

## CM5094

### 3 3/4 Digits Auto Range Multimeter with 32 segment bar graph and Temperature Measurement

#### Features:

- 3 3/4 Digits LCD display with bar graph
- Max. reading 3260
- Backlight
- Auto AC/DC selection
- Manual range selected
- Auto power off with beeper alert
- DC voltage 320mV up to 600V
- AC voltage 3.2V up to 600V
- DC current 320 $\mu$ A up to 10A (fused)
- AC current 320 $\mu$ A up to 10A (fused)
- Resistance 320 $\Omega$  up to 30M $\Omega$
- Diode test
- Continuity test
- Data hold
- Add on clamp function
- Temperature measurement ( $^{\circ}$ C)
- Low battery warning display
- All ranges 600volt overload protection
- Wrong terminal inserting warning beeper
- Double injection case design
- Conform to IEC1010/EN61010  
CAT III 600V, CE-EMC & LVD



#### General Specifications

Display	: 3 3/4 digits LCD with max. reading of 3260 and 32 segment bar graph.
Polarity	: Automatic, (-) negative polarity indication.
Zero adjustment	: Automatic.
Over range indication	: Only the MSD "OL" is displayed.
Power	: 2 x standard 1.5volt AAA batteries.
Dimension	: 93 (W) x 194 (H) x 39.4 (D) mm.
Weight	: Approx. 400 g (including battery).

## Electrical Specification

Accuracies are  $\pm$ (% of reading + number of least significant digits) at  $23^{\circ}\text{C}\pm 5^{\circ}\text{C}$ , less than 75%RH

### DC voltage measurement

Range	Resolution	Accuracy	Input impedance	Overload protection
320mV	0.1mV	$\pm(0.8\% \text{Read.} + 2\text{dgt})$	2M $\Omega$	600Vrms $\leq$ 10s
3.2V	0.001V	$\pm(1.2\% \text{Read.} + 2\text{dgt})$		
32V	0.01V			
320V	0.1V			
600V	1V			

### AC voltage measurement

Range (*)	Resolution	Accuracy	Input impedance	Overload protection
3.2V	0.001V	$\pm(1.2\% \text{Read.} + 5\text{dgt})$	2M $\Omega$	600Vrms $\leq$ 10s
32V	0.01V			
320V	0.1V			
600V	1V			

(\*) The instrument doesn't perform the measurement if detect DC components.

Frequency Range: 50 – 400Hz

### DC current measurement

Range	Resolution	Accuracy	Voltage drop	Overload protection
320 $\mu$ A	0.1 $\mu$ A	$\pm(1.5\% \text{Read.} + 2\text{dgt})$	163mV	Fuse 400mA/600V Rapid
3.2mA	1 $\mu$ A			
32mA	0.01mA			
320mA	0.1mA	$\pm(2.5\% \text{Read.} + 2\text{dgt})$		Fuse 10A/600V Rapid
10A	0.01A			


**AC current measurement**

Range	Resolution	Accuracy	Voltage drop	Overload protection
320 $\mu$ A	0.1 $\mu$ A	$\pm(1.5\% \text{Read.} + 5 \text{dgt})$	163mV	Fuse 400mA/600V Rapid
3200 $\mu$ A	1 $\mu$ A			
32mA	0.01mA			
320mA	0.1mA	$\pm(2.5\% \text{Read.} + 5 \text{dgt})$		Fuse 10A/600V Rapid
10A	0.01A			


**Resistance measurement**

Range	Resolution	Accuracy	Max open circuit voltage	Overload protection
320 $\Omega$	0.1 $\Omega$	$\pm(1.2\% \text{Read} + 5 \text{dgt})$	$\leq 1.5\text{V}$	600Vrms $\leq 10\text{s}$
3.2k $\Omega$	0.001k $\Omega$			
32k $\Omega$	0.01k $\Omega$			
320k $\Omega$	0.1k $\Omega$			
3.2M $\Omega$	0.001M $\Omega$	$\pm(3.5\% \text{Read} + 5 \text{dgt})$		
30M $\Omega$	0.01M $\Omega$			

**Diode test**

Range	Test voltage	Test current	Max open circuit voltage	Overload protection
	0 – 3.2V	Approx. 1mA	3.0V	600Vrms $\leq 10\text{s}$

**Continuity test**

Range	Test Range	Test current	Max open circuit voltage	Overload protection
	Buzzer sounds when resistance value $\leq 20\Omega$	Approx. 1mA	$\leq 1.2\text{V}$	600Vrms $\leq 10\text{s}$



**Temperature measurement**

<b>Range</b>	<b>Resolution</b>	<b>Accuracy</b>	<b>Overload protection</b>
-40 ÷ 0°C	1°C	±(2.0%Read. + 5dgt)	600Vrms ≤10s
0 ÷ 320°C		±(1.5%Read. + 10dgt)	
320 ÷ 800°C		±(2.0%Read. + 10dgt)	

**CALTEK INDUSTRIAL (HONG KONG) LIMITED**

[www.caltek.com.hk](http://www.caltek.com.hk)

Hong Kong Office

Address: Unit 11 10/F, Kwai Cheong Center, 50 Kwai Cheong Road, Kwai Chung, N.T., Hong Kong  
Email: [caltek@caltek.com.hk](mailto:caltek@caltek.com.hk) Tel: (852) 2401-1222 Fax: (852) 2420-3472

Singapore Office

Level 15, Suite 27, Prudential Tower, 30 Cecil Street, Singapore 049712

Email: [caltek\\_sg@caltek.com.hk](mailto:caltek_sg@caltek.com.hk) Tel: (65) 6232-2903 Fax: (65) 6232-2888