

# ALL NEW

# APPA 100 Series

## The Toughest Multimeters

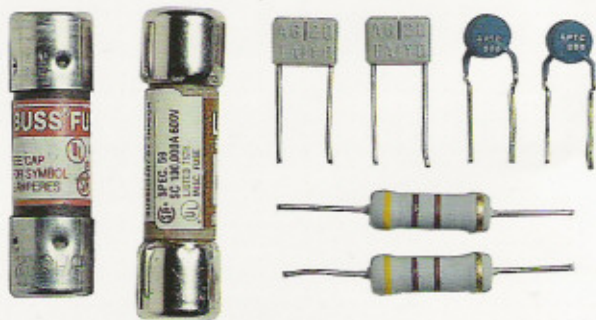


# APPA®

Advanced Instrument Technology Made Easy



# Here are the key features



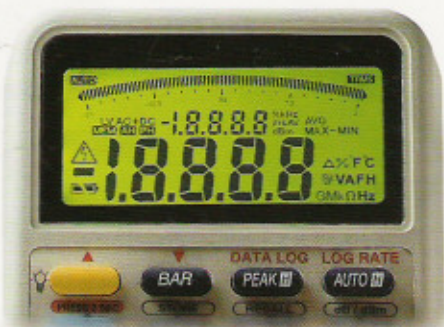
## OVERLOAD PROTECTION

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



## 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.



## EXTRA PROTECTION

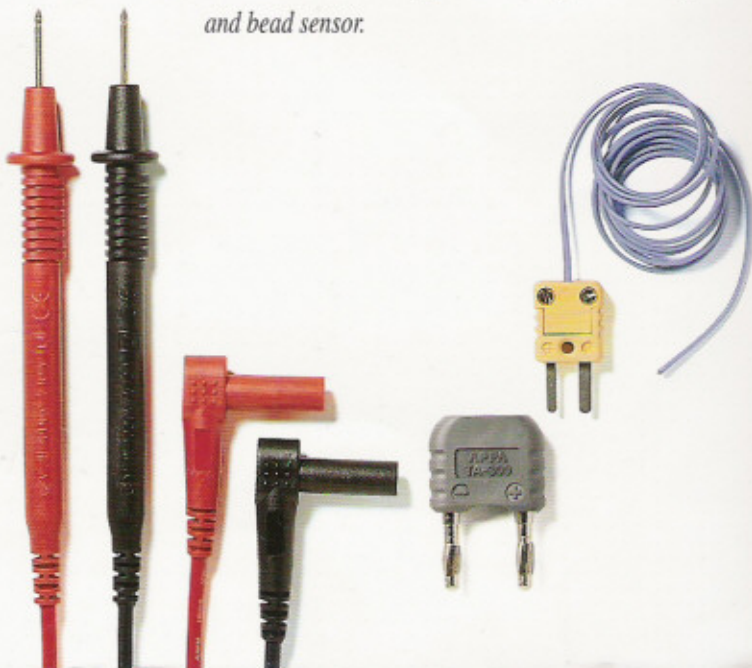
Every APPA 100 Series meter is supplied with a protective holster that includes a built-in tilt stand, a nail hook, and convenient test lead storage. This holster provides an extra degree of protection and convenience for your meter.



## 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.





# that make us the toughest



## 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.



APPA107



APPA109



APPA103N



APPA105N



APPA106

APPA 100 Series multimeters are as tough as they come ...and the best value for your money.



# APPA 100 SERIES MULTIMETERS

## FEATURES:

	APPA 103N	APPA 105N	APPA 106	APPA 107	APPA 109
Main Display	4000 count	4000 count	4000 count	20000/4000 count	20000/4000count
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 100J software	OPTION	OPTION	OPTION	NA	NA
WinDMM 100 software	NA	NA	NA	OPTION	INCLUDED
Data logger records	NA	NA	NA	6,000 records	40,000 records
dBm/ dB measurement	NA	NA	NA	*	*
Continuity Check/Beeper	*	*	*	*	*
Low Voltage Ohms	NA	NA	NA	*	*
Backlight	*	*	*	*	*
Open Communication Protocol	*	*	*	*	*
Water / Dust Resistant	*	*	*	*	*
Protective Holster	*	*	*	*	*

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

DCV:	Ranges: Resolution: Basic Accuracy:	400mV ~ 1000V 0.1mV ±(0.25%+1d)	400mV ~ 1000V 0.1mV ±(0.1%+1d)	400mV ~ 1000V 0.1mV ±(0.1%+1d)	20mV ~ 1000V 0.001mV ±(0.05%+10d)	20mV ~ 1000V 0.001mV ±(0.06%+10d)
ACV:	Ranges: Resolution: Basic Accuracy: Bandwidth:	400mV ~ 750V 0.1mV ±(1.3%+5d) 40Hz ~ 1kHz	400mV ~ 750V 0.1mV ±(1.0%+5d) 40Hz ~ 1kHz	400mV ~ 750V 0.1mV ±(1.0%+5d) 40Hz ~ 1kHz	20mV ~ 750V 0.001mV ±(0.70%+50d), 40Hz ~ 100Hz 40Hz ~ 50kHz	20mV ~ 750V 0.001mV ±(0.70%+50d), 40Hz ~ 100Hz 40Hz ~ 100kHz
Ω:	Ranges: Resolution: Basic Accuracy:	400Ω ~ 40MΩ 0.1Ω ±(0.5%+2d)	400Ω ~ 40MΩ 0.1Ω ±(0.4%+2d)	400Ω ~ 40MΩ 0.1Ω ±(0.4%+2d)	200Ω ~ 2GΩ 0.01Ω ±(0.30%+30d), 200Ω ~ 200KΩ	200Ω ~ 2GΩ 0.01Ω ±(0.30%+30d), 200Ω ~ 200KΩ
Diode Test:	Test Current: Open Circuit Voltage:	1.5 mA (Typical) 3V DC(max)	1.5 mA (Typical) 3V DC(max)	1.5 mA (Typical) 3V DC(max)	1.1 mA (Typical) 3.3V DC(max)	1.1 mA (Typical) 3.3V DC(max)
Continuity Test:	Continuity Threshold: Indicator:	Approx.30Ω 2kHz Tone Buzzer	Approx.30Ω 2kHz Tone Buzzer	Approx.30Ω 2kHz Tone Buzzer	Approx.50Ω 2kHz Tone Buzzer	Approx.50Ω 2kHz Tone Buzzer
DCA:	Ranges: Resolution: Basic Accuracy:	40mA ~ 10A 10µA ±(0.5%+2d)	40mA ~ 10A 10µA ±(0.4%+2d)	40mA ~ 10A 10µA ±(0.4%+2d)	20mA ~ 10A 0.001mA ±(0.20%+40d)	20mA ~ 10A 0.001mA ±(0.20%+40d)
ACA:	Ranges: Resolution: Basic Accuracy: Bandwidth:	40mA ~ 10A 10µA ±(1.3%+5d) 40Hz ~ 1kHz	40mA ~ 10A 10µA ±(1.3%+5d) 40Hz ~ 1kHz	40mA ~ 10A 10µA ±(1.3%+5d) 40Hz ~ 1kHz	20mA ~ 10A 0.001mA ±(0.80%+50d), 40Hz ~ 500Hz 40Hz ~ 3kHz	20mA ~ 10A 0.001mA ±(0.80%+50d), 40Hz ~ 500Hz 40Hz ~ 3kHz
Capacitance:	Ranges: Resolution: Basic Accuracy:	4nF ~ 40mF 1pF ±(2%+5d)	4nF ~ 40mF 1pF ±(2%+5d)	4nF ~ 40mF 1pF ±(2%+5d)	4nF ~ 40mF 1pF ±(0.90%+5d), 400nF ~ 4µF	4nF ~ 40mF 1pF ±(0.90%+5d), 400nF ~ 4µF
HZ:	Ranges: Resolution: Basic Accuracy:	4kHz ~ 40MHz 1Hz ±(0.01%+1d)	4kHz ~ 40MHz 1Hz ±(0.01%+1d)	4kHz ~ 40MHz 1Hz ±(0.01%+1d)	20Hz ~ 1MHz 0.01Hz ±(0.01%+10d)	20Hz ~ 1MHz 0.01Hz ±(0.01%+10d)
RPM:	Ranges: Resolution: Basic Accuracy:	40kRPM ~ 400kRPM 30RPM ±(0.01%+10d)	40kRPM ~ 400kRPM 30RPM ±(0.01%+10d)	40kRPM ~ 400kRPM 30RPM ±(0.01%+10d)	NA	NA
%DF:	Ranges: Resolution: Basic Accuracy:	NA	NA	NA	20% ~ 80% 0.1% ±1% (20Hz ~ 10kHz, 5 Vp-p)	20% ~ 80% 0.1% ±1% (20Hz ~ 10kHz, 5 Vp-p)
Temperature:	Ranges: Resolution: Basic Accuracy:	NA	NA	-20°C ~ 800°C 1°C ±(2%+4°C), -20°C ~ 350°C ±(2%+2°C), 351°C ~ 500°C ±(3%+2°C), 501°C ~ 800°C	-200°C ~ 1200°C 0.1°C ±(0.1%+6°C), -200°C ~ 100°C ±(0.1%+3°C), 100°C ~ 1200°C	-200°C ~ 1200°C 0.1°C ±(0.1%+6°C), -200°C ~ 100°C ±(0.1%+3°C), 100°C ~ 1200°C

## GENERAL SPECIFICATIONS:

Auto Power Off: 30 minutes	*	*	*	*	*
Operating Temperature: 0°C ~ 50°C	*	*	*	*	*
Storage Temperature: -20°C ~ 60°C 0 to 80% R.H.	*	*	*	*	*
Temperature Coefficient: 0.15 x (Spec. Accuracy)/°C, <18°C, >28°C	*	*	*	*	*
Safety: Designed to meet IEC 1010 CAT III 600V & UL 3111 Spec.	*	*	*	*	*
Battery Life: in hours ( Alkaline 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	NA	NA	NA
IEC, LR03, AM4 or AAA Size 1.5 x 2	*	*	NA	NA	NA
Dimensions: 96mm (W) x 185mm (L) x 31.5mm (D) 96mm (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, 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.
Optical RS 232 Cable:	OPTION	OPTION	OPTION	OPTION	INCLUDED
APPA WinDMM 100J software:	OPTION	OPTION	OPTION	NA	NA
APPA WinDMM 100 software:	NA	NA	NA	OPTION	INCLUDED

Specifications subject to change without notice.

Copyright © 2001 APPA Tech., Corp. All rights reserved

Distributed by:



**CHRISTCHURCH**  
Phone: 0-3-348 5999 Fax: 0-3-348 5993  
**AUCKLAND**  
Phone: 0-9-443 3304 Fax: 0-9-443 3077  
email: sales@avo.co.nz  
Internet: www.avo.co.nz

## 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