

TEMPERATURE CONTROLLER

UTC-121P,221P, 421P



TECH SPECS

Model	UTC-121P	UTC-221P	UTC-421P
Dimension (HxWxD) mm	96 x 96 x 50	72 x 72 x 85	48 x 48 x 70
Panel Cutout	92 x 92	68 x 68	44 x 44
Input	J/K/PT-100 2W/3W (Configurable)		
Range	J: 600° C, K: 1200° C RTD (PT-100): -99.9°C to 400.0°C		
Output	1 Relay 1 C/O, 5A, 230V AC & SSR 12V DC Parallel (1 Set point)		
Control Action	PID / ON-OFF (Configurable)		
Mode	Heating / Cooling (Configurable)		
Power Supply	100-250V AC, 50/60 HZ		

APPLICATIONS

Packaging Machinery

Extrusion Machinery

Furnace & Boilers

Ovens & Incubators

Food Industry

Technical Specifications

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

Output	
Control Output	
Control Type	On-Off, Auto tune PID
Proportional Band	0000 to 999.9
Integral Time	0000 to 9999
Derivative Time	0000 to 9999
Cycl Time For SSR For Relay	4 sec to 99 sec
Relay Control Output	
Relay	1 Nos.
Rating	5A @230V AC / 28V DC Resistive Load
SSR Control Output	
Rating	12V DC @30mA

Physical			
	UTC-121P	UTC-221P	UTC-421P
Enclosure	Molded ABS		
Weight	230gm	180gm	110gm
Color	Black		
Front Bezel (mm)	96 x 96	72 x 72	48 x 48
Panel cutout (mm)	92 x 92	68 x 68	44 x 44
Depth behind panel	50 mm	85 mm	70 mm
Accessories	1 pair of Mounting clamp		
Terminal Cable Size	Barrier Type terminal Cable Size (2.5 mm ²)		

Environmental	
Operating Temperature	0 to 55° C
Storage Temperature	0 to 70° C
Humidity	95% RH Non-condensing
Protection	IP 54 (Front Side)

Power Supply	
Standard	100 - 250V AC @ 50/60 Hz
Optional	24V DC
Consumption	4VA

Display		
	UTC-121P , 221P	UTC-421P
Process Value	UPPER:- 4 Digit 7 seg 0.56",RED LED Display	UPPER:- 4 Digit 7 seg 0.39",RED LED Display
Set Value	LOWER:- 4 Digit 7 seg 0.4",GREEN LED Display	LOWER:- 4 Digit 7 seg 0.28",GREEN LED Display
Keys	SET, UP, DOWN, ENT	
LED Indication	Relay , SSR	

Table 1 (Sensor Range)

J	0 to 600° C	PT-100	-99 to 400° C
K	0 to 1200° C	PT.1	-99.0 to 400.0° C