

*Infrared temperature*

# IR TEMPERATURE CONTROLLER/MONITOR

Model : PIR-9959A

*ISO-9001, CE, IEC1010*



IR Temp. transmitter, TR-IR420, optional



**LUTRON ELECTRONIC**

*The Art of Measurement*

# IR TEMP. CONTROLLER/MONITOR

## Model : PIR-9959A

### FEATURES

* Input : 4-20 mA DC, 4 mA = 0.0 °C or 4 mA = 32 °F 20 mA = 300.0 °C or 20 mA = 572 °F
* User can default the Temp. unit to °C or °F.
* User can default the resolution of Temp. value to 0.1 degree or 1 degree.
* When PIR-9959 cooperate LUTRON's 4 to 20 mA IR Temp. transmitters ( TR-Ir420 ) , whole system will become the high performance Controller/Alarm/Indicator of no contact IR Temp. measurement system.
* Easy to adjust the function factors by push button on the front panel.
* Control output : 2 points ( COM, NO ).
* Alarm output : 2 points ( COM, NO ).
* Control Relay will make action when the reading value reach to control value.
* Hysteresis value setting for control and alarm function.
* Large red LED display, high brightness and easy to read.
* Microprocessor circuit ensures high accuracy and provides special functions and features.
* DC 24V power supply output, used for the power supply external IR Temp. transmitter.
* RS232/USB computer interface.
* Power : 90 ACV - 260 ACV, 50/60 Hz.
* Standard 96 X 48 mm DIN case.
* Optional data acquisition software.

### SPECIFICATIONS

Measurement Range	0.1 °C resolution	0.0 to 300.0 °C
	1 °C resolution	0 to 300 °C
	0.1 °F resolution	32.0 to 572.0 °F
	1 °F resolution	32 to 572 °F
Display	* 4 digits red LED, 14 mm ( 0.55 inch ) digit height	
	* 4 indicators : PV ( process value ) indicator SV ( set value ) indicator Control out indicator Alarm out indicator	
	* User can set the Temp. unit to °C or °F with default.	
	* User can set the Temp. value to 0.1 degree or 1 degree with default.	
Input Signal	Linear, 4 to 20 mA * It should cooperate the LUTRON's optional IR Temp. transmitter, TR-IR2W	
Accuracy @ 23 ± 5 °C	Span	± ( 0.15% + 2d ) F.S.
	Zero	± ( 0.1% + 2d ) F.S.
* F.S. : full scale		
Relay Output	Number	2 relays
	Function	Relay 1 : High/Low control relay. Relay 2 : High/Low alarm relay.
	Max load	0.5 ACA/250 ACV 0.5 DCA/24 DCV  * Do not apply the relay contact load current > 0.5 A, other wise the relay may be damaged permanently without warranty.
Circuit	Custom chip of microprocessor LSI circuit.	
Sampling Time	Approx. 1 second.	

Main Internal Function Selection	<ul style="list-style-type: none"> <li>* Display resolution setting : 1 degree or 0.1 degree</li> <li>* Low limit of range adjustment : 4 mA = 0.0 for °C. 4 mA = 32.0 for °F.</li> <li>* High limit of range adjustment : 20 mA = 400.0 for °C. 20 mA = 752.0 for °F.</li> <li>* Alarm value adjustment : High Alarm or Low alarm.</li> <li>* Control value adjustment High control or Low control.</li> <li>* Control hysteresis value setting.</li> <li>* Alarm hysteresis value setting.</li> <li>* Filter value of display reading</li> <li>* Offset adjustment.</li> <li>* Gain adjustment.</li> <li>* Temp. unit ( C, F )</li> </ul> <p>Default of internal function : Without advice previously, the function of PIR-9959 will preset :</p> <ul style="list-style-type: none"> <li>* 4 mA = 0.0, 20 mA = 300.0</li> <li>* High control mode.</li> <li>* High alarm mode.</li> <li>* Temp. unit is °C.</li> </ul>
Front Panel Function Selection	<ul style="list-style-type: none"> <li>* Control set-point value adjustment.</li> <li>* Measuring value ( Process value ) offset. Use to offset the PV indication from the actual PV.</li> <li>* Alarm set-point value adjustment.</li> </ul>
External Power Supply	DC 24 V, 50 mA max.
Data Output	RS 232 PC serial interface.
Operating Temp. and Humidity	Operating Temp. : 0 to 50 °C. Operating Humidity : Less than 80% R.H.
Power Supply	90 to 260 ACV, 50/60 Hz.
Power Consumption	Approx. 9.2 VA/AC 110V. Approx. 12.0 VA/AC 220V.
Weight	384 g/ 0.84 LB.
Dimension	DIN size : 96 x 48 mm. Panel cut size : 92 mm x 46 mm. Depth : 110 mm.
Accessories Included	Instruction manual..... 1 PC Case holder with screw..... 2 PCs
Optional Accessories	<ul style="list-style-type: none"> <li>* IR Temp. Transmitter, TR-IR420.</li> <li>* Data Acquisition software, SW-U801-WIN.</li> <li>* RS232 cable, UPCB-02.</li> <li>* USB cable, USB-01.</li> <li>* SD card data logger, DL-9602SD.</li> </ul>

### 4 to 20 mA IR TEMP. TRANSMITTER Model : TR-IR420, optional



\* Appearance and specifications listed in this brochure are subject to change without notice.