

Universal Calibrator (Model UNICAL 3001M)

3001 M

TECHNICAL SPECIFICATIONS 3001M

Display

5 Digit, 0.56" red high efficiency LED.

Rechargeable Battery

Built-in 7.2V, 2.2 AH Power Pack

Battery Operation

Approximately 5 Hours in measurement mode or 4 Hours with 20mA output.

Battery charging time

14 Hours for full charge.

Lo Bat indication provided.

Protection

Voltage Source Short Circuit

Current Source Open Circuit

Input impedance

Greater than 10 M for mV, V, t/c. 10 in mA.

Operating Temperature

0 to 55 °C

Humidity Range

0 to 80% RH non-condensing

Cold Junction Compensation

Automatic from 0 °C to 50 °C in both measure and simulation mode. C J C switch off with 0 °C reference provided.

Temperature Coefficient

±0.002% Rdg / °C

Thermocouple Linearisation

ANSI Standard.

Sampling Time

400 mSec.

Enclosure

General Purpose.

TECHNICAL SPECIFICATIONS 3001M

Standard Accessories

Carrying Case, 2 sets test leads, 2 shorting links, RTD Simulator Module and Instruction Manual.

Mains Power Supply

230/110V AC +/- 10%, 50 Hz (Please specify)

Dimension

240(W) X 135(H) X 185(D) (all in mm)

OPTIONS

- Additional facility to Measure / Simulate 2 user defined Thermocouples.
- Panel mounting kit.

ORDERING CODE

Model	Option 1		Mounting	
3001M	X		X	
	N	None	T	Table-top
	1	2 nos. custom T/C*	P	Panel

X - Specify from table

* - Please specify T/C types

FUNCTION	RANGE	RESOLUTION	ACCURACY	SOURCE LOADING CAPABILITY
Amb	0 to 50 °C	0.1 °C	± (0.2 °C + 1 Count)	---
20mV	0 to +20mV	1 V	± (0.03% FS + 1 Count)	10mA max.
200mV	0 to +200mV	10 V	± (0.03% FS + 1 Count)	10mA max.
2V	0 to +2V	0.1mV	± (0.03% FS + 1 Count)	10mA max.
10V	0 to +10V	1mV	± (0.03% FS + 1 Count)	10mA max.
20mA	0 to +20mA	1 A	± (0.03% FS + 1 Count)	Compliance Voltage 24V DC
60mA	0 to +60mA	10 A	± (0.03% FS + 1 Count)	Compliance Voltage 24V DC
B type	450 to 1750 °C	0.1 °C	± (2.0 °C + 1 Count)	10mA max.
E type	-200 to 1000 °C	0.1 °C	± (0.5 °C + 1 Count)	10mA max.
J typ	-200 to 1200 °C	0.1 °C	± (0.5 °C + 1 Count)	10mA max.
K type	-200 to 1370 °C	0.1 °C	± (0.5 °C + 1 Count)	10mA max.
R type	0 to 1750 °C	0.1 °C	± (1.0 °C + 1 Count)	10mA max.
S type	0 to 1750 °C	0.1 °C	± (1.0 °C + 1 Count)	10mA max.
T type	-160 to 400 °C	0.1 °C	± (0.5 °C + 1 Count)	10mA max.
Pt - 100	-200 to 850 °C	0.1 °C	± (0.5 °C + 1 Count)	0.5 mA Injection Current
CU - 53	-100 to 200 °C	0.1 °C	± (0.5 °C + 1 Count)	0.5 mA Injection Current
2K Ohm	0 to 2K Ohm	0.1 Ohm	± (0.03% FS + 1 Count)	0.5 mA Injection Current

Note : For mV, V and 20 mA ranges 25% over range provided.