

APPA 60 & 90 SERIES MULTIMETER

FEATURES:	APPA 63N	APPA 67	APPA 69	APPA 91	APPA 93N	APPA 97/97R
Digital display	3200 count	3200 count	3200 count	2000 count	2000 count	3200 count
Analog bar graph	65 segments	65 segments	65 segments			65 segments
Range selection	Auto/Manual	Auto/Manual	Auto/Manual	Manual	Manual	Auto/Manual
Frequency counter					•	
Capacitance measurement			•		•	
Audible continuity and Diode test	•	•	•	•	•	•
Data hold	•	•	•			•
Delay hold						•
True RMS measuring						APPA 97R
Beep guard			•	•		•
Automatic power shut off	•	•	•		•	•
Shock proof from 4 feet drops	•	•	•	5 feet	5 feet	5 feet
Standard full-sleeve safety test leads	•	•	•	•	•	•
Protective holster	•	•	•		•	
Water resistant and dust proof case				•		•

SPECIFICATIONS: (All at 23°C ± 5°C, £ 80% R.H.)

DCV:	Ranges	300.0mV~600V	300.0mV~600V	300.0mV~600V	200.0mV~1000V	200.0mV~600V	300.0mV~1000V
	Resolution	0.1mV	0.1mV	0.1mV	0.1mV	0.1mV	0.1mV
	Accuracy	±(0.5%+2d)	±(0.7%+2d)	±(0.5%+2d)	±(0.5%+1d)	±(0.5%+1d)	±(0.5%+2d)/ 97R ±(0.3%+2d)
	Input Impedance:10MW	•	•	•	•	•	•
	Overload Protection: 600V DC or AC rms	•	•	•	1200V DC or 850V AC	•	1000V rms
ACV:	Ranges	3.000V~600V	3.000V~600V	3.000V~600V	200.0mV~750V	200.0mV~600V	3.000V~750V
	Resolution	1mV	1mV	1mV	0.1mV	0.1mV	1mV
	Accuracy: ±(1.5%+5d) at 40Hz~500Hz	•	±(1.7%+5d)	•	• ±(1.25%+4d)	• ±(1.3%+4d)	• ±(1.3%+5d)/ 97R ±(1.3%+3d)
	at 40Hz~500Hz						
	Input Impedance:10MW/<100pF	•	•	•	•	•	•
	Overload Protection: 600V DC or AC rms	•	•	•	•	•	•
	1000V DC or AC peak				1200V DC or 850V AC		•
	Conversion Type: Average sensing RMS indicating	•	•	•	•	•	•
DCA:	Ranges: (20A for 30 seconds)	300.0µA	300.0µA~20.00A	300.0µA~20.00A	200.0µA~20.00A	200.0µA~20.00A	300.0µA~20.00A
	Resolution	0.1µA	0.1µA	0.1µA	0.1µA	0.1µA	0.1µA
	Accuracy: ±(1.2%+2d) basic, ±(2.5%+5d) at >300mA	±(1.0%+2d)	•	•	• ±(1%+1d) basic	• ±(1%+1d) basic	• ±(1%+2d) basic
	±(0.9%+2d) basic, ±(2.5%+5d) at >300mA						
	±(2%+3d) at >2A						
	Input Protection: 1A, 240V fuse for µA/mA input		•	•			
	13A, 240V fuse for A/10A input		•	•			
	600V rms	•					
	1A/500V and 16A/500V fast blow fuses				•	•	•
ACA:	Ranges: (20A for 30 seconds)		300.0µA~20.00A	300.0µA~20.00A	200.0µA~20.00A	200.0µA~20.00A	300.0µA~20.00A
	Resolution		0.1µA	0.1µA	0.1µA	0.1µA	0.1µA
	Accuracy: ±(1.7%+4d) basic, ±(2.9%+7d) >300mA		•	•			
	±(1.5%+4d) basic, ±(2.9%+5d) >300mA			•			
	±(1.5%+3d) basic				• ±(2.5%+3d) at >2A	• ±(2.5%+3d) at >2A	• ±(2.5%+5d) at >2A
	all at 40Hz ~ 500Hz				•	•	•
	Input Protection: Same as DCA		•	•	•	•	•
OHM:	Ranges	300.0W~30.00MW	300.0W~30.00MW	300.0W~30.00MW	200.0W~20.00MW	200.0W~20.00MW	300.0W~30.00MW
	Resolution	0.1W	0.1W	0.1W	0.1W	0.1W	0.1W
	Accuracy: 300W/ 200W	±(1.0%+4d)	±(1.2%+4d)	±(1.0%+4d)	±(0.75%+4d)	±(0.8%+4d)	±(1.0%+4d)/ 97R ±(0.7%+4d)
	3KW 2KW	±(0.8%+2d)	±(0.9%+2d)	±(0.8%+2d)	±(0.75%+1d)	±(0.8%+1d)	±(0.8%+2d)/ 97R ±(0.5%+2d)
	30KW 20KW	±(0.8%+2d)	±(0.9%+2d)	±(0.8%+2d)	±(0.75%+1d)	±(0.8%+1d)	±(0.8%+2d)/ 97R ±(0.5%+2d)
	300KW 200KW	±(0.8%+2d)	±(0.9%+2d)	±(0.8%+2d)	±(0.75%+1d)	±(0.8%+1d)	±(0.8%+2d)/ 97R ±(0.5%+2d)
	3MW 2MW	±(0.8%+2d)	±(1.2%+3d)	±(1.0%+3d)	±(0.75%+1d)	±(0.8%+1d)	±(1.2%+3d)/ 97R ±(1.0%+3d)
	30MW 20MW	±(2.0%+5d)	±(2.5%+5d)	±(2.0%+5d)	±(1.5%+5d)	±(1.5%+5d)	±(2.5%+5d)/ 97R ±(2.0%+5d)
	Overload Protection	600V rms	600V rms	600V rms	500V rms	600V rms	600V rms
Continuity Beeper:	<50W, 2KHz tone buzzer	•	•	•	•	•	•
Diode Test:	Open circuit voltage: 3.3V max	•	•	•	•	•	•
Frequency Counter:	Ranges					2KHz~200KHz	
	Resolution					1Hz	
	Accuracy: ±(1%+3d) at 5V rms max					•	
	Overload Protection					600Vrms	
Capacitance:	Ranges			3.000µF~3000µF		2.000nF~200.0µF	
	Resolution			1nF		1pF	
	Accuracy: ±(1.9%+5d) basic			•		2%+4d	

GENERAL:						
Sampling Rate: 2times/sec for digital display, 12times/sec for analog bar graph	2times/sec	2times/sec	2times/sec	2.5times/sec	2.5times/sec	•
Overload Indication	"1" or "-1"	"1" or "-1"	"1" or "-1"	"1" or "-1"	"1" or "-1"	"OL" or "-OL"
Low Battery Indication						
Auto Power Off: Approx. 30 minutes	•	•	•	•	•	•
Operating Temperature: 0°C~50°C, £80% RH	•	•	•	•	•	•
Storage Temperature: - 20°C ~ 60°C	•	•	•	•	•	•
Temperature Coefficient: 0.15(Spec. Acc)/°C, <18°C or>28°C	•	•	•	•	•	•
Safety: IEC 61010 and designed to meet UL3111 specifications	CAT. III 600V	CAT. II 600V	CAT. II 600V	CAT. III 600V	CAT. II 600V	CAT IIII600V
Power Requirement: Single 9V battery (NEDA 1604 or IEC 6F22)				•	•	•
	IEC LR03, AM4 or AAA size 1.5V x 2			•	•	•
Battery Life: In hours (Alkaline battery)	1000	900	600	300	150	700/ 97R 350
Size: 80mm(W) x 165mm (L) x 36 mm(H), with holster	•					
85mm(W) x 165mm (L) x 40 mm (H), with holster		•	•			
84mm(W) x 175mm (L) x 31 mm(H), without holster				•	•	•
95mm(W) x 192mm (L) x 50 mm (H), with holster				•	•	•
Weight: In grams (with holster)	310	360	370	550	550	550
Included with instrument: Test Leads, Protective holster						
ZnC battery (installed) and manual	•	•	•	•	•	•

Specifications subject to change without notice.

Copyright © 2002 APPA Tech., Corp. All rights reserved

APPA 60 & 90 Series Multimeter

- Analog Bar Graph • True RMS • Auto Power Off • Beep Guard™
- Frequency Counter • Capacitance Ranges • Continuity/Diode Test
- Water Resistant • Drop Proof • Protective Holster



Distrubuted by:

APPA TECHNOLOGY CORPORATION

9F, 119-1 Pao-Zong Rd., Shintien, Taipei, 231, TAIWAN

Tel: +886-2-29178820 Fax: +886-2-29170848

E-mail: info@appatech.com · http://www.appatech.com

ISO 9001 CERTIFIED

APPA®

Advanced Instrument Technology Made Easy

Pocket-Size Multimeter

One Hand Operation



Built-in Tilt Stand



Hanging Convenience



Test Lead Storage



APPA 63N

3200 count digital display
65 segments analog bar graph
Autoranging and manual selection
0.5% basic dc volts accuracy
1.5% basic ac volts accuracy
1.8% basic ohms accuracy
1.0% basic dc amps accuracy
600V protection in every range
Fast continuity beeper
Diode test
Display hold function
MagiHolster™

NEW

APPA 65N

4000 count digital display
No analog bar graph
Same features as APPA 63N plus
Capacitance measurement
Frequency counter

Rugged Industrial Multimeter

Water Resistant



Modles 91, 97 & 97R are designed for harsh environments with water tight gasket at the seams, rotary switch and input terminals to keep out dust, dirt and moisture.

Rating IP 64

Shockproof



Shock mounting and thick-wall design guarantee that these multimeters will keep on working even after a five foot fall to a concrete floor.

Beep Guard



Specially designed Beep Guard provides a constant beep warning if the test leads put in the current jacks and select an incorrect function.

Model 91, 97 & 97R



Multipurpose Holster

Every APPA 90 Series meter is supplied with a protective holster that includes a built-in tilt stand, a nail hook, and convenient test lead storage. This holster provides an extra degree of protection and convenience for your meter.

Safety

All models are designed to meet Class II IEC 1010 and UL 3111 standards for the safest operation in all applications.



APPA 91

3 1/2 digit 0.8" large scale LCD
0.5 % basic DCV accuracy
1.3 % basic ACV accuracy
1.0 % basic DCA accuracy
1.5 % basic ACA accuracy
0.75% basic OHM accuracy
CONTINUITY and DIODE Test
500V dual fuses protection
Auto Power Shut Off
Beep Guard™ warning system
Water Resistant rating IP 64
5 feet drop proof
Protective Holster with tilt stand
IEC 1010-1 standard CAT. I



APPA 67

3200 count digital display
65 segments analog bar graph
Autoranging and manual selection
0.7% basic dc volts accuracy
1.7% basic ac volts accuracy
1.2% basic dc amperes accuracy
1.7% basic ac amperes accuracy
0.9% basic ohms accuracy
600V protection non-current ranges
Beep Guard™ warning system
Fast continuity beeper (0.2 msec)
Diode test
Display hold function
Auto power off
MagiHolster™



APPA 69

3200 count digital display
65 segments analog bar graph
Autoranging and manual selection
0.5% basic dc volts accuracy
1.5% basic ac volts accuracy
0.9% basic dc amperes accuracy
1.5% basic ac amperes accuracy
0.8% basic ohms accuracy
1.9% basic capacitance accuracy
600V protection non-current ranges
Beep Guard™ warning system
Fast continuity beeper (0.2 msec)
Diode test
Display hold function
Auto power off
MagiHolster™



APPA 93N

3 1/2 digit 0.8" large scale LCD
0.5 % basic DCV accuracy
1.3 % basic ACV accuracy
1.0 % basic DCA accuracy
1.5 % basic ACA accuracy
0.75% basic OHM accuracy
1.0 % FREQUENCY accuracy
2.0 % CAPACITANCE accuracy
CONTINUITY and DIODE Test
600V protection in non-current ranges
500V dual fuses protection
Auto Power Shut Off
5 feet drop proof
Protective Holster with tilt stand
IEC 1010-1 standard CAT. II 600V



APPA 97

APPA 97R (True RMS reading)

3200 count digital display
65 segment analog bar graph
Autoranging and manual selection
0.3 % basic DCV accuracy
0.5 % basic DCA accuracy
1.3 % basic ACV accuracy
1.0 % basic DCA accuracy
1.5 % basic ACA accuracy
0.5 % basic OHM accuracy
0.75% basic OHM accuracy
TRUE RMS reading in AC/DC (97R)
CONTINUITY and DIODE Test
500V dual fuses protection
Auto Power Shut Off
Beep Guard™ warning system
Water Resistant rating IP 64
Fast continuity beeper (0.2 msec)
Data HOLD key
Unique DELAY HOLD function
5 feet drop proof
Protective Holster with tilt stand
IEC 1010-1 standard CAT. I

APPA 67 & 69 are designed to safely meet measuring requirements of the field service industry. They are not recommended for use in high energy current measurements.