

Multimeters and Accessories



750 Series Automotive Multimeter



3980

The 750 Series AUTOMOTIVE MULTIMETER includes all the great features of the 550 Series METER, PLUS Automotive specific tests; True RMS, RPM, Dwell, Pulse Width, Temperature, Backlight, RS232, and Min/Max. It is CATIII so it is compatible Hybrid vehicle systems.

Specifications:

- Frequency: 1Hz ~ 10MHz \pm 0.1%
- RPM (Direct Test with Leads): 0 - 10,000
- RPM (with RPM Pick UP): 0 - 10,000
- DWELL Angle: 0 - 360° (1 - 12 CYL)
- Duty Cycle: 0.1% ~ 99.9% \pm 2.5%
- Pulse With-ms (negative): 1 ~ 999ms
- Temperature: -50°C to 400°C, -58°F to 752°F
- DC Volts: 400mV/4/40/400V \pm 0.5%, 1000V \pm 0.8%
- AC Volts: TRMS - 4/40/400V \pm 1.5%, 400mV/750V \pm 2%
- DC Amps: 400/4000 μ A \pm 2%, 40/400mA \pm 1.5%, 4/10A \pm 2%
- AC Amps: TRMS - 400/4000 μ A \pm 2%, 40/400mA \pm 2%, 4/10A \pm 2.5%
- Resistance: 400 Ω /4/40/400k Ω \pm 1%, 4/40M Ω \pm 2%
- Capacitance: 40nF/400nF/4 μ F/40 μ F \pm 3%, 400 μ F/4000 μ F \pm 20%
- Dimensions (H x W x D): 20cm (H) x 9.2cm (W) x 4.1cm (D)

Features:

- Diode Test
- Continuity Test
- Auto Range
- Data Hold
- Relative Change
- Backlight
- Auto Power Off
- CATIII 1000V
- Min/Max
- RS232 & Cable
- Red & Black Test Leads
- Alligator Clips
- RPM Pickup Adapter
- Temp Probe Adapter
- Black Canvas Case
- PC Cable & Software

550 Series Digital Multimeter

3940

The 550 Series DIGITAL MULTIMETER features powerful automotive test functions such as; Frequency, Duty Cycle, Diode & Continuity Tests, plus all the standard meter features you expect in a professional grade Multimeter.

Specifications:

- Frequency: 1Hz ~ 10MHz \pm 0.1%
- Duty Cycle: 0.1% ~ 99.9% \pm 2.5%
- DC Volts: 400mV/4/40/400V \pm 0.5%, 1000V \pm 0.8%
- AC Volts: 4/40/400V \pm 0.8%, 400mV/750V \pm 1.2%
- DC Amps: 400/4000 μ A \pm 2%, 40/400mA \pm 1.5%, 4/10A \pm 2%
- AC Amps: 400/4000 μ A \pm 2.5%, 40/400mA \pm 2%, 4/10A \pm 2.5%
- Resistance: 400 Ω /4/40/400k Ω \pm 1%, 4/40M Ω \pm 2%
- Capacitance: 40nF \pm 3.5%, 400nF/4 μ F/40 μ F \pm 3%, 400 μ F/4000 μ F \pm 20%
- Dimensions (H x W x D): 17.7cm (H) x 8.8cm (W) x 3.9cm (D)

Features:

- Diode Test
- Continuity Test
- Auto Range
- Data Hold
- Relative Change
- Auto Power Off



55 Series Digital Multimeter

3910

The 55 Series DIGITAL MULTIMETER meter provides a full feature set at an economical price. The 55 SERIES contains all the base functions required for today's automotive testing.



Specifications:

- DC Voltage: 200mV/2/20/200V \pm 0.5%, 600V \pm 0.8%
- AC Voltage: 2/20/200V \pm 0.8%, 200mV/600V \pm 1.5%
- DC Amps: 200/2000 μ A \pm 2%, 20/200mA \pm 1.5%, 2/10A \pm 2%
- AC Amps: 200/2000 μ A \pm 2.5%, 20/200mA \pm 2%, 2/10A \pm 2.5%
- Resistance: 200 Ω /2/20/200k Ω /2M Ω \pm 1%, 20M Ω \pm 2%
- Temperature: -50°C – 200°C, -58°F to 392°F
- Dimensions (H x W x D): 14cm (H) x 7.2cm (W) x 3.7cm (D)

Features:

- Display: Max. 2000 Counts
- Auto / Manual Range
- Diode Check
- Continuity Buzzer
- Data Hold, Max Hold
- Auto Power Off

Probe Multimeter

3907

This new probe style meter is a full function multimeter in a convenient pocket pen type package. The probe contains a retractable probe cover and lead clip on back of meter for carrying in pocket or storage.



Specifications:

- DC Voltage: 200mV/2/20/200V \pm 0.5%, 600V \pm 0.8%
- AC Voltage: 2/20/200V \pm 0.8%, 600V \pm 1.2%
- Resistance Measurement: 200 Ω /2/20/200k Ω /2M Ω \pm 1%, 20M Ω \pm 2%
- Dimensions (H x W x D): 18.8cm (H) x 3.8cm (W) x 3cm (D)

Features:

- Display: Max. 2000 Counts
- Function: Ohm/DCV/ACV/Diode/Continuity
- Input Impedance: 10M Ω
- Auto Range
- Operating Switch: Combined switch with function and power switch
- Auto Power Off
- Pocket pen type
- Back light and testing light
- Rotating pen tip protector
- Test lead installing socket

Built-in Probe Protector



1000V CAT III Hybrid Multimeter



3990

OTC 1000V CAT III Hybrid Multimeter with Insulation Test. A full function Multimeter with an insulation test feature is used to test for voltage leaks through insulation found on Hybrid and Electric Vehicles.

Features:

- Hybrid Insulation Resistance Test
- True RMS
- Auto Ranging
- Diode Test
- Continuity Buzzer
- Data Hold
- Data Logging
- Display Backlight
- Min/Max Mode
- Sleep Mode
- Low Battery Display

Specifications:

Insulation Testing Voltage:	50V, 100V, 250V, 500V, 1000V
AC Voltage:	6V, 60V, 600V, 1000V
DC Voltage:	6V, 60V, 600V, 1000V
DC Millivolts:	60mV, 600mV
AC Current:	60mA, 600mA
DC Current:	60mA, 600mA
Ohms:	600., 6k., 60k., 600k., 6M., 40M.
Capacitance:	10nF, 100nF, 1000nF, 10µF, 100µF
Frequency at mV range:	60Hz, 600Hz, 6kHz, 60kHz, 600kHz, 1MHz
Frequency at DCV/ACV range:	10Hz ~ 100kHz
Temperature:	-40C to + 537C (-40F to + 998F)

Kit Includes: Heavy Duty Class III test leads with alligator clips, Short Lead, K Type temperature adapter and Manual.



Hybrid Multimeter Accessories

These Hybrid Electric Safety Gloves are the most important articles of personal protective equipment when working on high voltage vehicles. They are the first line of defense for contact with any energized components.

3991-10

Small Glove with Leather outer protector set

3991-11

Medium Glove with Leather outer protector set

3991-12

Large Glove with Leather outer protector set



3991-2

Use this Orange Magnetic Warning Sign to deter people from entering an area where a high voltage system is being worked on.



WARNING: Safety Gloves must be inspected prior to each use in accordance with ASTM Standard F1236 and the applicable Service manual for the vehicle being serviced. Rubber insulating gloves must be retested electrically at least once every six (6) months using the test procedures described in the most recent editions of ASTM Standard F496.

AMP Clamp/Multimeter

3908

OTC AMP Clamp/Multimeter was designed to allow accurate current measurements using clamp jaws. The clamp meter is well suited for testing starting/ charging circuits, and provides easy access to current, voltage and other key automotive measurements, all in one easy to use tool.

Features:

- Duty Cycle
- Resistance
- Capacitance
- Diode
- Continuity
- Frequency
- Temperature
- Display maximum reading of 4000 counts
- Range auto/manual
- Automatic negative polarity indication
- Automatic zero adjustment
- Over range indication
- Low battery symbol
- Data hold symbol
- Relative measurement symbol
- Clamp opening size 32mm
- Auto power off

Specifications:

AC/DC Voltage:	600V
AC/DC Current:	1000A
Operating Environment Temperature:	32 to 104°F (0°C to 40°C),
Humidity:	< 80% RH
Storage environment temperature:	-4 TO 140°F (-20°C TO 60°C),
Humidity:	< 90% RH

Kit Includes: Test leads, temperature probe, soft carry case, 9-volt battery

The meter is in compliance with the following standards:

- IEC1010 double insulation
- Pollution degree 2
- Over voltage category III (600 volts)
- Power One 9-volt alkaline battery (NEDA 1604 or equivalent)





Multimeter Family Comparison Chart



	3907	3908	3910	3940	3980	3990
Technical Specifications:						
Frequency:				1Hz ~ 10MHz ± 0.1%	1Hz ~ 10MHz ± 0.1%	10Hz ~ 1MHz
RPM (Direct Test with Leads):					0 - 10,000	
RPM (with RPM PickUp):					0 - 10,000	
DWELL Angle:					0 - 360° (1 - 12 CYL)	
Duty Cycle:				0.1% ~ 99.9% ± 2.5%	0.1% ~ 99.9% ± 2.5%	
Pulse Width-ms (negative):					1 ~ 999ms	
Temperature:			-50°C to 200°C, -58°F to 392°F		-50°C to 400°C, -58°F to 752°F	-40°C to 537°C, -40°F to 998°F
DC Volts:	200mV/2/20/200V ± 0.5%, 600V ± 0.8%	400mV/4/40/400V ± 0.5%, 600V ± 0.8%	200mV/2/20/200V ± 0.5%, 600V ± 0.8%	400mV/4/40/400V ± 0.5%, 1000V ± 0.8%	400mV/4/40/400V ± 0.5%, 1000V ± 0.8%	60mV/600mV/6V/60V/600V/1000V
AC Volts:	2/20/200V ± 0.8%, 200mV/600V ± 1.2%	TRMS-4/40/400V ± 1%, 400mV/600V ± 1.5%	2/20/200V ± 0.8%, 200mV/600V ± 1.5%	4/40/400V ± 0.8%, 400mV/750V ± 1.2%	TRMS - 4/40/400V ± 1.5%, 400mV/750V ± 2%	TRMS - 6V/60V/600V/1000V
DC Amps (through Meter):			400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%	400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%	400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%	0.01mA to 600mA
AC Amps (through Meter):			200/2000µA ± 2.5%, 20/200mA ± 2%, 2/10A ± 2.5%	400/4000µA ± 2.5%, 40/400mA ± 2%, 4/10A ± 2.5%	TRMS - 400/4000µA ± 2%, 40/400A ± 2%, 4/10A ± 2.5%	3mA to 600mA
DC Amps (Inductive):		400A ± (1.5% + 5), 1000A ± (2% + 10)				
AC Amps (Inductive):		400A ± (2% + 5), 1000A ± (2.5% + 10)				
Resistance:	200Ω/2/20/200kΩ/2MΩ±1%, 20MΩ±2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	200Ω/2/20/200kΩ/2MΩ ± 1%, 20MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	600Ω, 6kΩ, 60kΩ, 600kΩ, 6MΩ, 40MΩ
Capacitance:		400nF/4µF ± (2.5%+5), 40µF/100µF ± (5%+10)		40nF ± 3.5%, 400nF/4µF/40µF ± 3%, 400µF/4000µF ± 20%	40nF/400nF/4µF/40µF ± 3%, 400µF/4000µF ± 20%	
Insulation Testing						50V,100V,250V,500V,1000V
Features:						
Diode Test / Continuity Test	■	■	■	■	■	■
Auto Range	■	■	■	■	■	■
Auto Power Off	■	■	■	■	■	■
Data Hold	■	■	■	■	■	■
Backlight	■	■	■	■	■	■
True RMS	■	■	■	■	■	■
Relative Change				■	■	■
Min/Max				■	■	■
Temperature Adapter			■		■	■
Hybrid Compatible / Class III					■	■
Alligator Clips					■	■
Class III Test Leads					■	■
Case		■			■	■
RS232 Computer Interface					■	■
PC Cable and Software					■	■
RPM Pickup Adapter					■	■
Insulation Test (Hybrid)						■
Inductive Current Measurement		■				

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