

Temperature Input Units

GT1-TS04 ☐

Temperature Input Units for use with
MULTIPLE I/O TERMINAL

- Four inputs
- Thermocouples and platinum resistance thermometer models are available
- Conversion time is only 250 ms for 4 inputs
- The Configurator can be used to calibrate temperatures
- The circuit section can be removed, so rewiring isn't required during maintenance
- Dimensions: 80 × 65 × 80 mm (W × D × H)
- DIN track mounting



Ordering Information

I/O type	I/O points	Connection	Rated voltage	Input specification	Part number
Temperature inputs	Four inputs	Terminal Block	24 V DC	Thermocouple	GT1-TS04T
				Platinum resistance thermometer	GT1-TS04P

Specifications

General Specifications

Supply voltage	20.4 to 26.4 V DC
Current consumption	I/O Unit Interface: 50 mA max. Internal power supply: 80 mA max.
Vibration resistance	10 to 150 Hz, 0.7-mm amplitude or 50 m/s ²
Shock resistance	150 m/s ²
Dielectric strength	500 V AC
Mounting method	35-mm DIN Track mounting
Ambient temperature	Operating: -10 to 55 °C Storage: -25 to 65 °C
Ambient humidity	Operating: 25 to 85% (with no condensation)
Accessories	I/O Unit Connecting Cable (40 mm)

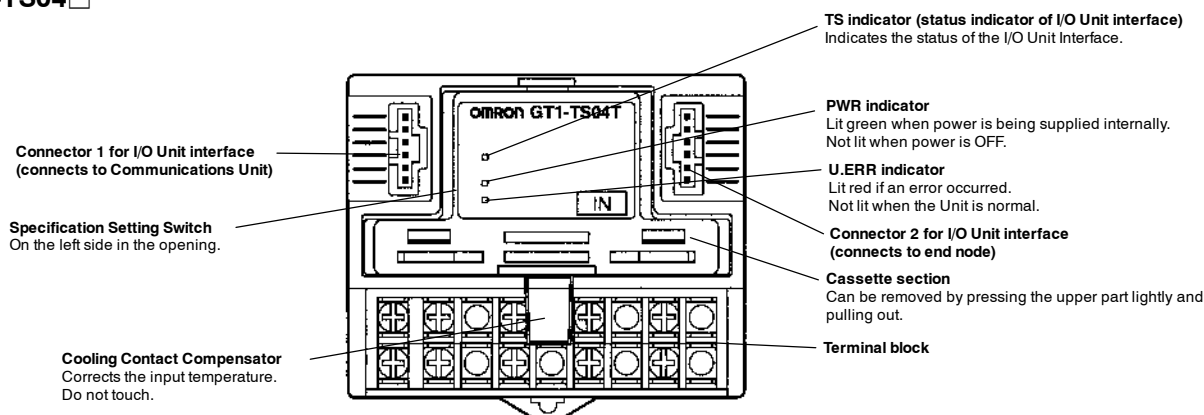
Input Specifications

Item	GT1-TS04T	GT1-TS04P
Input type	Switchable: R, S, K, J, T, L, or B	Switchable: Pt100 or JPt100
Indicated accuracy	(The larger of ±0.3% of the indicated value or ±1 °C. See note.) ±1 digit max.	When the range is -200.0 to 650.0: (The larger of ±0.3% of the indicated value or ±0.8 °C) ±1 digit max. When the range is -200.0 to 200.0: (The larger of ±0.3% of the indicated value or ±0.5 °C) ±1 digit max.
Conversion interval	250 ms/4 inputs	
Temperature conversion data	Binary data	
Isolation method	Photocoupler isolation between inputs and communications lines Photocoupler isolation between each temperature input signal	

Note: K or T below -100 °C: ±2 °C ±1 digit max.
L: ±2 °C ±1 digit max.
R or S below 200 °C: ±3 °C ±1 digit max.
B below 400 °C: No standard set

Nomenclature

GT1-TS04



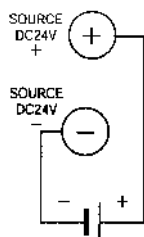
TS Indicator (Communications Status Indicator of I/O Unit Interface)

Green indicator lit	The Unit is normal.
Red indicator lit	The I/O Unit interface has an error.
Not lit	No power is supplied to the Unit or the Unit is being initialized.

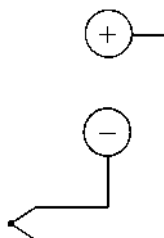
Operation

■ Wiring

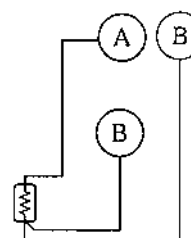
Power Supply



GT1-TS04T



GT1-TS04P



■ Terminal Arrangement

GT1-TS04T

+	+	NC	+	NC	+	NC	+	NC
0	0	1	1	2	2	3	3	NC
-	-	NC	-	NC	-	NC	-	NC
0	0	1	1	2	2	3	3	NC

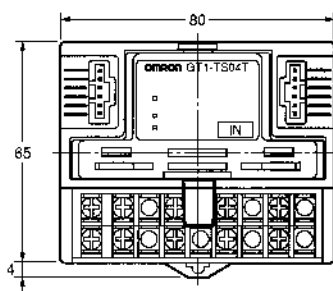
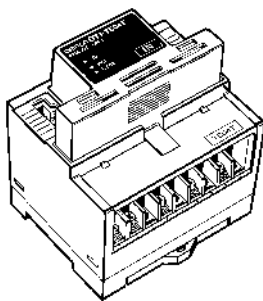
GT1-TS04P

+	A	B	A	B	A	B	A	B
0	0	0	1	1	2	2	3	3
-	B	NC	B	NC	B	NC	B	NC
0	0	1	1	2	2	3	3	NC

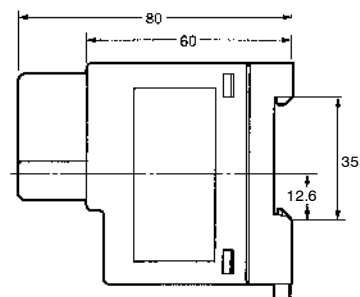
Dimensions

Unit: mm

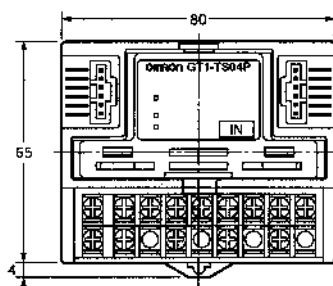
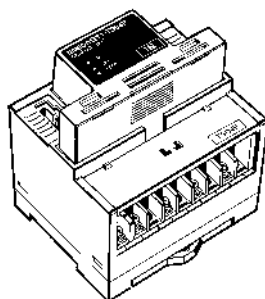
GT1-TS04T



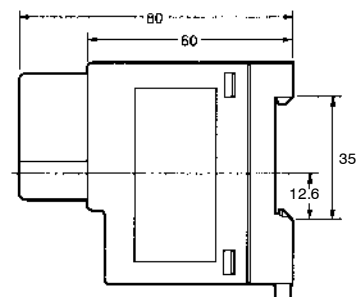
Note: Accessory cable included.



GT1-TS04P



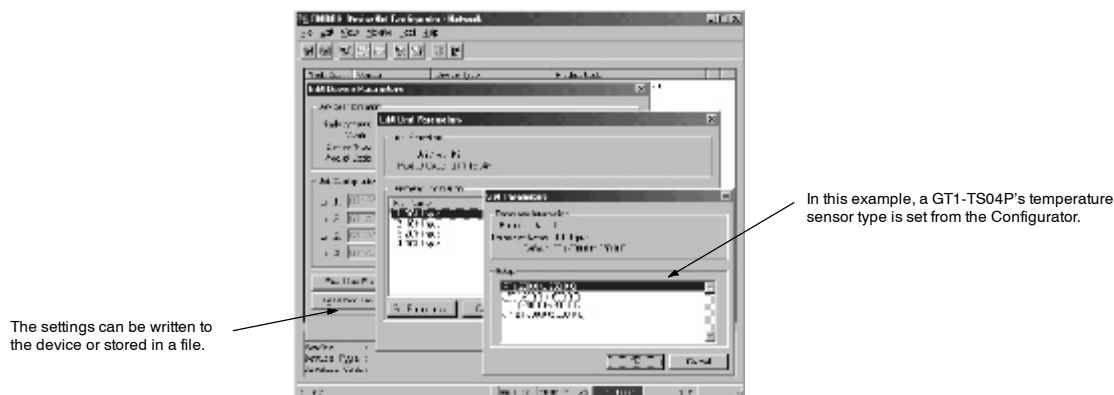
Note: Accessory cable included.



New features have been added to the DeviceNet (CompoBus/D) Configurator to make it even more user-friendly.

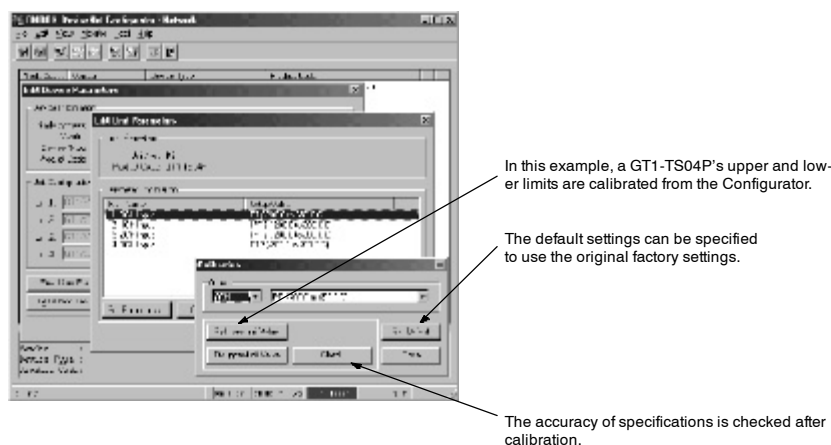
■ Parameter settings are easy to make.

Parameter settings for the Multiple I/O Terminal, such as analog settings and temperature sensor settings, can be made easily from the OMRON Configurator. The settings can be stored in files, so the parameters settings are easy to make when replacing Units during maintenance.



■ Periodic adjustments and calibrations are easy to make.

Convenient functions have been added to the Configurator such as adjusting the offset and gain in Analog Units and calibrating Temperature Input Units. Adjustments and calibrations that are required periodically are much easier with these functions.



NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

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