GVM-9102

6 ½ Digit 2 kV DC Voltmeter

CE | USB Host | USB Device | LAN | Digital IO | GPIB | RS-232 | LabVIEW Driver

GW INSTEK
Simply Reliable

Model	GVM-9102
DCV Accuracy	0.01%
Sampling Rate	10 k/sec
Memory	100 k
Display	Number, Trend Chart, Bar Meter, Histogram
Math.	REL, dB, dBm, Compare, MX+B, Percent, 1/X
STAT.	Min/Max/Average/ P-P, STDEV
Interface	RS-232C, USB Host/Device, LAN, Digital I/O and GPIB option

GW Instek launches GVM-9102 6 ½ digit 2 kV Voltmeter, featuring high precision DC voltage accuracy, fast sampling rate, 6 mathematical functions (dB/dBm/Compare/ MX+B/Percent and 1/X) as well as a variety of communications interfaces (USB device/host, RS-232C, LAN, digital I/O and optional GPIB) to provide comprehensive measurement capabilities, higher speed and accuracy , making it particularly suitable for output measurement of energy storage devices, photovoltaic devices or DC power supply devices.

The GVM-9102 adopts a 4.3-inch TFT graphical display and a fast sampling rate 10 k /s. In addition to the conventional digital display, displays can be collocated with bar meter, trend chart or histogram to make the panoramic view of the entire measurement process more completely and quickly presented. At the same time, the internal memory capacity 100 k can simultaneously facilitate the trend chart or histogram measurement process and perform statistical calculations to simplify the complex trend analysis.

For user-friendly, the GVM-9102 incorporates some ingenious operational ideas, such as numeric soft keys for settings that require numerical input, upper/lower limits, LAN IP operational interfaces or messages, and multiple languages (English / Traditional Chinese/ Simplified Chinese/ Japanese / Korean) to shorten the operational and learning time of the meter.

For ATS measurement or remote control applications, the GVM-9102 provides GPIB (option can be installed at customer site) other than standard communications interfaces: USB, RS-232 and LAN. With respect to software supports, the GVM-9102 provides LabVIEW driver to facilitate the program requirements of different system integrations.

FEATURES

* 6 1/2 Digit Display : 2,399,999 Counts Max.
* 4.3 TFT Graphic LCD
* DC Voltage Measurement up to 2400 V
* DCV Basic Accuracy : 0.01 %
* The Fastest Sampling Rate : 10 k Readings/Sec
* USB Storage Function Available
* Graphic Display Capability, Providing Histogram, Bar Meter and Trend Chart
* Standard Interfaces : Digital I/O, RS-232C, USB Host/Device, LAN
* Option Interface : GPIB

APPLICATIONS

* Testing of Electrical Product in Manufacturing
  - Photovoltaic Devices
  - Energy Storage Devices
  - DC Power Supply Devices
* Quality Assurance Verification

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SPECIFICATION

DC CHARACTERISTICS *1

DC Voltage

Range *2	1 Year TCAL ± 5 °C	Temperature Coefficient / °C
20.00000 V	0.0100 + 0.0030	0.0010 + 0.0005
200.0000 V	0.0100 + 0.0010	0.0010 + 0.0005
2000.000 V *3	0.0100 + 0.0010	0.0010 + 0.0005

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

MEASURING CHARACTERISTICS

DC Voltage		Range	Input Resistance
		20 V	30 MΩ ± 1 %
		200 V	
		2000 V	
	Input Bias	30 pA (Typ, 25 °C)	
	Input Protection	2400 V on all ranges	

Measurement Method: Sigma-delta A/D Converter

		Speed	Digits
Reading Rate (Readings/sec)	**DCV**	5 /s, 20 /s, 60 /s, 100 /s	6 ½
		400 /s, 1.2 k /s, 2.4 k /s	5 ½
		4.8 k /s, 7.5 k /s, 10 k /s	4 ¼

GENERAL

Display	4.3" color TFT WQVGA (480 x 272) with LED backlight Supports basic number, bar meter, trend chart and histogram views
Interface	USB Host/Device, RS-232C, LAN, Digital I/O and GPIB (optional)
Power Source	Power Supply : AC 100 V / 120 V / 220 V / 240 V ± 10 % Power Line Frequency : 50 Hz / 60 Hz / 400 Hz ± 10 % Power Consumption : Max. 25 VA
Dimensions & Weight	Rack Dimensions : 220 mm (W) x 88 mm (H) x 276.6 mm (D) (without bumpers) Bench Dimensions : 266.9 mm (W) x 107 mm (H) x 301.8 mm (D) (with bumpers) Weight : 3.30 kg (7.3 lbs)

Note : *1. DC Specification: In addition to the availability that requires warm-up of 60 minutes, it must be set in 5/s speed rate, A-Zero on.
*2. The entire range of measurement will pass the set range by 20 %.
*3. Specifications exceeding 1,000 V are linearly scaled based on 0 V to 1,000 V.
For the 2,000 V range, an additional coefficient of 0.02 ppm/V is required.

Specifications subject to change without notice. GVM-9102_ID1DH

ORDERING INFORMATION

GVM-9102 **6 ½ Digit 2 kV DC Voltmeter**

ACCESSORIES

Safety Instructions x 1, Power cord x 1, USB cable GTL-246 x 1, Test lead GHT-116R x 1, GHT-116B x 1

OPTIONAL ACCESSORIES

GTL-234 RS-232C Cable, 9-pin female-female cable, approx. 2000 mm
GTL-248 GPIB Cable, approx. 2000 mm
GRA-422 Rack Mount Kit (19", 2U)
GRA-454 Rack Mount kit (19", 2U) for one or two sets

OPTION *

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

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