

GDM-500 Series Hand-Held Digital Multimeter

GW INSTEK
Simply Reliable

GDM-541



GDM-533



GDM-532



GDM-531



The GDM-500 Series Hand Held DMM are a compact, high precision, battery operated multimeter series designed to meet of service engineers. The GDM-500 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 then NCV (Non-Contact Voltage) function for outdoor use.

The basic functions match the depth of bench-top multimeters: fuse-protected current input, true RMS for accurate AC measurements, Audible/Visual Alarm when Overload, Auto ranging, Duty cycle and Relative mode. The compact, reliable and economical devices are ideal for any engineer.

FEATURES

GDM-541 FEATURES

- * 22000 Counts Auto/Manual Ranging
- * 46 Segments Analogue Bar
- * ACV Measurement up to 1000V
- * AC+DC Voltage Measurement
- * Current Measurement up to 20A
- * Transistor (hFE) Measurement
- * Audible/Visual Alarm when Overload
- * True RMS/USB Interface

GDM-533 FEATURES

- * 6000 Counts Auto/Manual Ranging
- * 31 Segments Analogue Bar
- * LoZ ACV Measurement
- * ACV Measurement up to 1000V
- * Current Measurement up to 20A
- * Temperature Measurement
- * Audible/Visual Alarm when Overload
- * True RMS/USB Interface

GDM-532 FEATURES

- * 9999 Counts Auto/Manual Ranging
- * Display Backlight/Auto Power Off
- * Continuity Beeper/Diode Test
- * Temperature Measurement
- * Non-Contact Voltage (NCV) Detection
- * Data Hold and Relative Mode

GDM-531 FEATURES

- * 6000 Counts Manual Ranging
- * Display Backlight/Auto Power Off
- * Capacitance Measurement
- * Non-Contact Voltage (NCV) Detection
- * Data Hold
- * Audible/Visual Alarm when Overload

SELECTION GUIDE

MODEL	GDM-541	GDM-533	GDM-532	GDM-531
Max. Display	22000	6000	9999	6000
Auto Ranging	✓	✓	✓	
Analog Bar	✓	✓		
True RMS	✓	✓	✓	
Display Backlight	✓	✓	✓	✓
Auto Power off	✓	✓	✓	✓
Curr. Range Protection	PTS & Fuse	PTS & Fuse	Fuse	Fuse
DC Voltage	1000V	1000V	999.9V	600V
AC Voltage	1000V	1000V	999.9V	600V
DC Current	20A	20A	9.99A	10A
AC Current	20A	20A	9.99A	
Resistance	220MΩ	60MΩ	99.99MΩ	60MΩ
Capacitance	220mF	60mF	9.999mF	9.999mF
Frequency	220MHz	10MHz	9.9MHz	
Diode	✓	✓	✓	✓
Continuity	✓	✓	✓	✓
Temperature		✓	✓	
Duty Cycle (%)	✓	✓	✓	
Transistor (hFE)	✓			
NCV Function	✓	✓	✓	✓
REL	✓	✓	✓	
Data Hold	✓	✓	✓	✓
Peak Hold	✓	✓		
MAX MIN	✓	✓		
LoZ ACV		✓		
LPF ACV	✓			
Audible / Visual Alarm	✓	✓	✓	✓
AC+DC Measurement	✓			
Interface	USB	USB		
Safety Rating	CAT III 1000V CAT IV 600V	CAT III 1000V CAT IV 600V	CAT II 1000V CAT III 600V	CAT III 600V

SPECIFICATIONS		
DC VOLTAGE	Range	220.00mV, 2.2000V, 22.000V, 220.00V, 1000V(GDM-541) 60.00mV, 600.0mV, 6.000V, 60.00V, 600.0V, 1000V(GDM-533) 9.999mV, 99.99mV, 999.9mV, 9.999V, 99.99V, 999.9V(GDM-532) 600.0mV, 6000mV, 60.00V, 600.0V(GDM-531)
	Best Accuracy	±(0.05%rdg + 5 digits) for GDM-541; ±(0.5%rdg + 3 digits) for GDM-533
	Input Impedance	±(0.5%rdg + 3 digits) for GDM-532; ±(0.7%rdg + 3 digit) for GDM-531 10 MΩ (At mV range : 1GΩ for GDM-541/533; 3GΩ for GDM-532)
AC VOLTAGE	Range	220.00mV, 2.2000V, 22.000V, 220.00V, 1000.0V(GDM-541) 60.00mV, 600.0mV, 6.000V, 60.00V, 600.0V, 1000V(GDM-533) 9.999mV, 99.99mV, 999.9mV, 9.999V, 99.99V, 999.9V(GDM-532) 600.0V(GDM-531)
	Best Accuracy	±(0.8%rdg + 10 digits) for GDM-541; ±(1.0%rdg + 3 digits) for GDM-533
	Frequency Response	±(0.8%rdg + 3 digits) for GDM-532; ±(1.2%rdg + 3 digits) for GDM-531 40Hz-10kHz for GDM-541; 40Hz-1kHz for GDM-533
	Input Impedance	45Hz-400Hz for GDM-532; 40Hz-400Hz for GDM-531 10 MΩ
DC CURRENT	Range	220.00μA, 2200.0μA, 22.000mA, 220.00mA, 20.000A(GDM-541) 600.0μA, 6000μA, 60.00mA, 600.0mA, 6.000A, 20.00A(GDM-533) 999.9μA, 999.9mA, 9.999A(GDM-532) 600.0μA, 60.00mA, 600.0mA, 10.00A(GDM-531)
	Best Accuracy	±(0.5%rdg + 10 digits) for GDM-541; ±(1.0%rdg + 2 digits) for GDM-533 ±(0.8%rdg + 3 digits) for GDM-532; ±(1.0%rdg + 3 digits) for GDM-531
AC CURRENT	Range	220.00μA, 2200.0μA, 22.000mA, 220.00mA, 20.000A(GDM-541) 600.0μA, 6000μA, 60.00mA, 600.0mA, 6.000A, 20.00A(GDM-533) 999.9μA, 999.9mA, 9.999A(GDM-532)
	Best Accuracy	±(0.8%rdg + 10 digits) for GDM-541; ±(1.2%rdg + 5 digits) for GDM-533 ±(1.0%rdg + 3 digits) for GDM-532
RESISTANCE	Range	220.00Ω, 2.2000kΩ, 22.000kΩ, 220.00kΩ, 2.2000MΩ, 22.000MΩ, 220.00MΩ(GDM-541) 600.0Ω, 6.000kΩ, 60.00kΩ, 600.0kΩ, 6.000MΩ, 60.00MΩ(GDM-533) 999.9Ω, 9.999kΩ, 99.99kΩ, 999.9kΩ, 9.999MΩ, 99.99MΩ(GDM-532) 600.0Ω, 6000Ω, 60.00kΩ, 600.0kΩ, 60.00MΩ(GDM-531)
	Best Accuracy	±(0.5%rdg + 10 digits) for GDM-541; ±(1.0%rdg + 2 digit) for GDM-533 ±(0.8%rdg + 2 digits) for GDM-532; ±(0.8%rdg + 2 digits) for GDM-531
CONTINUITY BEEPER		Buzzer sounds if conductance less than 50Ω for GDM-541/533 Buzzer sounds if conductance less than 30Ω for GDM-532 Buzzer sounds if conductance less than 10Ω for GDM-531
DIODE TEST	Open Circuit Voltage	GDM-541/533 : 3V (Approx.); GDM-532 : 3.3V (Approx.); GDM-531 : 2.1V (Approx.)
CAPACITANCE	Range	22.000nF,220.00nF,2.2000μF,22.000μF,220.00μF,2.2000mF,22.000mF,220.00mF(GDM-461) 60.00nF, 600.0nF, 6.000μF, 60.00μF, 600.0μF, 6.000mF, 60.00mF(GDM-533)
	Best Accuracy	9.999nF, 99.99nF, 999.9nF, 9.999μF, 99.99μF, 999.9μF, 9.999mF(GDM-532/531) ±(3.0%rdg + 5 digits) for GDM-541/533; ±(4.0%rdg + 5 digits) for GDM-532/531
FREQUENCY	Range	10Hz ~ 220MHz(GDM-541); 10Hz ~ 10MHz(GDM-533); 99.99Hz ~ 9.999MHz(GDM-532)
	Best Accuracy	±(0.01%rdg + 5 digits) for GDM-541; ±(0.1%rdg + 4 digits) for GDM-533
	Input Amplitude	±(0.1%rdg + 5 digits) for GDM-532 ≤ 20Vrms
TEMPERATURE	Range	-40°C ~ 1000°C / -40°F ~ 1832°F
	Best Accuracy	±(1.0%rdg + 3 °C) for GDM-533; ±(1.0%rdg + 5 °C) for GDM-532 ±(1.0%rdg + 4 °F) for GDM-533; ±(1.5%rdg + 5 °F) for GDM-532
SPECIAL FUNCTION		Auto Ranging(GDM-541/533/532); True RMS(GDM-541/533/532); Analog Bar(GDM-541/533); USB(GDM-541/533); Display Backlight(GDM-541/533/532/531); NCV Function (GDM-541/533/532/531); Audible/Visual Alarm(GDM-541/533/532/531); AC+DC Voltage (GDM-541); LPF ACV(GDM-541); hFE Test(GDM-541); LoZ ACV(GDM-533)
LCD DISPLAY		22000 counts (GDM-541), 6000 counts (GDM-533/531), 9999 counts (GDM-532)
POWER SOURCE		1.5V AAA x 4 (GDM-541/533); 1.5V AAA x 3 (GDM-532); 1.5V AAA x 2 (GDM-531)
DIMENSIONS & WEIGHT		89(W) x 186(H) x 49(D) mm, Approx. 400g (GDM-541/533) 81(W) x 169(H) x 46(D) mm, Approx. 400g (GDM-532) 76.5(W) x 155(H) x 49(D) mm, Approx. 255g (GDM-531)

GDM-500_E_D1DH_202205

ORDERING INFORMATION	
GDM-541	22000 Counts Hand-Held DMM with True RMS Measurement and USB Interface
GDM-533	6000 Counts Hand-Held DMM with True RMS Measurement and USB Interface
GDM-532	9999 Counts Hand-Held DMM with True RMS Measurement
GDM-531	6000 Counts Hand-Held DMM

ACCESSORIES	
User manual, Test leads, Battery, USB cable & Adapter socket (GDM-541/533 only), K-type thermocouple (GDM-533/532 only)	
FREE DOWNLOAD	
GDM-541 PC Software	Remote Software
GDM-533 PC Software	Remote Software

Contact:
Industrial Process Measurement, Inc.
3910 Park Avenue, Unit 7
Edison, NJ 08820
732-632-6400
support@instrumentation2000.com
<https://www.instrumentation2000.com/>

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