



GDS-1000A Series is a general purpose 2-channel oscilloscope and originally designed to meet educational and industrial requirements without specializing in DSO features. This series provides three selective bandwidths of 60MHz, 100MHz and 150MHz together with innovative human machine interface design plus an TFT color LCD display, users will enjoy better measurement experience!

GDS-1000A series offers dual sampling mode, giving users two options for 1GSa/s Real-Time sampling or 25GSa/s high-speed Equivalent sampling rate. What's more, with high-speed wave handling capability, more advanced triggering functions, and 2.5 kg light-weight design, it is a powerful functional oscilloscope with the best price than ever. Ultimately, GDS-1000A series is considered for the replacement of analog oscilloscope and further promoted as a personal DSO affordable to any situation such as each student in educational labs, service technicians, or industrial field needing big quantity.

Besides, the requirement of measuring data exchange and analysis is intergraded into the GDS-1000A series. The convenient PC standard interface is also available, such as USB interface and SD card socket. This two build-in standard interface capability enable the performance of remote control or data transferring to a desktop/laptop for documenting purpose and enhance your work efficiency.

### Easy to use

Several acquisition mode and 27 auto measurement functions help user to measure the accurate property of waveforms. The advanced auto-set function makes GDS-1000A Series catch waveform automatically and display waveform quickly. With arithmetic functions, FFT function keeps user being aware of the results by updating value immediately. Without almost extra-calculation GDS-1000A series can provide sufficient information of testing.

### SD Card & USB Device supported

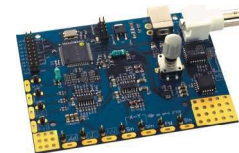
A total of 15 waveforms could be saved into the internal memory for later recall and display, and 2 saved reference waveforms plus 2 live waveforms could be shown on the screen at the same time for comparison. SD card mass storage and USB device port are supported, providing storage/transfer of measurement data and remote control for diversified solutions.

## GDS-1000A Series

### FEATURES

- 150/100/60 MHz Bandwidths
- Sample Rates up to 1 GSa/s Real-Time Maximum, 25GSa/s Equivalent-Time
- 2M Points Record Length Maximum
- 2mV~10V Vertical Scale
- 1ns~50s Horizontal Range
- TFT LCD Display Panel
- Up to 27 Automatic Measurements
- Up to 10ns Peak Detection for Glitch Capture
- Advanced Video, Pulse Width Trigger
- Cursor Tracking
- Versatile Math Functions +, -, X, FFT, FFTrms
- SD Card Supported
- On-Line Help and Multi-Language Operating Supported

### GDB-02 Oscilloscope Education and Training Kit



### APPLICATIONS

- Laboratories and Educational Facilities
- Product Testing and Quality Assurance
- Service Operation and Post-Sales Support
- Product Development and Debugging

## SPECIFICATIONS

		GDS-1062A	GDS-1102A	GDS-1152A
VERTICAL	Channels Bandwidth Rise Time Sensitivity Accuracy Input Coupling Input Impedance Polarity Maximum Input Waveform Signal Process Offset Range Bandwidth Limit	2 DC~60MHz(-3dB) <5.8ns Approx.	2 DC~100MHz(-3dB) <3.5ns Approx.	2 DC~150MHz(-3dB) <2.3ns Approx.
TRIGGER	Sources Modes Coupling Sensitivity	2mV/div ~ 10V/div (1-2-5 increments) $\pm (3\% \times  \text{Readout}  + 0.1 \text{ div} + 1 \text{ mV})$ AC, DC & Ground 1M $\Omega$ $\pm$ 2%, ~15pF Normal & Invert 300V (DC+AC peak), CATII +, -, X, FFT, FFTrms		
EXT TRIGGER	Range Sensitivity Input Impedance Maximum Input	2mV/div ~ 50mV/div : $\pm$ 0.4V ; 10mV/div ~ 500mV/div : $\pm$ 4V ; 1V/div ~ 10V/div : $\pm$ 40V 20MHz (-3dB)		
HORIZONTAL	Range Modes Accuracy Pre-Trigger Post-Trigger	CH1, CH2, Line, EXT AUTO, NORMAL, SINGLE, TV, Edge, Pulse width AC, DC, LF rej., HF rej., Noise rej. DC ~ 25MHz: Approx. 0.5div or 5mV; 25MHz ~ 60/100/150MHz: Approx. 1.5div or 15mV		
X-Y MODE	X-Axis Input Y-Axis Input Phase Shift	$\pm$ 15V DC ~ 25MHz : ~ 50mV ; 25M ~ 60/100/150MHz : ~100mV 1M $\Omega$ $\pm$ 2%, ~ 15pF 300V (DC+AC peak), CATII		
SIGNAL ACQUISITION	Real-Time Sample Rate Equivalent Sample Rate Vertical Resolution Record Length Acquisition Mode Peak Detection Average	1ns/div ~ 50s/div (1-2-5 increments); ROLL : 250ms/div ~ 50s/div MAIN, WINDOW, WINDOW ZOOM, ROLL, X-Y $\pm$ 0.01% 10 div maximum 1000 div		
CURSORS AND MEASUREMENT	Voltage Measurement Time Measurement Delay Measurement Cursors Measurement Auto Counter	Channel 1 Channel 2 $\pm$ 3' at 100kHz		
ADJUSTABLE PROBE COMPENSATION SIGNAL	Frequency Range Duty Cycle Range	1GSa/s maximum 25GSa/s maximum 8 Bits 2M Points maximum Normal, Peak Detect, Average 10ns(500ns/div ~ 50s/div) 2, 4, 8, 16, 32, 64, 128, 256		
CONTROL PANEL FUNCTION	Autoset Save Setup Save Waveform	$V_{pp}$ , $V_{amp}$ , $V_{avg}$ , $V_{rms}$ , $V_{hi}$ , $V_{lo}$ , $V_{max}$ , $V_{min}$ , Rise Preshoot/Overshoot, Fall Preshoot/Overshoot Freq, Period, Rise Time, Fall Time, Positive Width, Negative Width, Duty Cycle Eight different delay measurement Voltage difference between cursors ( $\Delta V$ ) Time difference between cursors ( $\Delta T$ ) Resolution : 6 digits Accuracy : $\pm$ 2% Signal Source: All available trigger source except the Video trigger mode		
DISPLAY	TFT LCD Type Display Resolution Display Graticule Display Brightness	1kHz ~ 100kHz, 1kHz/STEP 5% ~ 95%, 5%/STEP		
INTERFACE	USB Device SD Card Slot	Adjust Vertical VOLT/DIV, Horizontal TIME/DIV, and Trigger level automatically Up to 15 sets of measurement conditions 15 sets of waveform		
POWER SOURCE	Line Voltage Range	5.6 inch 234 (Vertically) x 320 (Horizontally) Dots 8 x 10 divisions Adjustable		
MISCELLANEOUS	Multi-Language Menu Online Help	USB 1.1 & 2.0 full speed compatible (printers and flash disk not supported) Image (BMP) waveform data (CSV) and setup (SET)		
DIMENSIONS & WEIGHT		AC 100V ~ 240V, 48Hz ~ 63Hz, Auto selection		
		Available Available		
		310(W) x 142 (H) x 140(D)mm, Approx. 2.5kg		

Specifications subject to change without notice. DS-1000AGD1DH

## ORDERING INFORMATION

**GDS-1062A** 60MHz, 2 channel, 1GSa/s & 2M Memory DSO  
**GDS-1102A** 100MHz, 2 channel, 1GSa/s & 2M Memory DSO  
**GDS-1152A** 150MHz, 2 channel, 1GSa/s & 2M Memory DSO

## ACCESSORIES

User manual x1, Power cord x1  
 Probe GTP-060A-4 or equivalent : 60MHz (10:1/ 1:1) Switchable passive probe for GDS-1062A (one per channel)  
 Probe GTP-100A-4 or equivalent : 100MHz (10:1/ 1:1) Switchable passive probe for GDS-1102A (one per channel)  
 Probe GTP-150A-2 or equivalent : 150MHz (10:1/ 1:1) Switchable passive probe for GDS-1152A (one per channel)

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