to 75%RH
	Operating environmental conditions	Temperature range: 0 to 50°C Humidity range: 20 to 90%RH (no condensation)
	Storage environmental conditions	Temperature range: -25 to 70°C (no freezing, no condensation) Humidity range: 5 to 95%RH (non-condensing)