

Unrestrained Storage and Connection

Data storage no longer be bound by transmission wires



GDM-8300 Series

3 Year WARRANTY

50000 Counts Dual Measurement Multimeter

- 50000 Counts Vacuum Fluorescent Display with Two Colors
- Dual Measurement
- Fast Measurement Rate Up to 40 readings/s for DCV
- 0.02% DCV Basic Accuracy
- Auto/Manual Ranging
- True RMS (AC, AC+DC)
- 11 Measurement Functions
- Max./Min.,REL,MX+B,1/X,Ref %,Compare,Hold,dB,dBm
- Standard USB device for communicating to PC
- Temperature Measurement (GDM-8342 only)
- USB Storage for Data Collection (GDM-8342 only)
- Optional GPIB (factory install for GDM-8342 only)



www.gwinstek.com

GW INSTEK
Simply Reliable

SPECIFICATIONS *1*2

DC CHARACTERISTICS

DC VOLTAGE

Range(*3)	Resolution	Input Resistance	Accuracy 1 Year (23°C±5°C)
500.00mV	10µV	10MΩ or >10GΩ	0.02 + 4
5.0000V	100µV	10MΩ or >10GΩ	0.02 + 4
50.000V	1mV	11.1MΩ	0.02 + 4
500.00V	10mV	10.1MΩ	0.02 + 4
1000.0V	100mV	10MΩ	0.02 + 4

RESISTANCE

Range(*3)	Resolution	Test Current	Accuracy 1 Year (23°C±5°C)
500.00Ω	10mΩ	0.83mA	0.10 + 5 (*4)
5.0000kΩ	100mΩ	0.83mA	0.10 + 3 (*4)
50.000kΩ	1Ω	83µA	0.10 + 3
500.00kΩ	10Ω	8.3µA	0.10 + 3
5.0000MΩ	100Ω	830nA	0.10 + 3
50.000MΩ	1kΩ	560nA/10MΩ	0.30 + 3

DC CURRENT

Range(*3)	Resolution	Burden Voltage	Accuracy 1 Year (23°C±5°C)
500.00µA	10nA	0.06Vmax.	0.05 + 5
5.0000mA	100nA	0.6Vmax.	0.05 + 4
50.000mA	1µA	0.14Vmax.	0.05 + 4
500.00mA	10µA	1.4Vmax.	0.10 + 4
5.0000A	100µA	0.5Vmax.	0.25 + 5
10.000A	1mA	0.8Vmax.	0.25 + 5

CONTINUITY

Range(*3)	Resolution	Test Current	Accuracy 1 Year (23°C±5°C)
5000.0Ω	100mΩ	0.83mA	0.10 + 5

DIODE TEST (*7)

Range(*3)	Resolution	Test Current	Accuracy 1 Year (23°C±5°C)
5.0000V	100µV	0.83mA	0.05 + 5

CAPACITANCE

Range(*3)	Resolution	Test Current	Accuracy 1 Year (23°C±5°C)
5.000nF : 0.5~1nF	0.001nF	8.3µA	2.00 + 20
5.000nF : 1~5nF	0.001nF	8.3µA	2.00 + 10
50.00nF : 5~10nF	0.01nF	8.3µA	2.00 + 30
50.00nF : 10~50nF	0.01nF	8.3µA	2.00 + 10
500.0nF	0.1nF	83µA	2.00 + 4
5.000µF	1nF	0.56mA	2.00 + 4
50.00µF	10nF	0.83mA	2.00 + 4

FREQUENCY AND PERIOD CHARACTERISTICS

FREQUENCY / PERIOD

Range	Accuracy 1 Year (23°C±5°C)
10Hz ~ 500Hz	0.01 + 5
500Hz ~ 500kHz	0.01 + 3
500kHz ~ 1MHz	0.01 + 5

General

Display	VFD, Two Colors Display
Interface	USB device, USB Host (GDM-8342 only)
Power Source	AC 100 V / 120 V / 220 V / 240 V ±10%, 50-60Hz
Power Consumption	Max. 15VA
Dimensions & Weight	265(W) x 107(H) x 302(D) mm, approx. 2.9kg

ORDERING INFORMATION

GDM-8342 with GPIB	50000 counts Dual Measurement Multimeter with USB Host/Device and opt.01 GPIB
GDM-8342	50000 counts Dual Measurement Multimeter with USB Host/Device
GDM-8341	50000 counts Dual Measurement Multimeter with USB Device

ACCESSORIES

Safety Instruction Sheet x 1, Power cord x 1, Test lead GTL-207 x 1, CD x 1 (including complete user manual, USB driver and PC software)

AC CHARACTERISTICS

True RMS AC (or AC+DC – AC Coupled) Voltage (*5*6)

Range(*3)	Resolution	Frequency	Accuracy 1 Year (23°C±5°C)
500.00mV	10µV	30Hz ~ 50Hz	1.00 + 40
		50Hz ~ 10kHz	0.50 + 40
		10kHz ~ 30kHz	2.00 + 60
		30kHz ~ 100kHz	3.00 + 120
5.0000V	100µV	30Hz ~ 50Hz	1.00 + 20
		50Hz ~ 10kHz	0.35 + 15
		10kHz ~ 30kHz	1.00 + 20
		30kHz ~ 100kHz	3.00 + 50
50.000V	1mV	30Hz ~ 50Hz	1.00 + 20
		50Hz ~ 10kHz	0.35 + 15
		10kHz ~ 30kHz	1.00 + 20
		30kHz ~ 100kHz	3.00 + 50
500.00V	10mV	30Hz ~ 50Hz	----
		50Hz ~ 10kHz	0.50 + 15
		10kHz ~ 30kHz	1.00 + 20
		30kHz ~ 100kHz	3.00 + 50
750.0V	100mV	30Hz ~ 50Hz	----
		50Hz ~ 10kHz	0.50 + 15
		10kHz ~ 30kHz	----
		30kHz ~ 100kHz	----

True RMS AC (or AC+DC – AC Coupled) Current (*5*6)

Range(*3)	Resolution	Frequency	Accuracy 1 Year (23°C±5°C)
500.00µA	10nA	30Hz ~ 50Hz	1.50 + 50
		50Hz ~ 2kHz	0.50 + 40
		2kHz ~ 5kHz	1.50 + 50
		5kHz ~ 20kHz	3.00 + 75
5.0000mA	100nA	30Hz ~ 50Hz	1.50 + 40
		50Hz ~ 2kHz	0.50 + 20
		2kHz ~ 5kHz	1.50 + 40
		5kHz ~ 20kHz	3.00 + 60
50.000mA	1µA	30Hz ~ 50Hz	1.50 + 40
		50Hz ~ 2kHz	0.50 + 20
		2kHz ~ 5kHz	1.50 + 40
		5kHz ~ 20kHz	3.00 + 60
500.00mA	10µA	30Hz ~ 50Hz	1.50 + 40
		50Hz ~ 2kHz	0.50 + 20
		2kHz ~ 5kHz	1.50 + 40
		5kHz ~ 20kHz	3.00 + 60
5.0000A	100µA	30Hz ~ 50Hz	2.00 + 40
		50Hz ~ 2kHz	0.50 + 30
10.000A	1mA	30 z ~ 50Hz	2.00 + 40
		50Hz ~ 2kHz	0.50 + 30

TEMPERATURE CHARACTERISTICS

THERMOCOUPLES

Type	Range	Resolution	Accuracy(*7) 1 Year (23°C±5°C)
J / T / K	-200 °C ~ +300 °C	0.1 °C	2 °C

Note: The specifications apply when the DMM is warmed up for at least 30 minutes and operates in slow rate.

1. All specifications are ensured only under main (1st) display.
2. Accuracy : ± (% of reading + digits)
3. 2% overrange on all ranges, except 10A. is 20% overrange.
4. REL function is on.
5. The accuracy of AC+DC is equal to AC with 10 more digits added.
6. AC Characteristics are for sinewave input > 5% of range.
7. Specifications do not include probe accuracy.

Specifications subject to change without notice.

DM-8300GD1DH

OPTION

Opt.1 GPIB Interface

OPTIONAL ASSESSORIES

GTL-205	Temperature probe adaptor with thermocouple (K-type), Approx. 1000mm
GTL-246	USB Cable, A-B type, Approx. 1200mm
GTL-251	GPIB-USB-HS (high Speed)

Global Headquarters

GOOD WILL INSTRUMENT CO., LTD.

No.7-1, Jhongsing Road, Tucheng Dist., New Taipei City 236, Taiwan
 T +886-2-2268-0389 F +886-2-2268-0639
 E-mail: marketing@goodwill.com.tw

China Subsidiary

GOOD WILL INSTRUMENT (SUZHOU) CO., LTD.

No. 521, Zhujiang Road, Snd, Suzhou Jiangsu 215011 China
 T +86-512-6661-7177 F +86-512-6661-7277
 E-mail: marketing@instek.com.cn

Malaysia Subsidiary

GOOD WILL INSTRUMENT (M) SDN. BHD.

27, Persiaran Mahsuri 1/1, Sunway Tunas,
 11900 Bayan Lepas, Penang, Malaysia
 T +604-6309988 F +604-6309989
 E-mail: sales@goodwill.com.my

U.S.A. Subsidiary

INSTEK AMERICA CORP.

3661 Walnut Avenue Chino, CA 91710, U.S.A.
 T +1-909-5918358 F +1-909-5912280
 E-mail: sales@instekamerica.com

Japan Subsidiary

INSTEK JAPAN CORPORATION

2F DSM Shin-Yokohama Bldg, 2-6-3, Shin Yokohama, Kouhoku-ku,
 Yokohama, Kanagawa 222-0033 Japan
 T +81-45-476-5650 F +81-45-476-5653
 E-mail: info@instek.co.jp

Korea Subsidiary

GOOD WILL INSTRUMENT KOREA CO., LTD.

#1406, Ace Hightech-City B/D 1Dong,
 Mullaee-Dong 3Ga 55-20, Yeongduengpo-Gu, Seoul, Korea
 T +82-2-3439-2205 F +82-2-3439-2207
 E-mail: gwinstek@gwinstek.co.kr

GW INSTEK
 Simply Reliable

www.gwinstek.com