

# Hand-Held Digital Multimeter

The GDM-300/400 Series Hand Held DMM are a compact, high precision, battery operated multimeter series designed to meet of service engineers. The GDM-300/400 Series design is driven by mobile-oriented features: automatic power off to preserve battery life, a large backlight display for crisp viewing, a rotary selector and push buttons to ease operation, and temperature measurement for outdoor use. The basic functions match the depth of bench-top multimeters: fuse-protected current input, true RMS for accurate AC measurements, Auto ranging, Duty cycle, and Relative mode. These compact, reliable, and economical devices are ideal for any engineer.



GDM-451



GDM-356



GDM-350B

NEW



### GDM-451 FEATURES

- \* 4 1/2 Digits Manual Ranging
- \* Temperature Measurement
- \* Capacitance, Frequency Measurement
- \* Data Hold
- \* Auto Power Off

### GDM-356 FEATURES

- \* 3 1/2 Digits Manual Ranging
- \* Temperature Measurement
- \* Capacitance, Frequency Measurement
- \* Data Hold
- \* Auto Power Off

### GDM-350B FEATURES

- \* 3 1/2 Digits Manual Ranging
- \* Temperature Measurement
- \* Continuity Beeper/Diode Test
- \* hFE Test
- \* Data Hold

SPECIFICATIONS	
<b>DC VOLTAGE</b>	
Range	220mV, 2.2V, 22V, 220V, 1000V(GDM-461); 200mV, 2V, 20V, 200V, 1000V(GDM-451/356) 40mV, 400mV, 4V, 40V, 400V, 1000V(GDM-397); 400mV, 4V, 40V, 400V, 1000V(GDM-394/396)
Best Accuracy	400mV, 4V, 40V, 400V, 600V(GDM-395); 200mV, 2000mV, 20V, 200V, 250V(GDM-350B) $\pm(0.1\%rdg + 2 \text{ digits})$ for GDM-461; $\pm(0.05\%rdg + 3 \text{ digits})$ for GDM-451 $\pm(0.5\%rdg + 1 \text{ digit})$ for GDM-397/356; $\pm(0.8\%rdg + 1 \text{ digit})$ for GDM-394/396 $\pm(0.7\%rdg + 3 \text{ digits})$ for GDM-395; $\pm(0.5\%rdg + 2 \text{ digits})$ for GDM-350B
Input Impedance	10MΩ (3000MΩ for mV range of GDM-461/397)
<b>AC VOLTAGE</b>	
Range	220mV, 2.2V, 22V, 220V, 750V(GDM-461); 2V, 20V, 200V, 750V(GDM-451/356) 40mV, 400mV, 4V, 40V, 400V, 750V(GDM-397); 4V, 40V, 400V, 750V(GDM-394/396)
Best Accuracy	4V, 40V, 400V, 600V(GDM-395); 200V, 250V(GDM-350B) $\pm(0.8\%rdg + 10 \text{ digits})$ for GDM-461; $\pm(0.5\%rdg + 10 \text{ digits})$ for GDM-451 $\pm(1.0\%rdg + 3 \text{ digits})$ for GDM-397; $\pm(1.0\%rdg + 5 \text{ digits})$ for GDM-394/396 $\pm(0.8\%rdg + 3 \text{ digits})$ for GDM-356; $\pm(2.3\%rdg + 5 \text{ digits})$ for GDM-395 $\pm(1.2\%rdg + 3 \text{ digits})$ for GDM-350B
Input Impedance	10MΩ(3000MΩ for mV range of GDM-461/397); 4.5MΩ for GDM-350B; 2MΩ for GDM-451
<b>DC CURRENT</b>	
Range	220 μA, 2200 μA, 22mA, 220mA, 10A(GDM-461); 2mA, 20mA, 200mA, 20A(GDM-451) 400 μA, 4000 μA, 40mA, 400mA, 4A, 10A(GDM-397); 2000 μA, 20mA, 200mA, 10A(GDM-350B)
Best Accuracy	400 μA, 4mA, 40mA, 400mA, 4A, 10A(GDM-394/396); 20mA, 200mA, 20A(GDM-356) $\pm(0.5\%rdg + 10 \text{ digits})$ for GDM-461; $\pm(0.5\%rdg + 5 \text{ digits})$ for GDM-451 $\pm(1.0\%rdg + 2 \text{ digits})$ for GDM-397/394/396/350B; $\pm(0.8\%rdg + 1 \text{ digit})$ for GDM-356
<b>AC CURRENT</b>	
Range	220 μA, 2200 μA, 22mA, 220mA, 10A(GDM-461); 20mA, 200mA, 20A(GDM-451/356) 400 μA, 4000 μA, 40mA, 400mA, 4A, 10A(GDM-397) 400 μA, 4mA, 40mA, 400mA, 4A, 10A(GDM-394/396)
Best Accuracy	$\pm(0.8\%rdg + 10 \text{ digits})$ for GDM-461/451; $\pm(1.2\%rdg + 5 \text{ digits})$ for GDM-397 $\pm(1.5\%rdg + 5 \text{ digits})$ for GDM-394/396; $\pm(1.0\%rdg + 3 \text{ digits})$ for GDM-356
<b>RESISTANCE</b>	
Range	220Ω ~ 220MΩ 7 ranges(GDM-461); 200Ω ~ 200MΩ 7 ranges(GDM-451/356) 400Ω ~ 40MΩ 6 ranges(GDM-394/395/396/397); 200Ω ~ 20MΩ 6 ranges(GDM-350B)
Best Accuracy	$\pm(0.5\%rdg + 10 \text{ digits})$ for GDM-461; $\pm(0.3\%rdg + 1 \text{ digit})$ for GDM-451 $\pm(1.0\%rdg + 2 \text{ digits})$ for GDM-394/396/397; $\pm(2.0\%rdg + 5 \text{ digits})$ for GDM-395 $\pm(0.8\%rdg + 1 \text{ digit})$ for GDM-356; $\pm(0.8\%rdg + 5 \text{ digits})$ for GDM-350B
<b>CONTINUITY BEEPER</b>	
	Buzzer sounds if conductance less than 70Ω for GDM-451/394/395/396/356 Buzzer sounds if conductance less than 10Ω for GDM-461/397/350B
<b>DIODE TEST</b>	
Open Circuit Voltage	GDM-461/451/397/356 : 2.8V(Approx.); GDM-394/395/396 : 1.48V(Approx.) GDM-350B : 2.3V(Approx.)
<b>CAPACITANCE</b>	
Range	22nF, 220nF, 2.2 μF, 22 μF, 220 μF, 2.2mF, 22mF, 220mF(GDM-461) 40nF, 400nF, 4 μF, 40 μF, 400 μF, 4000 μF(GDM-397); 2nF, 20nF, 2 μF, 20 μF(GDM-451)
Best Accuracy	40nF, 400nF, 4 μF, 40 μF, 100 μF(GDM-394/395/396); 20nF, 200nF, 2 μF, 100 μF(GDM-356) $\pm(3.0\%rdg + 5 \text{ digits})$ for GDM-461/397/396/394; $\pm(3.0\%rdg + 40 \text{ digits})$ for GDM-451 $\pm(5.0\%rdg + 10 \text{ digits})$ for GDM-395; $\pm(4.0\%rdg + 3 \text{ digits})$ for GDM-356
<b>FREQUENCY</b>	
Range	10Hz ~ 220MHz (GDM-461); 1Hz ~ 20kHz (GDM-451/356) 10Hz ~ 10MHz (GDM-394/396/397); 1Hz ~ 99.9kHz (GDM-395)
Best Accuracy	$\pm(0.01\%rdg + 5 \text{ digits})$ for GDM-461; $\pm(1.5\%rdg + 5 \text{ digits})$ for GDM-451/356 $\pm(0.1\%rdg + 3 \text{ digits})$ for GDM-394/396; $\pm(0.1\%rdg + 4 \text{ digits})$ for GDM-397 $\pm(0.7\%rdg + 3 \text{ digits})$ for GDM-395
<b>TEMPERATURE</b>	
Range	-40°C ~ 1000°C
Best Accuracy	$\pm(1.0\%rdg + 30 \text{ digits})$ for GDM-451; $\pm(1.0\%rdg + 7 \text{ digits})$ for GDM-396/356 $\pm(1.2\%rdg + 4 \text{ digits})$ for GDM-397; $\pm(1.0\%rdg + 3 \text{ digits})$ for GDM-350B
<b>SPECIAL FUNCTION</b>	
	Auto Ranging(GDM-461/397/396/395/394); True RMS(GDM-461/396); RS-232C(GDM-461/397/396) hFE Test(GDM-350B); Display Backlight(GDM-451/397/396/394/356); Analogue Bar(GDM-461/397)
<b>LCD DISPLAY</b>	
	22000 counts(GDM-461), 4 1/2 digits(GDM-451), 3 3/4 digits(GDM-397/396/395/394), 3 1/2 digits(GDM-356/350B)
<b>POWER SOURCE</b>	
	Single 9V Battery (6F22), Cell Battery for GDM-395 (CR2032)



GDM-461 NEW



GDM-397 NEW



GDM-394/396



GDM-395



SPECIFICATIONS	
<b>DIMENSIONS &amp; WEIGHT</b>	
	87(W) x 180(H) x 47(D) mm, Approx. 370g (GDM-461/397)
	85(W) x 177(H) x 40(D) mm, Approx. 330g (GDM-396/394)
	80(W) x 165(H) x 38.3(D) mm, Approx. 275g (GDM-451/356)
	72(W) x 137(H) x 35(D) mm, Approx. 200g (GDM-350B)
	56(W) x 110(H) x 11.5(D) mm, Approx. 97g (GDM-395)

ORDERING INFORMATION	
GDM-461	22000 Counts Hand-Held DMM with True RMS Measurement and RS-232C Interface
GDM-451	4 1/2 Digits Hand-Held DMM
GDM-397	3 3/4 Digits Hand-Held DMM with RS-232C Interface
GDM-396	3 3/4 Digits Hand-Held DMM with True RMS Measurement and RS-232C Interface
GDM-394	3 3/4 Digits Hand-Held DMM
GDM-395	3 3/4 Digits Slim-Pocket DMM
GDM-356	3 1/2 Digits Hand-Held DMM
GDM-350B	3 1/2 Digits Hand-Held DMM

<b>ACCESSORIES:</b> User manual x1, Test leads, Battery	
<b>FREE DOWNLOAD</b>	
GDM-461 PC Software	PC Software; Remote software (RS-232C/USB)
GDM-397 PC Software	PC Software; Remote software (RS-232C/USB)
GDM-396 PC Software	PC Software; Remote software (RS-232C)

SELECTION GUIDE								
MODEL	GDM-461	GDM-451	GDM-397	GDM-396	GDM-394	GDM-395	GDM-356	GDM-350B
Max. Display	22000	19999	4000	3999	3999	3999	1999	1999
Auto Ranging	✓		✓	✓	✓	✓		
Analogue Bar	✓		✓					
True RMS	✓		✓	✓				
Display Backlight		✓	✓	✓	✓		✓	
Fused 10A Range	✓		✓	✓	✓			✓
Auto Power off		✓	✓		✓	✓	✓	
DC Voltage	1000V	1000V	1000V	1000V	1000V	600V	1000V	250V
AC Voltage	750V	750V	750V	750V	750V	600V	750V	250V
DC Current	10A	20A	10A	10A	10A		20A	10A
AC Current	10A	20A	10A	10A	10A		20A	
Resistance	220MΩ	200MΩ	40MΩ	40MΩ	40MΩ	40MΩ	200MΩ	20MΩ
Capacitance	220mF	20 μF	4000 μF	100 μF	100 μF	100 μF	100 μF	
Frequency	220MHz	20kHz	10MHz	10MHz	10MHz	99.9kHz	20kHz	
Diode	✓	✓	✓	✓	✓	✓	✓	✓
Continuity	✓	✓	✓	✓	✓	✓	✓	✓
Temperature		✓	✓	✓			✓	✓
Duty Cycle (%)	✓		✓	✓	✓	✓		
Transistor (hFE)								✓
REL	✓		✓	✓	✓	✓		
Data Hold	✓	✓	✓	✓	✓	✓	✓	✓
Peak Hold	✓							
MAX MIN			✓					
RS-232C	✓		✓	✓				

- ### GDM-461 FEATURES
- \* 22000 Counts Auto/Manual Ranging
  - \* 46 Segments Analogue Bar
  - \* Data/Peak Hold and Relative Mode
  - \* True RMS/RS-232C

- ### GDM-397 FEATURES
- \* 3 3/4 Digits Auto/Manual Ranging
  - \* 41 Segments Analogue Bar
  - \* MAX/MIN, Data Hold and Relative Mode
  - \* RS-232C
  - \* Auto Power Off

- ### GDM-396/394 FEATURES
- \* 3999 Counts Auto/Manual Ranging
  - \* Continuity Beeper/Diode Test
  - \* Capacitance, Frequency Measurement
  - \* Data Hold and Relative Mode
  - \* True RMS/RS-232C (GDM-396 Only)

- ### GDM-395 FEATURES
- \* 3999 Counts Auto/Manual Ranging
  - \* Slim Pocket Digital Multimeter
  - \* Continuity Beeper/Diode Test
  - \* Capacitance, Frequency Measurement
  - \* Data Hold and Relative Mode
  - \* Auto Power Off