

## Digital Multimeter PC510a



### FEATURES

This instrument is portable digital multimeter designed for measurement of weak current circuits. It plays an important role in circuitry analysis by using additional functions as well as measurements of small type communication equipment, electrical home appliance, lighting voltage and batteries of various type.

- This instrument meets the requirements to Safety Standard IEC61010.
- The main unit case and the circuit board are made of fire retarding materials.
- Fuse protects the current function.
- Fast Response Digit 5 times/sec., Bargraph: 60 times/sec.
- AC coupling True RMS
- Temperature measurement(K-type)
- 0.01  $\Omega$  of resistance and 0.01mV of AC/DC resolution
- MAX/MIN Recording through Auto range
- MAX/MIN Capture(Peak hold 0.8ms in duration) through Auto range
- Zoom Bargraph
- Optical link RS232C / USB interface(KB-RS2a/KB-USB2a are necessary for connecting to PC)



### Specifications

- Update Sampling Rate:  
Digital data: 5 times / sec nominal  
52 segments bar graph: 60 times / sec nominal
- Display:  
3-5/6 digits 5000 counts LCD display
- Auto Power Off Timing: Idle for 17 minutes
- Low Battery Indication:  
Below approx. 7V
- Safety:  
IEC61010-1(EN61010-1) 2nd(2001)  
CAT. III for 600V MAX  
CAT. II for 1000V
- Power consumption : 2.6mA Typical

PC5000a	Measuring range	Best Accuracy	Resolution	Input Impedance
DCV	50m/500m/5/50/500/1000V	$\pm(0.08\%+2)$	0.01mV	10M $\Omega$
ACV	50m/500m/5/50/500/1000V	$\pm(0.5\%+3)$	0.01mV	
DCA	500 $\mu$ /5000 $\mu$ /50m/500m/5/10A	$\pm(0.2\%+4)$	0.01 $\mu$ A	
ACA	500 $\mu$ /5000 $\mu$ /50m/500m/5/10A	$\pm(0.6\%+3)$	0.01 $\mu$ A	
Resistance	50/500/5k/50k/500k/5M/50M $\Omega$	$\pm(0.2\%+2)$	0.01 $\Omega$	
Capacitance	50n/500n/5 $\mu$ /50 $\mu$ /500 $\mu$ /9999 $\mu$ F	$\pm(0.8\%+3)$	0.01nF	
Frequency	10Hz~125kHz	$\pm(0.01\%+2)$	0.001Hz	
Temperature	-50 $^{\circ}$ C~1000 $^{\circ}$ C(Thermocouple K type)	$\pm(0.3\%+3)$	1 $^{\circ}$ C	
Continuity	Buzzer sounds at between 20 $\Omega$ and 120 $\Omega$ . Open Voltage : approx. 3V			
Diode Test	Open Voltage : approx. 3.5V			
Bandwidth	40Hz~20kHz (below 500V) 40Hz~1kHz (ACA)			
Fuse	12.5A/500V 1R20kA $\phi$ 6.3 $\times$ 32mm 0.63A/500V 1R200kA $\phi$ 6.3 $\times$ 32mm			
Battery	6LF22(9V) $\times$ 1			
Size/Weight	H179 $\times$ W87 $\times$ D55mm/460g(including Holster)			
Standard Accessories	Test lead(TL-82), Holster(H-50), Thermocouple K type(K-250PC), Instruction Manual			

※A battery for monitoring is preinstalled before shipping, therefore it may run down sooner than the battery life specified in the instruction manual.

※Specifications and external appearance of the product described above may be revised for modification without prior notice.