

Technical Specifications

Input	
Input type	Thermocouple (J, K, T, R, S), RTD (Pt100), Current, Voltage
Display Range	Refer Table-1
Accuracy	±0.25% of FS ±1 degree for TC & RTD input ±0.1% of FS ±1 count for linear input
ADC Resolution	16 bits
Display Resolution	0.1 / 1.0 °C
Sampling Rate	5 Samples/Sec
CJC Error	±2.0 °C
Sensor open	All inputs except 0-5V
Sensor Burnout current	0.25µA
RTD Excitation current	0.166mA (Approx)
NMRR	> 40dB
CMRR	> 120dB
Temp-co	< 150ppm/°C
Input Impedance	> 1MΩ
Max Voltage	20VDC

Display & Keys				
	LC5296	5006RN	LC5296H	LC5248E
Process Value	0.56" 7 segment, Red LED, 4 digits	0.56" 7 segment, Red LED, 4 digits	0.56" or 0.8" 7 segment, Red LED, 4 digits	0.4" 7 segment, Red LED, 4 digits
Set Value	0.4" 7 segment, Green LED, 4 digits	NA	NA	0.28" 7 segment, Green LED, 4 digits
Status LEDs	Relay & Communication			
Keys	SET1, SET2, Increase, Decrease			

Output	
Control Output	
Relays	2 Nos.
Type	Single Change over (C, NO, NC)
Rating	2A @ 230VAC / 30VDC
Control mode	Heat or Cool with time delay
Retransmission Output (Optional)	
Current	0/4-20mA @500Ω Max.
Voltage	0/1-5V, 0-10V @2KΩ Min.
Accuracy	0.25% of FS
Communication Output (Optional in lieu of 2nd Retransmission o/p)	
Interface	RS485
Protocol	Modbus-RTU
Baud Rate	9600, 19200, 38400

Transmitter Supply 24VDC (±10%) @26mA (Current limited)

Power Supply	
Standard	85-265VAC/ 125-300VDC
Optional	18-36VDC

Isolation (Withstanding voltage)

- Between primary terminals* and secondary terminals**: At least 1500 VAC for 1 minute
- Between primary terminals* and grounding terminal: At least 1500 VAC for 1 minute
- Between grounding terminal** and secondary terminals**: At least 1500 VAC for 1 minute
- Between secondary terminals**: At least 500 VAC for 1 minute

* Primary terminals indicate power terminals and relay output terminals.

** Secondary terminals indicate Analog input/output signal and Communication output.

Insulation resistance: 50MΩ or more at 500 V DC between power terminals and grounding terminal

Physical			
Dimensions:			

	LC5296/ 5006RN	LC5296H	LC5248E
Dimension (H x W x D) (in mm)	96 x 96 x 75	48 x 96 x 85	48 x 48 x 120
Front Bezel (H x W) (in mm)	96 x 96	48 x 96	48 x 48
Panel Cutout (in mm)	92 x 92	45 x 92	44 x 44
Depth Behind Panel (in mm)	65	75	115
Weight	300 g approx.	300 g approx.	200 g approx.
Enclosure Material	Molded ABS		
Enclosure Protection	IP20		
Terminal Cable Size	2.5mm ²		

Environmental	
Operating temperature	0 to 55 °C
Storage temperature	0 to 80 °C
Humidity	20-95% RH (non-condensing)

Table-1: Display Range		
Input	Input Type	Range
Thermocouple	J	-200 to 1200 °C
	K	-200 to 1372 °C
	T	-200 to 400 °C
	R	0 to 1768 °C
	S	0 to 1768 °C
RTD	PT-100 (3 wire)	-200 to 850 °C, -199.0 to 850.0 °C
Linear	1-5V/0-5V/0-10V DC 0/4-20mA (Ext 250 Ω)	-1999 to 9999

Ordering code

Model	Input	Auxiliary Power Supply	Options		Display (Only in LC5296H)
			Output-1	Output-2*	
LC5296	1 J	U1 80-265VAC / 125-300VDC	N None	N None	5 0.56"
5006RN	2 K	U2 18-36VDC	1 4-20 mA	1 4-20 mA	8 0.8"
LC5296H	3 T		2 0-20 mA	2 0-20 mA	
LC5248E	4 R		3 1-5 V	3 1-5 V	
	5 S		4 0-5 V	4 0-5 V	
	6 Pt-100		5 0-10 V	5 0-10 V	
	C 4-20 mA		6 RS485		
	D 0-20 mA				
	E 1-5 V				
	F 0-5 V				
	G 0-10 V				

Accessories: Two numbers mounting clamps

*Output-2 = 2nd Retransmission o/p not possible in LC5296H & LC5248E model;
only optional RS485 is possible in same.

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All specifications are subject to change without notice
due to continuous improvements.
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