

## 4¾ Digit 80 Segment High End Multimeter

## **FEATURES**

- 4 ¾ Dual Digit Display with EL Back light for Night operation
- Measuring Rate 2 times/sec
- 80 Segment Analog Bar Graph Display with ZOOM Analog Graph and centre Zero Graph
- Select 40000 count or 4000 count for Resolution
- Auto Range and Manual Range for Fast Readings
- Frequency Counter up to 4MHz
- Capacitance Measurement
- Temperature Measurement
- Auto Hold/ Peak Hold
- Reset For Fresh Reading
- Auto Fuse Detector
- Beep Guard
- Continuity Beeper
- Diode Test
- Hazard Warning
- HI-LO Limits as Comparator with Second Display
- Max, Min, Max-Min on Second Display with beep to sense the limits
- A & % Function for relative and Percentage measurement with preset value as per user's choice
- Low Voltage Ohms
- Ture RMS (AC, AC+DC)
- VAC/Hz/Period Triple Display
- Zero Reference for Offseting Purpose
- dBm/dB
- 600V High Voltage Fuse
- Peak Hold Circuit (0.5ms)
- Self Calibration
- Store Recall up to 7 Memories on the Second Display
- Auto Power Off
- Protective Holster



- Optically Isolated Rs232
- Overload Protection
- Temp Adaptor
- Meeting IEC1010-1, UL3111-1, CSA EN55011
   Class A
- Water / Dust Resistant (IP64 Rating)

Aplab-APPA multimeter 305 is designed for harsh environments with water tight gaskets at the seams, rotary switch, input terminals, and battery cover. This keeps dust, dirt and splashing out. It is provided with extra protective holster with built in stand for comfortable view and test lead storage. This holster provides an extra degree of protection and convenience for your meter. This meter is ergonomically designed with comfort grip for test leads safety shrouded full sleeve right angle plug and hard alloy tips for long life. Excellent protection with high energy fuse, spark gaps and PTC with fusible resistors. The unique rotary switch with durable engineering plastic and beryllium copper contacts plated with gold plated circuit boards will provide years of trouble free use.

## **Technical Specification**

Ranges   Accuracy	<u> </u>		
400mV		Ranges	Accuracy
4V	DCV	400mV 4V 40V 400V	±0.06% +2d ±0.06% +2d ±0.06% +2d ±0.06% +2d
Resolution   1μV in 40mV range.	ACV (40Hz to 100Hz)	4V 40V 400V	±0.7% +5d ±0.7% +5d ±0.7% +5d
I/P Impedance   10MΩ < 100pF.	Bandwidth	40Hz to 100KH	lz.
DCA	Resolution	1μV in 40mV range.	
400mA	I/P Impedance	10MΩ < 100pF.	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	DCA	400mA 4A	±0.2% ±0.2%
Resolution   1μA in 40mA range.	ACA (40Hz to 400Hz)	400mA 4A	±0.8% ±0.8%
Resistance $Ω$ $400Ω$ $\pm 0.3\%$ $\pm 0.3\%$ $\pm 0.3\%$ $\pm 0.3\%$ $\pm 0.3\%$ $\pm 0.0\%$ Resolution $0.01Ω$ in $400Ω$ range.         Input protection $600V$ rms.         Continuity Tester $50Ω$ Threshold.         Indicative Buzzer       at $2KHz$ Tone.         Diode Test       Test current $1.1mA$ Open Circuit Voltage : $3.3V$ .         Capacitance $4nF$ $\pm 0.9\%$	Bandwidth	40Hz to 400Hz.	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Resolution	1μA in 40mA range.	
Input protection   600V rms.	Resistance $\Omega$	4ΚΩ 40ΚΩ 400ΚΩ 4ΜΩ	±0.3% ±0.3% ±0.3% ±0.6%
Continuity Tester   50Ω Threshold.	Resolution	$0.01\Omega$ in $400\Omega$ range.	
Indicative Buzzer	Input protection	-	
Diode Test   Test current 1.1mA   Open Circuit Voltage : 3.3V.	Continuity Tester	$50\Omega$ Threshold.	
Open Circuit Voltage : 3.3V.           Capacitance         4nF         ±0.9%           40nF         ±0.9%           40nF         ±0.9%           4μF         ±0.9%           40μF         ±1.9%           400μF         ±1.9%           4mF         ±2.9%           10mF         ±2.9%           Resolution           1pF on Basic Range.	Indicative Buzzer	at 2KHz Tone.	
40nF ±0.9% 400nF ±0.9% 4μF ±0.9% 40μF ±1.9% 40μF ±1.9% 400μF ±2.9% 10mF ±2.9% 10mF ±2.9%	Diode Test		
ļ <b>y</b> .	Capacitance	40nF 400nF 4μF 40μF 400μF 4mF	±0.9% ±0.9% ±0.9% ±1.9% ±1.9% ±2.9%
Basic Accuracy ±0.9%.	Resolution	1pF on Basic Range.	
	Basic Accuracy	±0.9%.	

Input protection	600Vrms.		
Frequency Counter	400Hz 4KHz 40KHz 400KHz 4MHz	±0.01% +1d ±0.01% +1d ±0.01% +1d ±0.01% +1d ±0.01% +1d	
Sensitivity	0.5VP-P for 15Hz to 1MHz 1VP-P for 1MHz to 4MHz.		
Resolution	0.01Hz on basic range.		
Temperature Measurement	-200°C to +1300°C ±1% (-50 to 1200°C).		
Resolution	0.1°C.		
General			
Beep Guard Provided.			
Overrang Indicator "OL".			
Continuity Beeper.			
dBm/dB readings with selectable Ref. Impedance.			
Self Calibration	Yes.		
Auto Power Off	User selectable upto 30 Mins.		
Software for PC connectivity	WIN DMM 300 (Also works with Lab View).		
Operating Temperature	0°C to 50°C.		
Storage Temp	-20°C to +60°C.		
Relative Humidity	0% to 80%.		
Battery Life (Alkaline)	100 Hrs.		
Power Requirement	Single 9V batte IEC6F22).	Single 9V battery (NEDA1604 or IEC6F22).	
Maximum voltage to Earth	1000V DC or AC peak from any terminal.		
Protective Holster with Stand	Yes.		
Weight	420 gms.		
Size	90 x 200 x 42 mm (without Holster) and 100 x 212 x 55 mm (with Holster).		
Accessories Optional	APPA 32 AC/DC current probe 0.1A to 600A.		
Accessories	clips, 9V a (installed), In: Protective ho	er, K type bead 232 cable and	



## Test & Measurement Instruments Division

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