



81K, 81K-TRMS

Electrical Specifications

DC Voltage					
Range	Resolution	Accuracy	Note		
80mV	1µV	± (0.05%rdg + 10)	Input impedance : 80mV - 800mV > 1000MΩ 8V -1000V : 10MΩ		
800mV	10µV				
8V	0.1mV				
80V	1mV				
800V	10mV	± (0.08%rdg + 10)			
1000V	0.1V				
AC Voltage (True RMS) for Model 81K-TRMS only					
Range	Resolution	Accuracy			
		50Hz / 60Hz	50Hz - 1kHz	1kHz - 10kHz	10kHz - 20kHz
80mV	1µV	± (0.5%rdg + 10)	± (1.0%rdg + 10)	± (3.0%rdg + 10)	± (8.0%rdg + 10)
800mV	10µV				± (5.0%rdg + 10)
8V	0.1mV				50Hz - 400Hz: ± (1.0%rdg + 5)
80V	1mV				
750V	10mV				
Input Impedance : 8mV - 800mV > 1000MΩ; 8V - 1000V 10 MΩ; Parallel capacitance < 100pF					
AC Voltage Average (60Hz Sine Wave Calibrating)					
Range	Resolution	Accuracy			
		50Hz / 60Hz	50Hz - 1kHz	1kHz - 10kHz	10kHz - 20kHz
80mV	1µV	± (1.0%rdg + 8)	± (1.5%rdg + 8)	± (4.0%rdg + 8)	± (8.0%rdg + 8)
800mV	10µV				± (5.0%rdg + 8)
8V	0.1mV				± (1.0%rdg + 8)
80V	1mV	50Hz - 400Hz: ± (1.0%rdg + 5)			
750V	10mV				
Input Impedance : 8mV - 800mV > 1000MΩ; 8V - 1000V 10 MΩ; Parallel capacitance < 100pF					
DC Current					
Range	Resolution	Accuracy	Note		
80mA	1µA	± (0.5%rdg + 10)	Fuses : F 800mA/250V F 20A/250V Voltage drop : ≤ 800mV		
800mA	10µA				
8A	0.1mA				
20A	1mA				

Features

- Multi-Display : Primary 80000, Secondary 80000, Bargraph 23 Segments
- Basic DC Accuracy : 0.05%
- mV Impedance : > 1000MΩ
- More than 50 Measuring Functions
- Frequency Measurement : 0.5Hz to 8.0000MHz
- 16 Frequency Points, 1% to 99% Duty
- Selectable Square Wave Output
- Analyzing Component of Current or Voltage Signal
- Resistance : 0.1Ω to 80MΩ, 10MΩ to 8000MΩ
- Capacitance : 1nF to 100µF
- Temperature : -50°C to 1372°C, -58°F to 2502°F
- dBm 20 Types of Reference Impedance
- Auto Data Hold/Peak Hold
- Relative Measurement
- 36 Hours Dynamic Recording : MAX/MIN/AVG/MAX-MIN
- Communication : Isolated Optical RS-232
- Timer for Measurement
- Backlight Display
- Auto Power Off

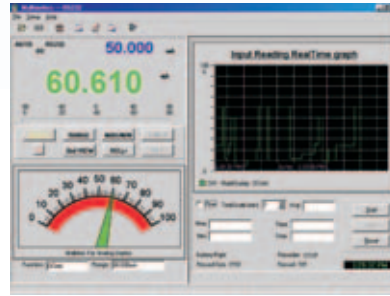
General Specifications

- Power : 9V Battery
- Weight : 650gms Including Battery (approx.)
- Dimension : 190 x 90 x 37 mm
- Safety / Compliance : IEC 61010 CATII 1000V CATIII 600V
- Accessories : Instruction Manual, Pair of Test Leads, Holster, Battery (installed), RS-232 Interface Cable, K Type Thermocouple (upto + 500°C) & Software CD

DMM Utility Software

Displays Graphs, Real Time Values, Analog Indication and Digital Values simultaneously.
Also has special feature like :

- Range
- MAX / MIN / AVG / MAX - MIN
- Timer
- Hold / Peak - Hold
- Secondary View
- REL
- Alarm
- Auto Scheduler



AC Current (True RMS) for Model 81K-TRMS only				
Range	Resolution	Accuracy (50Hz-2kHz)		Note
80mA	1μA	± (0.5%rdg + 10)		Fuses : F 800mA/250V F 20A/250V Voltage drop : < 800mV
800mA	10μA			
8A	0.1mA			
20A	1mA			
AC Current Average (60Hz Sine Wave Calibrating)				
Range	Resolution	Accuracy		Note
80mA	1μA	50Hz-500Hz ± (0.8%rdg + 10)		Fuses : F 800mA/250V F 20A/250V Voltage drop : < 800mV
800mA	10μA			
8A	0.1mA			
20A	1mA			
dBm				
Function	Range	Accuracy		Resolution
dBm	-80.00dBm - +80.00dBm	± 1.0%rdg		0.01dBm
Resistance (Ω)				
Range	Resolution	Accuracy		Note
800Ω	0.01Ω	± (0.3%rdg + 10)		Overload protection : 250V RMS
8kΩ	0.1Ω			
80kΩ	1Ω			
800kΩ	10Ω			
8MΩ	100Ω	± (2.5%rdg + 8)		60MΩ - 80MΩ : ± (3.5%rdg + 10)
80MΩ	1kΩ			
Diode				
Function	Range	Accuracy	Resolution	Note
Diode	8.0000V	± (3.0%rdg + 5)	0.0001V	Diode positive Voltage drop Overload protection : 250V RMS
Frequency (Hz)				
Function	Range	Accuracy	Resolution	Note
Frequency	999.99Hz	± (0.05% rdg + 5)	0.01Hz	Overload protection : 250V RMS Sensitivity : 0.7V RMS
	9.9999kHz		0.1Hz	
	99.999kHz		1Hz	
	999.99kHz		10Hz	
	8.0000MHz		100Hz	
Capacitance				
Range	Resolution	Accuracy		Note
1nF	1pF	± (5.0%rdg + 10) N.A. below 1nF		Overload protection : 250V RMS
10nF	10pF	± (2.5%rdg + 10)		
100nF	100pF			
1μF	1nF			
10μF	10nF			
100μF	100nF	± (3.5%rdg + 10)		
Square Wave output				
□□ OUT		Description		
Voltage amplitude		100mV approx.		
Frequency		0.5Hz ~ 5000Hz		
Duty cycle		1% ~ 99%		
Temperature				
Temp	Resolution	Accuracy	Note	
-50°C ~ 1372°C	1°C	± (2.5% rdg + 8)	K-Type Stick Probe Model TP-02 (upto + 500°C) supplied with 81K & 81K TRMS. For Higher Temperature Range, use appropriate Thermocouple.	
-58°F ~ 2502°F	1°F			