

Type K/J/T/E/R/S, Pt 100 ohm

TEMPERATURE CONTROLLER/MONITOR

Model : PTM-9957

ISO-9001, CE, IEC1010



Lutron

LUTRON ELECTRONIC

The Art of Measurement

TEMPERATURE CONTROLLER/MONITOR

Model : PTM-9957

FEATURES

* Thermocouple Temp. sensor : type K/J/T/E/R/S.
* Pt Temp. sensor : Pt 100 ohm.
* Type K range : -100 to 1300 °C, °C/°F. Type J range : -100 to 1200 °C, °C/°F. Type T range : -100 to 400 °C, °C/°F. Type E range : -100 to 900 °C, °C/°F. Type R range : 0 to 1700 °C, °C/°F. Type S range : 0 to 1500 °C, °C/°F.
* Pt 100 ohm range : -199 to 850 °C, °C/°F.
* Resolution : 0.1 degree (< 1000 degree) 1 degree (≥ 1000 degree)
* Control setting, Hi/Lo alarm setting.
* Control relay output, alarm relay output.
* Control Relay will make action when the reading value reach to control value.
* Alarm Relay will make action when the reading value reach to high/low alarm value.
* Hysteresis value setting for control and alarm function.
* Pcmicroprocessor circuit ensures high accuracy and provides special functions and features.
* Power : 90 ACV to 264 ACV, 50/60 Hz.
* RS-232/USB computer interface.
* DIN size : 96 x 48 mm. Depth : 107 mm.
* Optional type K probe : TP-01, TP-02A, TP-03, TP-04, TP-05.
* Optional Pt 100 ohm probe : TP-100B.
* Optional USB cable, USB-01.
* Optional data acquisition software, SW-U801-WIN.

GENERAL SPECIFICATIONS

Display	4 digits red LED, digit size : 14 mm.
Circuit	Custom chip of microprocessor LSI circuit.
Temp. Sensor type	Thermocouple Temp. sensor : Type K/J/T/E/R/S. Pt Temp. sensor : Pt 100 ohm. <i>* Sensor type can make the internal setting with default</i>
Display units	°C, °F.
Offset adjust	It can make the internal Offset setting with default.
Gain adjust	It can make the internal Gain setting with default
Sampling Time	Approx. 1 second.
Relay Output	Number 2 relays Function <i>Relay 1 :</i> Control relay. <i>Relay 2 :</i> High/Low alarm relay. Max load 0.5 ACA/250 ACV 0.5 DCA/24 DCV <i>* Do not apply the relay contact load current > 0.5 A, other wise the relay may be damaged permanently without warranty.</i>
Setting Function	<i>1st layer setting procedures</i> CtLo (Control low limit) CtHi (Control high limit) ALLo (Alarm low limit) ALHi (Alarm high limit) <i>Second layer setting procedures</i> tyPE (Sensor type) dEG (°C, °F) FiLt (Digital filter) CtHy (Control hysteresis set) ALHy (Alarm hysteresis set) oFSt (Offset adjustment) GAin (Gain adjustment)
Data Output	RS 232 PC serial interface.

Operating Temperature	0 to 50 °C.
Operating Humidity	Less than 80% R.H.
Power Supply	90 to 260 ACV, 50/60 Hz.
Power Consumption	Approx. 3.3 VA/AC 110V. Approx. 5.5 VA/AC 220V.
Weight	384 g/ 0.84 LB.
Dimension	DIN size : 96 x 48 mm, Depth : 110 mm.
Accessories Included	Instruction manual..... 1 PC Case holder with screw.....2 PCs
Optional Accessories	Type K Temp. probe : TP-01, TP-02A, TP-03, TP-04, TP-05 Pt 100 ohm Temp. probe : TP-100B. * Data Acquisition software, SW-U801-WIN. * RS232 cable, UPCB-02. * USB cable, USB-01. * Real time SD card datalogger DL-9602SD * GSM controller, GSM-889. * Interface cable (cable between meter to GSM-889), GMCB-89.

ELECTRICAL SPECIFICATIONS

PT 100 ohm

Resolution	Range	Accuracy
0.1 °C	-199.9 to 850.0 °C	± (0.4 % + 1 °C)
0.1 °F	-327.0 to 999.9 °F	± (0.4 % + 1.8 °F)
1 °F	1000 to 1562 °F	± (0.4 % + 2 °F)

Type K/J/T/E/R/S

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 °C	-50.1 to -100.0 °C	± (0.4 % + 1 °C)
		-50.0 to 999.9 °C	± (0.4 % + 0.5 °C)
	1 °C	1000 to 1300 °C	± (0.4 % + 1 °C)
	0.1 °F	-58.1 to -148.0 °F	± (0.4 % + 1.8 °F)
Type J		-58.0 to 999.9 °F	± (0.4 % + 1 °F)
	1 °F	1000 to 2372 °F	± (0.4 % + 2 °F)
	0.1 °C	-50.1 to -100.0 °C	± (0.4 % + 1 °C)
		-50.0 to 999.9 °C	± (0.4 % + 0.5 °C)
Type T	1 °C	1000 to 1150 °C	± (0.4 % + 1 °C)
	0.1 °F	-58.1 to -148.0 °F	± (0.4 % + 1.8 °F)
		-58.0 to 999.9 °F	± (0.4 % + 1 °F)
	1 °F	1000 to 2102 °F	± (0.4 % + 2 °F)
Type E	0.1 °C	-50.1 to -100.0 °C	± (0.4 % + 1 °C)
		-50.0 to 900.0 °C	± (0.4 % + 0.5 °C)
	0.1 °F	-58.1 to -148.0 °F	± (0.4 % + 1.8 °F)
		-58.0 to 999.9 °F	± (0.4 % + 1 °F)
Type R	1 °F	1000 to 1652 °F	± (0.4 % + 2 °F)
	1 °C	0 to 600 °C	± (0.5 % + 1 °C)
		601 to 1700 °C	± (0.5 % + 1 °C)
	1 °F	32 to 1112 °F	± (0.5 % + 2 °F)
Type S		1113 to 3092 °F	± (0.5 % + 2 °F)
	1 °C	0 to 600 °C	± (0.5 % + 1 °C)
		601 to 1500 °C	± (0.5 % + 1 °C)
	1 °F	32 to 1112 °F	± (0.5 % + 2 °F)
	1113 to 2732 °F	± (0.5 % + 2 °F)	

Remark :

- Accuracy value is specified for the meter only.
- Accuracy is tested under the meter's environment temperature within 23 ± 5 °C.
- Linearity Correction :
Memorize the thermocouple's curve into the intelligent CPU circuit.