



TEMPERATURE CONTROLLER

UTC-121G+

APPLICATIONS

Packaging Machinery

Extrusion Machinery

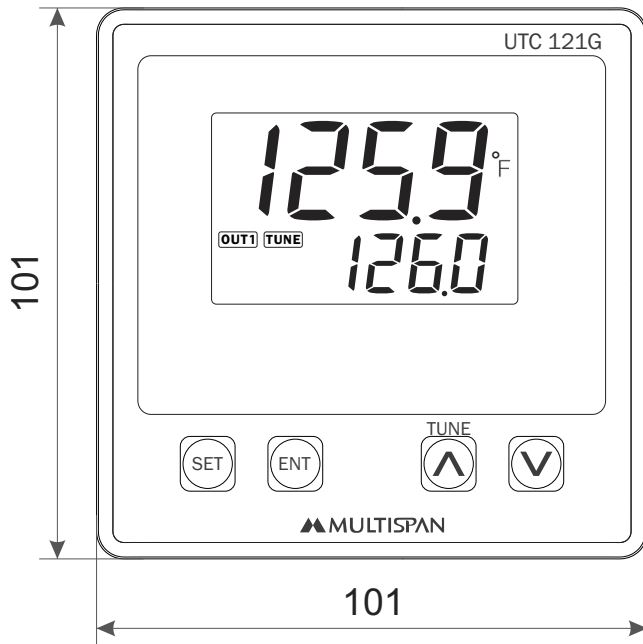
Furnace & Boilers

Ovens & Incubators

Food Industry

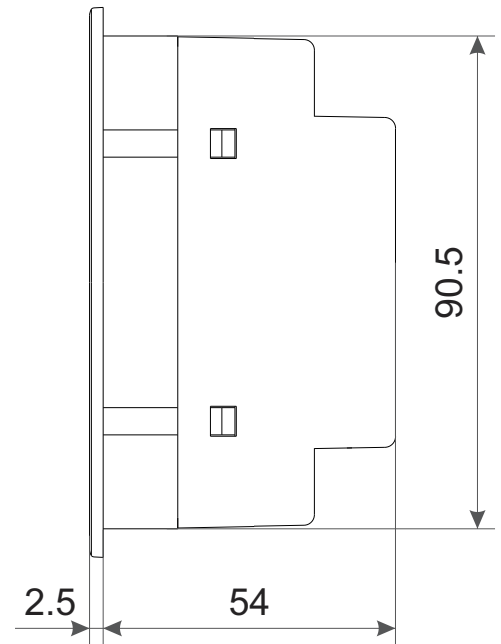
Mechanical Dimensions

Body Dimensions



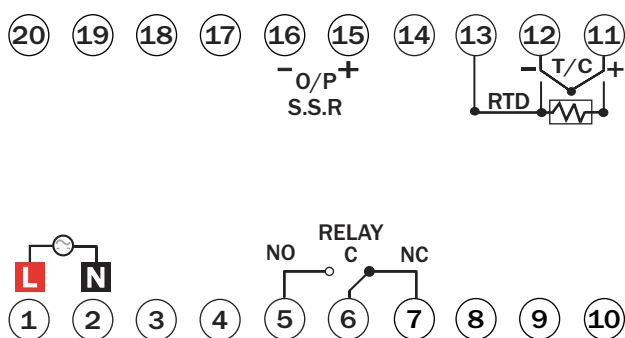
FRONT VIEW

All dimensions are in mm

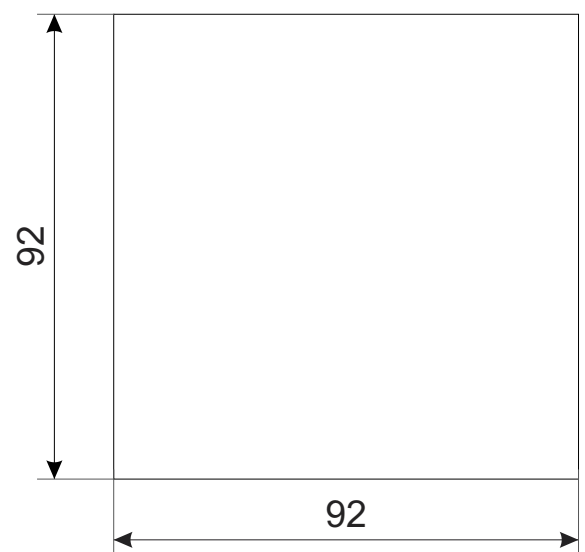


RIGHT SIDE VIEW

Connection Diagram



Panel Cutout



TECHNICAL DATA

Input	Thermocouple	J/ J.1 / K / K.1 / E / B / R / S / T / N (Configurable)
	RTD	PT-100/ PT.1 2 or 3Wire (Configurable)
Range		Thermocouple :- J: 0 to 600°C, J.1: 0.0 to 600.0°C, K: 0 to 1200°C, K.1: 0.0 to 950.0°C, E: 0 to 650°C, N: 0 to 1250°C, T: 0 to 350°C, B: 150 to 1800°C R: 0 to 1600°C, S: 0 to 1800°C RTD :- PT-100: -200 to 400°C, PT.1: -199.9 to 400.0°C
Output		2 Relay 1 C/O, 5A, 230V AC For Resistive Load, & SSR 12V DC Parallel
Control Action		PID / ON-OFF / TP / BL.TP (Configurable)
Operating Mode		High / Low / Inband / Outband / Absolute Low Absolute Outband Alarm (Configurable) + Soak Time
Power Supply		100-270V AC/DC, 50/60 Hz, Approx 5VA
Certification		

Input Table

Input Type	Range	Accuracy	± 0.50% of FSD
J	0 to 600°C	ADC Resolution	12 Bit
J.1	0.0 to 600.0°C	Display Resolution	Thermocouple J, K, S, R, B, E, T, N : 1°C K.1, J.1 : 0.1°C RTD : PT: 1°C / PT.1: 0.1°C
K	0 to 1200°C	Sample Time	600 msec
K.1	0.0 to 950.0°C	CJC Error	± 2°C
PT-100	-200 to 400°C	Sensor Open	All Sensor
PT.1	-199.9 to 400.0°C	Sensor Burnout Current	1.10uA
R	0 to 1600°C	RTD Excitation Current	0.2mA
S	0 to 1800°C	CMRR	>120 dB (Typical)
E	0 to 650°C	Max Voltage	20V DC
N	0 to 1250°C	Input Impedance	>1M
T	0 to 350°C		
B	150 to 1800°C		

Display & Keys

Display	UPPER:- 4 Digit 7 seg 0.70", LED Display LOWER:- 4 Digit 7 seg 0.43", LED Display
LED Status	Relay OR SSR
4 controlling keys for configuration and operation SET, ENT, UP, DOWN	

Environmental Characteristics

Working Temperature	0 to 55 °C
Storage Temperature	0 to 70 °C
Relative Humidity	95% RH Non-condensing
Protection	IP 65 (Front Side)

Power Supply

Standard	100 - 270V AC/DC, 50/60Hz
Optional	24V DC
Consumption	5VA

Output

Control Output

Control Type	Auto tune PID, ON-OFF, TP, BL.TP(Select.)
Proportional Band	0000 to 999.9
Integral Time	0000 to 9999
Derivative Time	0000 to 9999
Cycle Time For Relay For SSR	4.0 sec to 99.9 sec 0.1 sec to 99.9 sec

Relay Control Output

Relay	NO - C - NC
Rating	Relay 1: 5A @230V AC/ 28V DC Resistive Load Relay 2: 5A @230V AC/ 28V DC Resistive Load

SSR Control Output

Rating	12V DC @30mA
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Mechanical Characteristics

Mounting Type	Panel Mount
Dimension (HxWxD) mm	101 x 101 x 54
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 : 200 Packed : 255
Accessories	1 Pair of Mounting Clamps