MEASUREMENT EXPLORES~ INSIGHT & EFFICIENCY



GDM-906X Series

6 1/2 Digit Dual Measurement Multimeter

CE | USB Device | USB Host | LAN | RS-232 | GPIB | Digital I/O | PC Software | LabVIEW Driver

- 6 1/2 Digit Display: 1,200,000 Counts
- 4.3" TFT Graphic LCD
- DCV Basic Accuracy: 0.0035%(GDM-9061)/0.0075%(GDM-9060)
- 12 Measurement Functions: DCV, ACV, DCI, ACI, 2-wire and 4-wire Resistance, Frequency, Period, Diode, Continuity, Temperature and Capacitance
- Sampling Rate up to 10k SPS (GDM-9061)
- Dual Measurements to Perform Two Selected Measurement Simultaneously
- Offer Graphical Capabilities Including Histogram, Bar Meter and Trend
- Temperature Measurement Support RTD, Thermistor as Well as Thermocouple
- Standard Interface: USB Host/Device,RS-232C,LAN,Digital I/O
- Optional Interface: GPIB



GW INSTEK
Simply Reliable

PLUG-IN Electronic GmbH • Am Sonnenlicht 5 • 82239 Alling • Tel.: +49 (0) 8141 3697-0 • info@plug-in.de • www.plug-in.de

SPECIFICATIONS

DC CHARACTERISTICS

Accuracy : ± (% of reading + % of range)

DC Voltage

Range	Resolution	Input Resistance	Accuracy(1Year)(TCAL±5°C)	
			GDM-9061	GDM-9060
100.0000 mV	0.1µV	10MΩ or >10GΩ	0.0050 + 0.0035	0.0090 + 0.0065
1.000000 V	1µV	10MΩ or >10GΩ	0.0048 + 0.0007	0.0080 + 0.0010
10.00000 V	10µV	10MΩ or >10GΩ	0.0035 + 0.0005	0.0075 + 0.0005
100.0000 V	0.1mV	10MΩ ±1%	0.0050 + 0.0006	0.0085 + 0.0006
1000.000 V	1mV	10MΩ ±1%	0.0050 + 0.0010	0.0085 + 0.0010

Resistance

Range	Resolution	Test Current	Accuracy(1Year)(TCAL±5°C)	
			GDM-9061	GDM-9060
100.0000 Ω	100µΩ	1mA	0.010 + 0.004	0.014 + 0.007
1.000000 kΩ	1mΩ	1mA	0.010 + 0.001	0.014 + 0.001
10.00000 kΩ	10mΩ	100µA	0.010 + 0.001	0.014 + 0.001
100.0000 kΩ	100mΩ	10µA	0.010 + 0.001	0.014 + 0.001
1.000000 MΩ	1Ω	5µA	0.010 + 0.001	0.014 + 0.001
10.00000 MΩ	10Ω	500nA	0.040 + 0.001	0.040 + 0.001
100.0000 MΩ	100Ω	500nA//10 MΩ	0.800 + 0.010	0.800 + 0.010

DC Current

Range	Resolution	Burden Volt.	Accuracy(1Year)(TCAL±5°C)	
			GDM-9061	GDM-9060
100.0000 µA	100pA	< 0.011 V	0.05 + 0.025	0.05 + 0.025
1.000000 mA	1nA	< 0.11 V	0.05 + 0.006	0.05 + 0.006
10.00000 mA	10nA	< 0.04 V	0.05 + 0.020	0.05 + 0.020
100.0000 mA	100nA	< 0.4 V	0.05 + 0.005	0.05 + 0.005
1.000000 A	1µA	< 0.7 V	0.10 + 0.010	0.10 + 0.010
3.000000 A	1µA	< 2.0 V	0.20 + 0.020	0.20 + 0.020
10.00000 A	10µA	< 0.5 V	0.15 + 0.010	----------

Continuity

Range	Resolution	Test Current	Accuracy(1Year)(TCAL±5°C)	
			GDM-9061	GDM-9060
1000.000 Ω	0.001 Ω	1 mA	0.010 + 0.030	0.014 + 0.030

Diode Test

Range	Resolution	Test Current	Accuracy(1Year)(TCAL±5°C)	
			GDM-9061	GDM-9060
5.000000 V	1µV	1 mA	0.010 + 0.030	0.014 + 0.030

DC Ratio

Accuracy Specification: ± (DC Input accuracy + DC Reference accuracy)

TEMPERATURE CHARACTERISTICS

RTD (Accuracy based on PT100)

Range	Resolution	Accuracy(1Year)(TCAL±5°C)
-200 °C ~ -100 °C	0.001 °C	0.09 °C
-100 °C ~ -20 °C	0.001 °C	0.08 °C
-20 °C ~ 20 °C	0.001 °C	0.06 °C
20 °C ~ 100 °C	0.001 °C	0.08 °C
100 °C ~ 300 °C	0.001 °C	0.12 °C
300 °C ~ 600 °C	0.001 °C	0.22 °C

Thermocouples (Accuracy based on ITS-90)

Type	Range	Resolution	Accuracy(1Year)(TCAL±5°C)
E	-200 °C ~ +1000 °C	0.002 °C	0.2 °C
J	-210 °C ~ +1200 °C	0.002 °C	0.2 °C
T	-200 °C ~ +400 °C	0.002 °C	0.3 °C
K	-200 °C ~ +1372 °C	0.002 °C	0.3 °C
N	-200 °C ~ +1300 °C	0.003 °C	0.4 °C
R	-50 °C ~ +1768 °C	0.01 °C	1 °C
S	-50 °C ~ +1768 °C	0.01 °C	1 °C
B	+350 °C ~ +1820 °C	0.01 °C	1 °C

Thermistor (2.2kΩ, 5kΩ, 10kΩ or User Type)

Range	Resolution	Accuracy(1Year)(TCAL±5°C)
-80 °C ~ 150 °C	0.01 °C	0.01 °C

ORDERING INFORMATION

GDM-9061 6 ½ (1200000 counts) Digit Dual Measurement Multimeter
GDM-9060 6 ½ (1200000 counts) Digit Dual Measurement Multimeter

ACCESSORIES

Safety Instructions x 1, Power cord x 1, USB cable GTL-246 x 1, Test lead GTL-217 x 1, CD x 1(including the complete user manual, upgrade program and PC software, DMM-Viewer2)

AC CHARACTERISTICS

Accuracy : ± (% of reading + % of range)

AC Voltage (True RMS)

Range	Resolution	Frequency	Accuracy(1Year)(TCAL±5°C)	
			GDM-9061	GDM-9060
100.0000 mV	0.1µV	3Hz ~ 5Hz	1.00 + 0.04	1.00 + 0.04
		5Hz ~ 10Hz	0.35 + 0.04	0.38 + 0.04
		10Hz ~ 20kHz	0.06 + 0.04	0.09 + 0.04
		20kHz ~ 50kHz	0.12 + 0.05	0.15 + 0.05
		50kHz ~ 100kHz	0.60 + 0.08	0.63 + 0.08
		100kHz ~ 300kHz	4.00 + 0.50	4.00 + 0.50
1.000000 V to 750.000 V	1µV ~ 1mV	3Hz ~ 5Hz	1.00 + 0.04	1.00 + 0.04
		5Hz ~ 10Hz	0.35 + 0.04	0.38 + 0.04
		10Hz ~ 20kHz	0.06 + 0.04	0.09 + 0.04
		20kHz ~ 50kHz	0.12 + 0.05	0.15 + 0.05
		50kHz ~ 100kHz	0.60 + 0.08	0.63 + 0.08
		100kHz ~ 300kHz	4.00 + 0.50	4.00 + 0.50

AC Current (True RMS)

Range	Resolution	Frequency	Accuracy(1Year)(TCAL±5°C)	
			GDM-9061	GDM-9060
100.0000 µA 10.00000 mA	100pA 10nA	3Hz ~ 5Hz	1.00 + 0.04	1.00 + 0.04
		5Hz ~ 10Hz	0.35 + 0.04	0.38 + 0.04
		10Hz ~ 5kHz	0.10 + 0.04	0.13 + 0.04
		5kHz ~ 10kHz	0.18 + 0.04	0.20 + 0.04
1.000000 mA 100.0000 mA	1nA 100nA	3Hz ~ 5Hz	1.00 + 0.04	1.00 + 0.04
		5Hz ~ 10Hz	0.30 + 0.04	0.33 + 0.04
		10Hz ~ 5kHz	0.10 + 0.04	0.13 + 0.04
		5kHz ~ 10kHz	0.15 + 0.04	0.18 + 0.04
1.000000 A	1µA	3Hz ~ 5Hz	1.00 + 0.04	1.00 + 0.04
		5Hz ~ 10Hz	0.30 + 0.04	0.33 + 0.04
		10Hz ~ 5kHz	0.10 + 0.04	0.13 + 0.04
		5kHz ~ 10kHz	0.15 + 0.04	0.18 + 0.04
3.000000 A	1µA	3Hz ~ 5Hz	1.00 + 0.04	1.00 + 0.04
		5Hz ~ 10Hz	0.35 + 0.04	0.38 + 0.04
		10Hz ~ 5kHz	0.23 + 0.04	0.23 + 0.04
		5kHz ~ 10kHz	0.23 + 0.04	0.23 + 0.04
10.00000 A	10µA	3Hz ~ 5Hz	1.10 + 0.04	----------
		5Hz ~ 10Hz	0.35 + 0.04	----------
		10Hz ~ 5kHz	0.15 + 0.04	----------
		5kHz ~ 10kHz	0.35 + 0.04	----------

CAPACITANCE CHARACTERISTICS

Accuracy : ± (% of reading + % of range)

Capacitance

Range	Resolution	Accuracy(1Year)(TCAL±5°C)
1.000 nF	0.001nF	2.00 + 2.00
10.00 nF	0.01nF	2.00 + 1.00
100.0 nF	0.1nF	2.00 + 0.40
1.000 µF	0.001µF	2.00 + 0.40
10.00 µF	0.01µF	2.00 + 0.40
100.0 µF	0.1µF	2.00 + 0.40

FREQUENCY AND PERIOD CHARACTERISTICS

Accuracy : ± (% of reading)

Frequency/Period

Range	Frequency	Accuracy(1Year)(TCAL±5°C)
100.0000mV to 750.000V	3Hz ~ 5Hz	0.1
	5Hz ~ 10Hz	0.05
	10Hz ~ 40Hz	0.03
	40Hz ~ 1MHz	0.006

GENERAL INFORMATION

Display	4.3" Color TFT WQVGA (480 x 272)
Standard Interface	RS-232C, USB Host/Device, LAN, Digital I/O
Power Source	AC 100 V/120 V/220 V/240 V±10%
Power Line Frequency	50 Hz/60 Hz/400 Hz±10%
Power Consumption	Max. 25VA
Dimension & Weight	267(W) x 107(H) x 302(D) mm, Approx. 3.5kg

Specifications subject to change without notice. GDM-906XCD1DS

OPTION

GDM-90G1 GPIB card (*) GPIB can be installed at customer site

OPTIONAL ACCESSORIES

GTL-205A Temperature Probe Adapter with Thermal Coupling (K-type), approx. 1000mm
GTL-234 RS-232C Cable, 9-pin female-female cable, approx. 2000mm
GTL-248 GPIB Cable, approx. 2000mm
GTL-308 4Wire Type (+shield) Test lead, approx. 1500mm
GRA-422 Rack Mount Kit(19",2U)
GDM-TL1 Test Lead Set
GSC-014 Soft Carrying Case for DMM Accessory

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