

GDS-122 (20MHz)



USB





FEATURES

- * 20 MHz Bandwidth
- * 100 MS/s Real-Time Sampling Rate
- * Digital Storage Oscilloscope & Multimeter
- * True RMS Multimeter Volts, Amps, Ohms, Continuity, Diode
- * Dual Independent Floating Isolated Channels (for Multimeter and Between Oscilloscope and Multimeter)
- * Trigger Mode : Free Run, Single Shot, Edge, Video
- * USB Interface
- * 6 Hour Capacity Li-ion Rechargeable Battery
- * 3.8" Color LCD, Resolution: 320 \times 240
- * Light Weight at 690g

PACKAGE CONTENTS

Extension module for large current measurement

Oscilloscope probe





Extension module for small capacitance measurement

Multimeter test lead





Soft carrying case

AC-DC adaptor





1kHz square wave output cable USB communication cable





CD-ROM(Software), User manual

The GDS-122 is a reliable and handy instrument for all test and electronic engineers. This model is designed to carry out complicated on-site tests. The Dual-channel unit provides 20MHz of bandwidth with a sampling rate of 100MS/s with additional DMM functionality. The color LCD display with a 320 x 240 resolution helps you to read waveforms easily, especially when displaying a lot of data or multiple waveforms. The compact design with a total weight of 690g allows engineers to carry it around easily. The unit's protective cover is insulated and specially designed to endure tough environments. A rechargeable Li-ion battery ensures convenience for on-site testing.

| SPECIFICATIONS | |
|---|---|
| VERTICAL | |
| Analog Digital Converter Resolution | 8 bits simultaneously sampling on both channels |
| Sensitivity | 5mV/div 5V/div at the input BNC |
| Displacement Range | ±50V (500mV ~ 5V), ±1V(5mV ~ 200mV) |
| Analog Bandwidth | 20MHz |
| Single Bandwidth | Full bandwidth |
| Low Frequency Response AD Coupling,-3dB | ±5Hz at the BNC input |
| Rise Time | 17.5ns (typical) |
| DC Gain Accuracy | ±5% |
| DC Measurement Accuracy | \pm (5% reading + 0.05 div), at the Average sampling mode (> 16) |
| <u> </u> | ±(570 reading + 0.03 div), at the Average sampling mode (> 10) |
| TRIGGER | |
| Trigger Sensitivity Edge Triggering | DC coupling: 1div (full bandwidth) |
| | AC coupling: Same as the DC coupling ≥ 50Hz |
| Trigger Level | ±6 divs from the screen center |
| Trigger Level Accuracy | ±0.3 divs (typical) |
| Trigger Displacement 50% Level Setting | 655 divs (pre-trigger), 4 divs (post-trigger) Input signal frequency ≥50Hz |
| Trigger Sensitivity | 2 divs of peak-to-peak value |
| Video Trigger | Supports NTSC, PAL and SECAM, any or line frequency |
| 35 | , |
| HORIZONTAL | |
| Sampling Rate Range | 10S/s~100MS/s |
| Waveform Interpolation | sin x / x |
| Record Length | 6K points on each channel |
| Scanning Speed Range S/div | 5ns/div 5s/div, stepping in the "1-2.5-5" mode. |
| Sampling Rate and Relay Time Accuracy | ±100ppm(any time interval which is equal to or larger than 1ms) |
| Time Interval | Single: ±(1 sampling interval time+100ppmxreading+0.6ns) |
| (T) Measurement Accuracy Full Bandwidth | >average 16 : ±(1 sampling interval time +100ppmxreading+0.4ns) |
| • | |
| INPUT | |
| Input Coupling | DC, AC |
| Input Impedance | 1M Ω ±2% connected in parallel with 20pF±3pF |
| Probe Attenuation Coefficient | 1X, 10X, 100X, 1000X |
| Max. Input Voltage | 400V (peak) |
| Channel Delay Time (Typical) | 150ps |
| SAMPLING | |
| Sampling Modes | Normal sampling |
| Camping mouse | Peak detection |
| | Average value |
| Sampling Rate | 100 MSa/s |
| MEASUREMENT | |
| Cursor Measurement | Voltage difference (V) and time difference (T) between cursors |
| Auto Measurement | Peak-to-peak value, average value, root mean square value, frequency and cycle |
| MULTIMETER SPECIFICATIONS | ,,,, |
| | 10140 |
| Input Impedance Voltage | 10M Ω VDC: 400mV, 4V, 400V \pm (1% +1 digit) |
| Max Input | DC 400V |
| VAC | 4V, 40V, 400V ±(1% +3 digit) |
| Frequency | 40Hz ~ 400Hz |
| Max Input | AC 400V (Virtual value) |
| Current | DCA: 40mA, 400mA ±(1.5% +1 digit); 20A: ±(3% +3 digit) |
| | DAA: $40mA \pm (1.5\% + 3 \text{ digit})$, $400mA \pm (2\% + 1 \text{ digit})$; $20A: \pm (5\% + 3 \text{ digit})$ |
| Impedance | 400 Ω ±(1%+3 digit), 4K Ω , 40K Ω , 400K Ω , 4M Ω ±(1%+1 digit), 40M Ω ±(1.5%+3 digit) |
| Compatheren | $4K\Omega_2$, $4UK\Omega_2$, $4UUK\Omega_2$, $4M\Omega_2$ $\pm (1\%+1)$ digit), $40M\Omega_2$ $\pm (1.5\%+3)$ digit) |
| Capacitance | 51.2nF ~ 100uF ±(3%+3 digit) |
| Diode | 0V ~ 1.5V On/Off measurement < 50 (±30) beeping |
| GENERAL SPECIFICATIONS | |
| Display | Display type : 3.8" color liquid crystal display |
| | Display resolution: 320 (horizontal) × 240 (vertical) pixels |
| Danier Adamton | Display color: 4096 colors |
| Power Adapter Operating Temperature | Power supply : 100-240 VACRMS, 50Hz, CAT II ; Power consumption : < 6W Used battery : $0\sim50$ °C ($32\sim122$ °F);Power adapter : $0\sim40$ °C ($32\sim104$ °F) |
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ORDERING INFORMATION

GDS-122 Handheld Digital Storage Oscilloscope & Multimeter

ACCESSORIES:

User manual, AC-DC Adaptor, Probe-T5060:60MHz(10:1/1:1)Switchabel Passive Probe (one per channel) Multimeter test lead, Serial data communication cable, Extension module for small capacitance measurement, Extension module for large current measurement

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PC Software

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