



# TEMPERATURE CONTROLLER

UTC 121P

## APPLICATIONS

Packaging Machinery

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Extrusion Machinery

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Furnaces & Boilers

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Ovens & Incubators

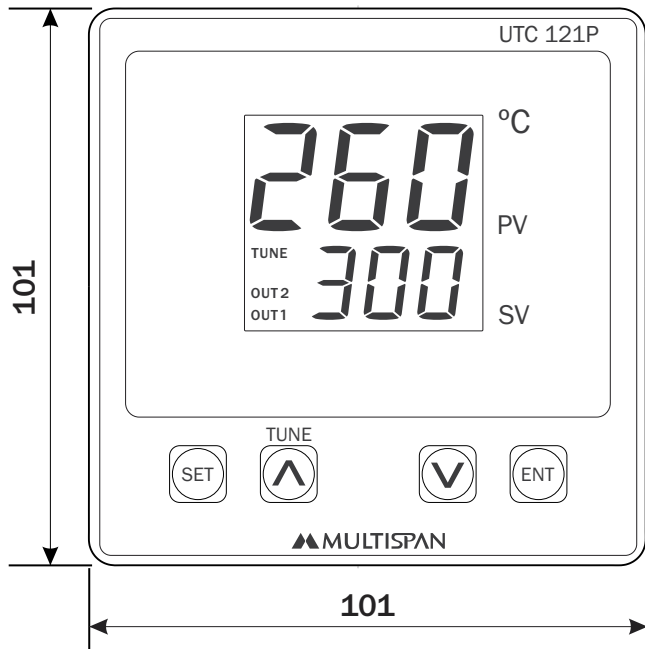
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Food Industry

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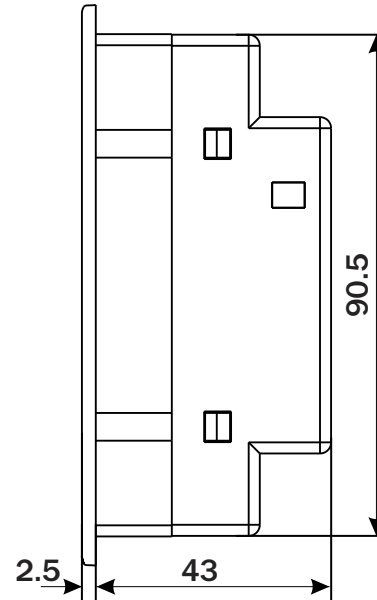
# Mechanical Dimensions

## Body Dimensions



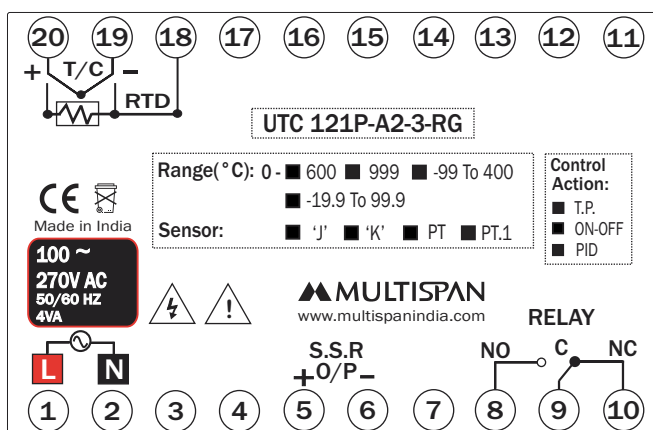
**FRONT VIEW**

All dimensions are in mm

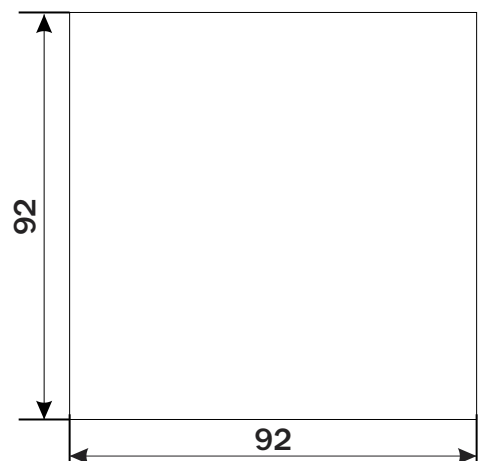


**RIGHT SIDE VIEW**

## Connection Diagram



## Panel Cutout



# TECHNICAL DATA

<b>Input</b>	J/K/PT-100 2W/3W (Configurable)
<b>Range</b>	J: 0 to 600° C, K: 0 to 999° C RTD ( PT-100 ): -99° C to 400° C/ -19.9° C to 99.9° C
<b>Output</b>	1 Relay 1 C/O, 5A, 230V AC & SSR 12V DC Parallel ( 1 Set point )
<b>Control Action</b>	PID / TP / ON-OFF ( Configurable )
<b>Mode</b>	Heating / Cooling ( Configurable )
<b>Power Supply</b>	100-270V AC, 50/60 HZ

Input	
<b>Input Type</b>	Thermocouple : ( J, K ) RTD : ( PT-100 )
<b>Display Range</b>	Refer ( Table 1 )
<b>Accuracy</b>	± 1% of FSD
<b>ADC Resolution</b>	10 Bits
<b>Display Resolution</b>	Thermocouple : 1° C RTD : 1° C / 0.1° C
<b>Sample Rate</b>	6 Sample / Sec
<b>CJC Error</b>	± 2° C
<b>Sensor Open</b>	All Input
<b>Sensor Burnout Current</b>	1.10uA
<b>RTD Excitation Current</b>	0.2mA
<b>CMRR</b>	>120 db ( Typical )
<b>Input Impedance</b>	>1M
<b>Max Voltage</b>	20V DC

Output	
Control Output	
<b>Control Type</b>	On-Off, Auto tune PID,TP
<b>Proportional Band</b>	0.0 to 999
<b>Integral Time</b>	0 to 999
<b>Derivative Time</b>	0 to 999
<b>Cycle Time For SSR For Relay</b>	1 sec to 99 sec 4 sec to 99 sec
Relay Control Output	
<b>Relay</b>	1 Nos.
<b>Rating</b>	5A @230V AC / 28V DC Resistive Load
SSR Control Output	
<b>Rating</b>	12V DC @30mA

Display		
<b>Display</b>	Upper	3 digit, 7 segment, 0.75"
	Lower	3 digit, 7 segment, 0.51"
<b>Key</b>	SET,INC, DEC & ENT	

Table 1 (Sensor Range)	
<b>J</b>	0 to 600° C
<b>K</b>	0 to 999° C
<b>PT-100</b>	-99 to 400° C
<b>PT.1</b>	-19.9 to 99.9° C

### Environmental Characteristics

Working Temperature	0 to 55 °C
Storage Temperature	0 to 55 °C
Relative Humidity	95% RH Non-condensing
Warm up time	5 minutes

### Mechanical Characteristics

Mounting Type	Panel Mount	
Dimension (HxWxD) mm	101 x 101 x 43	
Panel Cutout (HxW) mm	92 x 92	
Material	Front Enclosure	Polycarbonate (PC) ABS
Terminal Screw Size	M3.5	
Screw Torque (N.m)	0.5	
Wire Gauge (AWG)	26-14	
Weight (Approx) gms	Unpacked : 150 Packed : 180	
Accessories	1 Pair of Mounting Clamps	