CE USB PC Software Labview Driver

GDS-1000-U Series

- 100/70/50 MHz Bandwidth, 2 Input Channels
- 250MSa/s Real-Time & 25GSa/s Equivalent-Time Sampling Rate
- 4k Record Length per Channel
- Save/Recall of 15 Front Panel Settings & Waveforms
- 5.7" Color TFT LCD Display
- 19 Auto Measurements
- Math Function: Add, Subtract, FFT
- USB Host & Device Ports
- Go/NoGo Function
- Data Logger
- Limited Lifetime Warranty

GDS-1000-U is a general purpose 2-channel oscilloscope designed to meet diversified educational demands and basic industrial requirements. This series provides bandwidths ranging from 50MHz to 100MHz. Together with intuitive human machine interface design and 5.7 inch color TFT LCD, GDS-1000-U allows users to enjoy better measurement experiences.

GDS-1000-U series offers dual sampling modes, 250MSa/s Real-Time and 25GSa/s Equivalent sampling rates, giving users a more flexible option to process incoming signals. With fast waveform process capability, more advanced triggering functions, and 2.5Kg light-weight design, GDS-1000-U is a very capable oscilloscope to enhance users' returns on their investments in terms of price versus performance. GDS-1000-U is also viewed as a replacement of analog oscilloscope. With its good functionality and capability, GDS-1000-U can satisfy diversified educational demands as well as fulfill industrial basic requirements in servicing, maintenance, or production.

GDS-1000-U also provides great accessibility through its USB Host and Device ports. Via USB Device port, user can easily build a remote control program to manipulate the machine. Via USB Host port, user is capable of not only storing data directly into flash disk for further analysis but also activating data logging function to monitor waveform data in designated time sequence.

Easy to use

Several acquisition mode and 19 auto measurement functions help user to measure the accurate property of waveforms. The advanced auto-set function makes GDS-1000-U 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-1000-U Series can provide sufficient information of testing.

USB Host & 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. USB Host mass storage and USB device port are supported, providing storage/ transfer of measurement data and remote control for diversified solutions.
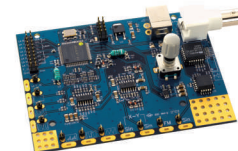
Guaranteed Protection

By providing the Global Lifetime Warranty Program for the GDS-1000A-U digital storage oscilloscope series, we believe you can have the same confidence we do in the quality of each GDS-1000-U DSO. By purchasing a GDS-1000-U you can be assured of a highly economical, low maintenance, quality DSO backed with the protection of the LifeTime Warranty program. For more details and applicable conditions regarding the LifeTime Service program, please visit the GW Instek or consult your nearest distributor.

GDB-02 Oscilloscope Education and Training Kit

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

GDS-1000-U Series

GW INSTEK
Simply Reliable

SPECIFICATIONS

		GDS-1052-U	GDS-1072-U	GDS-1102-U
VERTICAL	Channels Bandwidth Rise Time	2 DC~50MHz($-$3dB) <7ns Approx.	2 DC~70MHz($-$3dB) <5ns Approx.	2 DC~100MHz($-$3dB) <3.5ns Approx.
	Sensitivity Accuracy Input Coupling Input Impedance Polarity Maximum Input Waveform Signal Process Offset Range Bandwidth Limit	2mV/div ~ 10V/div (1-2-5 increments) $\pm$ (3% x |Readout| + 0.1 div + 1mV) AC, DC & Ground 1M$\Omega$$\pm$ 2%, ~15pF Normal & Invert 300V (DC+AC peak), CATII + , $-$, FFT 2mV/div ~ 50mV/div : $\pm$0.4V ; 10mV/div ~ 500mV/div : $\pm$4V ; 1V/div ~ 5V/div : $\pm$40V ; 10V/div: $\pm$300V 20MHz (- 3dB)		
TRIGGER	Sources Modes Coupling Sensitivity	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 ~ 50/70/100MHz: Approx. 1.5div or 15mV		
EXT TRIGGER	Range Sensitivity Input Impedance Maximum Input	$\pm$15V DC ~ 25MHz : ~ 50mV ; 25M ~ 50/70/100MHz : ~15mV 1MΩ $\pm$2% , ~ 16pF 300V (DC$+$AC peak) , CATII		
HORIZONTAL	Range Modes Accuracy Pre-Trigger Post-Trigger	1ns/div ~ 50s/div (1-2.5-5 increments); ROLL : 50ms/div ~ 50s/div MAIN, WINDOW, WINDOW ZOOM, ROLL, X-Y $\pm$0.01% 10 div maximum 1000 div		
X-Y MODE	X-Axis Input Y-Axis Input Phase Shift	Channel 1 Channel 2 $\pm$3°at 100kHz		
SIGNAL ACQUISITION	Real-Time Sample Rate Equivalent Sample Rate Vertical Resolution Record Length Acquisition Mode Peak Detection Average	250MSa/s maximum 25GSa/s maximum 8 Bits 4K Points maximum Normal, Peak Detect, Average 10ns(500ns/div ~ 50s/div) 2 , 4 , 8 , 16 , 32 , 64 , 128 , 256		
CURSORS AND MEASUREMENT	Voltage Measurement Time Measurement Cursors Measurement Auto Counter	V_{pp} , V_{amp} , V_{avg} , V_{rms} , V_{hi} , V_{lo} , V_{max} , V_{min} , Rise Preshoot/ Overshoot , Fall Preshoot/Overshoot Freq , Period , Rise Time , Fall Time , Positive Width , Negative Width , Duty Cycle Voltage difference between cursors ($\triangle$V) Time difference between cursors ($\triangle$T) Resolution : 6 digits ; Accuracy : $\pm$2% Signal Source: All available trigger source except the Video trigger mode		
ADJUSTABLE PROBE COMPENSATION SIGNAL	Frequency Range Duty Cycle Range	1kHz ~ 100kHz, 1kHz/STEP 5% ~ 95%, 5%/STEP		
CONTROL PANEL FUNCTION	Autoset Save Setup Save Waveform	Adjust Vertical VOLT/DIV, Horizontal TIME/DIV, and Trigger level automatically Up to 15 sets of measurement conditions 15 sets of waveform		
DISPLAY	TFT LCD Type Display Resolution Display Graticule Display Brightness	5.7 inch 234 (Vertically) x 320 (Horizontally) Dots 8 x 10 divisions Adjustable		
INTERFACE	USB Device USB Host	USB1.1 & 2.0 full speed compatible Image (BMP) waveform data (CSV) and setup (SET)		
POWER SOURCE	Line Voltage Range	AC 100V ~ 240V , 48Hz ~ 63Hz , Auto selection		
MISCELLANEOUS	Go/NoGo Function Data Logger Multi-Language Menu Online Help	Available Available Available Available		
DIMENSIONS & WEIGHT		310(W) x 142 (H) x 140(D)mm, Approx. 2.5kg		

Specifications subject to change without notice. GD-1000-UGD1DH

ORDERING INFORMATION

GDS-1052-U 50MHz, 2-channel, Color LCD Display DSO
GDS-1072-U 70MHz, 2-channel, Color LCD Display DSO
GDS-1102-U 100MHz, 2-channel, Color LCD Display DSO

ACCESSORIES

User Manual x 1, Power Cord x 1
Probe-GTP-070A-4 : 70MHz(10:1/1:1)Switchable Passive Probe for GDS-1052-U(one per channel)
Probe-GTP-070A-4 : 70MHz(10:1/1:1)Switchable Passive Probe for GDS-1072-U(one per channel)
Probe-GTP-100A-4 : 100MHz(10:1/1:1)Switchable Passive Probe for GDS-1102-U(one per channel)

OPTIONAL ACCESSORIES

GTL-242 USB Cable, USB 1.1 A-B TYPE CABLE, 4P
GTL-110 Test Lead, BNC-BNC Heads
GSC-006 Soft Carrying Case

FREE DOWNLOAD

PC Software FreeWave software
Driver USB driver
LabView Driver

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Simply Reliable

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