

ALL NEW APPA 100 Series

The Toughest Multimeters



Here are the key features that make us the toughest



OVERLOAD PROTECTION

High energy fuses, PTCs, and fusible resistors protect APPA 100 Series multimeter, and its user, from overloads.



EXTRA PROTECTION

Every APPA 100 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.



OPTICAL RS-232 INTERFACE

All new APPA 100 series has RS-232 optical interface to connect to PC for data acquisition. APPA 107 and 109 can be self-calibrated in connection with calibrator, also have self-data logging function without connecting to a computer.



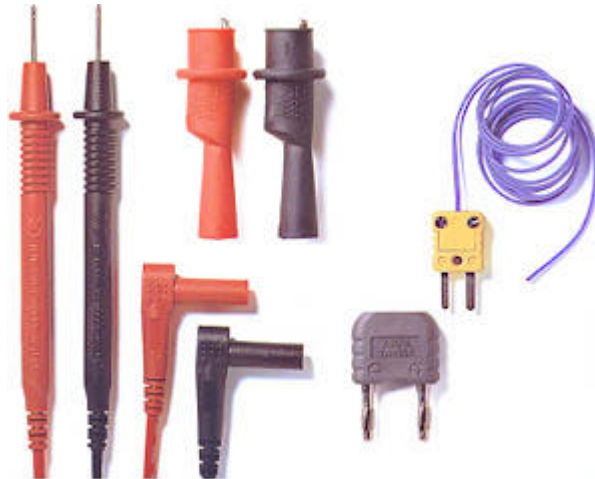
DAY & NIGHT

All new APPA 100 series has LED backlit display that turns ON/OFF at the touch of a button, also automatically goes off to save battery life.



BATTERY EASY TO REPLACE

Unscrew only two screws to remove battery door for battery replacement, designed for user's convenience without opening the bottom case.



NO-OPTION FULL ACCESSORIES

Ergonomically designed test leads with comfort-grip, safety-shrouded, full-sleeve right-angle plug and hard alloy tips for long life. Slip-on insulated alligator clips are standard. Also supplied with temperature adaptor and bead sensor.

APPA103 N



APPA106



APPA 109



APPA 100 Series

The Toughest Multimeters

FEATURES :

	APPA 103N	APPA 105N	APPA 106	APPA 107	APPA 109
Main Display	4000 Count	4000 Count	4000 Count	20000 Count	20000 Count
Dual Digital Display	NA	NA	NA	•	•
Analog Bargraph Display	82 segment	82 segment	82 segment	83 segment	83 segment
Zoom Analog Bargraph	NA	NA	NA	•	•
Center Zero Analog Bargraph	NA	NA	NA	•	•
Self-Calibration	NA	NA	NA	•	•
True RMS	NA	NA	True RMS	AC+DC True RMS	AC+DC True RMS
Data Hold	•	•	•	NA	NA
Auto Hold	NA	NA	NA	•	•
Relative Mode	NA	•	•	•	•
Min/Max/Avg Function	NA	•	•	•	•
Peak Hold	NA	•	•	•	•
Store, Recall Function	NA	NA	NA	Up to 1000 records	Up to 1000 records
°C/°F Temperature Test	NA	NA	•	•	•
Auto Fuse Detector	NA	NA	NA	•	•
Beep Guard	NA	NA	NA	•	•
RS - 232 Cable	OPTION	OPTION	OPTION	OPTION	INCLUDED
WinDMM 100 software	NA	NA	NA	OPTION	INCLUDED
Data logger records	NA	NA	NA	6,000 records	40000 records
dBm/ dB measurment	NA	NA	NA	•	•
Continuity Check/Beeper	•	•	•	•	•
Low Voltage Ohms	•	•	•	•	•
Backlight	•	•	•	•	•
Open Communication Protocol	•	•	•	•	•
Water / Dust Resistant (IP63)	•	•	•	•	•
High Energy Fuses	•	•	•	•	•
Protective Holster	•	•	•	•	•

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

		APPA 103N	APPA 105N	APPA 106	APPA 107	APPA 109
DCV:	Ranges:	400mV ~ 1000V	400mV ~ 1000V	400mV ~ 1000V	20mV ~ 1000V	20mV ~ 1000V
	Resolution:	0.1mV	0.1mV	0.1mV	0.001mV	0.001mV
	Basic Accuracy:	± (0.25% + 1d)	± (0.1% + 1d)	± (0.1% + 1d)	±(0.06% + 10d)	± (0.06% + 10d)
ACV:	Ranges:	400mV ~ 750V	400mV ~ 750V	400mV ~ 750V	20mV ~ 750V	20mV ~ 750V
	Resolution:	0.1mV	0.1mV	0.1mV	0.001mV	0.001mV
	Accuracy:	± (1.3% + 5d)	± (1.0% + 5d)	± (1.0% + 5d)	± (0.70% + 50d), 40Hz ~ 100Hz	± (0.70% + 50d), 40Hz ~ 100Hz
	Randwidth:	40Hz ~ 1KHz	40Hz ~ 1KHz	40Hz ~ 1KHz	40Hz ~ 50KHz	40Hz ~ 100KHz
Ω	Ranges:	400Ω ~ 40MΩ	400Ω ~ 40MΩ	400Ω ~ 40MΩ	200Ω ~ 2GΩ	200Ω ~ 2GΩ
	Resolution:	0.1Ω	0.1Ω	0.1Ω	0.01Ω	0.01Ω
	Basic Accuracy:	± (0.6% + 2d)	± (0.4% + 2d)	± (0.4% + 2d)	± (0.30% + 30d), 200Ω ~ 200KΩ	± (0.30% + 30d), 200Ω ~ 200KΩ
DIODE TEST:	Test Current:	1.5mA (Typical)	1.5mA (Typical)	1.5mA (Typical)	1.1mA (Typical)	1.1mA (Typical)
	Open circuit voltage:	3V DC (max).	3V DC (max).	3V DC (max).	3.3V DC (max).	3.3V DC (max).
Continuity Test:	Continuity Threshold :	Approx.30 Ω	Approx.30 Ω	Approx.30 Ω	Approx.50 Ω	Approx.50 Ω
	Continuity Indicator:	2KHz Tone Buzzer	2KHz Tone Buzzer	2KHz Tone Buzzer	2KHz Tone Buzzer	2KHz Tone Buzzer
DCA:	Ranges :	40mA ~ 10A	40mA ~ 10A	40mA ~ 10A	20mA ~ 10A	20mA ~ 10A
	Resolution:	10μA	10μA	10μA	0.001mA	0.001mA
	Basic Accuracy:	± (0.6% + 2d)	± (0.4% + 2d)	± (0.4% + 2d)	± (0.20% + 40d)	± (0.20% + 40d)
ACA:	Ranges :	40mA ~ 10A	40mA ~ 10A	40mA ~ 10A	20mA ~ 10A	20mA ~ 10A
	Resolution:	10μA	10μA	10μA	0.001mA	0.001mA
	Basic Accuracy:	± (1.3% + 5d)	± (1.3% + 5d)	± (1.3% + 5d)	± (0.80% + 50d), 40Hz ~ 500Hz	± (0.80% + 50d), 40Hz ~ 500Hz
	Bandwidth:	40Hz ~ 1KHz	40Hz ~ 1KHz	40Hz ~ 1KHz	40Hz ~ 3KHz	40Hz ~ 3KHz
Capacitance:	Ranges :	4nF ~ 40mF	4nF ~ 40mF	4nF ~ 40mF	4nF ~ 40mF	4nF ~ 40mF
	Resolution:	1pF	1pF	1pF	1pF	1pF
	Basic Accuracy:	± (2% + 5d)	± (2% + 5d)	± (2% + 5d)	± (0.90% + 5d), 400nF ~ 4 μF	± (0.90% + 5d), 400nF ~ 4 μF

		APPA 103N	APPA 105N	APPA 106	APPA 107	APPA 109
Hz:	Ranges :	4KHz ~ 40MHz	4KHz ~ 400MHz	4KHz ~ 400MHz	20Hz ~ 1MHz	20Hz ~ 1MHz
	Resolution:	1Hz	1Hz	1Hz	0.01Hz	0.01Hz
	Basic Accuracy:	± (0.01% + 1d)	± (0.01% + 1d)	± (0.01% + 1d)	± (0.01% + 10d)	± (0.01% + 10d)
RPM:	Ranges :	40KRPM ~ 400KRPM	40KRPM ~ 400MRPM	40KRPM ~ 400MRPM	NA	NA
	Resolution:	30RPM	30RPM	30RPM		
	Basic Accuracy:	± (0.01% + 10d)	± (0.01% + 10d)	± (0.01% + 10d)		
%DF:	Ranges :	NA	NA	NA	20% ~ 80%	20% ~ 80%
	Resolution:				0.1%	0.1%
	Basic Accuracy:				±1% (20Hz ~ 10KHz, 5Vp-p).	±1% (20Hz ~ 10KHz, 5Vp-p).
Temperature:	Ranges :	NA	NA	-20°C ~ 800°C	-200°C ~ 1200°C	-200°C ~ 1200°C
	Resolution:			1°C	0.1 °C	0.1 °C
	Basic Accuracy:			±(2% + 4°C), -20°C ~ 350°C ±(2% + 2°C), 350°C ~ 500°C ±(3% + 2°C), 501°C ~ 800°C	±(0.1% + 6°C), -200°C ~ 100°C ±(0.1% + 3°C), 100°C ~ 1200°C	±(0.1% + 6°C), -200°C ~ 100°C ±(0.1% + 3°Cs), 100°C ~ 1200°C

GENERAL SPECIFICATIONS:

	APPA 103N	APPA 105N	APPA 106	APPA 107	APPA 109
Sampling Rate: 2.5times/sec	•	•	•	•	•
Auto Power Off: 30 minutes	•	•	•	•	•
Operating Temperature: 0°C ~ 50°C	•	•	•	•	•
Storage Temperature: -20°C ~ 60°C 0 to 80% R.H.	•	•	•	•	•
Temperature: Coefficient: 0.15x (Spec.Sccuracy)/°C, <18°C, >28°C	•	•	•	•	•
Safty Standard: IEC 1010-1&UL3111, CAT III 600V/CAT.II 1000V.	•	•	•	•	•
Battery Life: in hours (Akaline battery)	Alkaline 450 hours	Alkaline 450 hours	Alkaline 300 hours	Alkaline 100 hours	Alkaline 100 hours
Power Requirement: Single 9V battery (NEDA 1604 or IEC 6F22)	NA	NA	•	•	•
IEC, LR03, AM4 Aor AAA Size 1.5 x2	•	•	NA	NA	NA
Dimensions: 86mm (W) x 185mm (L) x 31.5mm (D) 98mm (W) x 197mm (L) x 50mm (D) with holster	•	•	•	•	•
Weight: in grams (with holster)	620grams	620grams	620grams	620grams	620grams
Accessories:	Protective holster, test leads, test clips, ZnC battery (installed) and manual.	Protective holster, test leads, test clips, ZnC battery (installed) and manual.	Protective holster, test leads, test clips, Temp. adaptor, Bead sensor, Alkaline, battery (installed) and manual.	Protective holster, test leads, test clips, Temp. adaptor, Bead sensor. Alkaline battery (installed) and manual.	Protective holster, test leads, test clips, Temp. adaptor, Bead sensor. Alkaline battery (installed) and manual.
Optical RS 232 Cable:	OPTION	OPTION	OPTION	OPTION	INCLUDED
APPA WinDMM 100 software:	NA	NA	NA	OPTION	INCLUDED