

200MHz/100MHz/60MHz DIGITAL STORAGE OSCILLOSCOPE



GDS-2000 Series (200/100/60 MHz)



FEATURES

- * 200/100/60 MHz Bandwidth
- * 2 or 4 Input Channels
- * 1GSa/s Real-Time and 25GSa/s Equivalent-Time Sampling
- * 25k Points Record Length Maximum
- * Large 5.6" TFT Color Display
- * USB Host/Device : Support USB Printer and USB Flashdisk
- * DC Power Operation (optional)
- * Color Printout

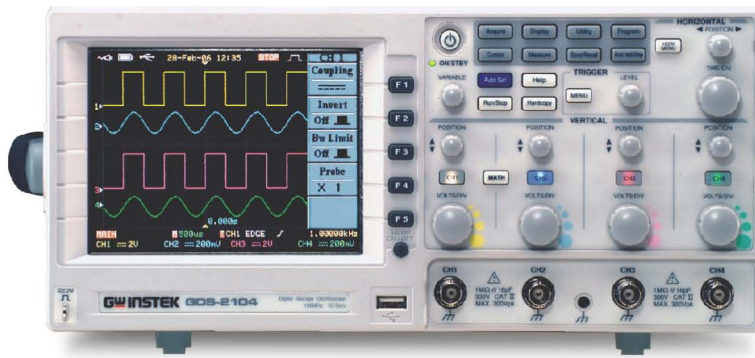
The GDS-2000 Series Digital Storage Oscilloscope comes along with All-In-One design, including 1GSa/s real-time sampling rate, 25k record length, 2 and 4 channel selection, TFT color LCD display, USB support on flash drive storage, color printout, and remote control, Battery power operation and all the powerful Auto-Measurement functions.

The GDS-2000 Series, carrying bandwidths of 200MHz, 100MHz and 60MHz and inputs of 2 and 4 channels, makes up a family of 6 members in total. The combination of 1GSa/s real-time sampling rate (25GSa/s for ET sampling) and 25k points record length of the GDS-2000 Series provides the highest value platform among all equivalent products available in the market today. The 27 Auto Measurement functions, FFT measurement, Advanced Triggering, 12 Division Horizontal Display, Time Clock, Frequency Counter, Go/NoGo, Multi-Language Screen Menu, On-Line Help, and Setup Sequence are all standard features of the GDS-2000 Series.

The USB mass storage and programmability, the RS-232C and USB interface are included as standard features, and the battery power operation (optional) available for field applications all together make the GDS-2000 Series a new standard for the main stream DSO market.

SPECIFICATIONS

	GDS-2062/2064	GDS-2102/2104	GDS-2202/2204
VERTICAL			
Channels	2/4	2/4	2/4
Bandwidth	DC ~ 60MHz (−3dB)	DC ~ 100MHz (−3dB)	DC ~ 200MHz (−3dB)
Rise Time	5.8ns Approx.	3.5ns Approx.	1.75ns Approx.
Sensitivity	2mV/div ~ 5V/div (1-2.5 increments)		
Accuracy	±(3% x Readout + 0.05 div + 0.8mV)		
Input Coupling	AC, DC & Ground		
Input Impedance	1MΩ ± 2%, ~16pF		
Polarity	Normal & Invert		
Maximum Input	300V (DC+AC peak), CATII		
Waveform Signal Process	+, −, FFT		
Offset Range	2mV/div ~ 20mV/div : ±0.5V ; 50mV/div ~ 200mV/div : ±5V 500mV/div ~ 2V/div : ±50V ; 5V/div : ±300V		
Bandwidth Limit	20MHz (−3dB)		
TRIGGER			
Sources	CH1, CH2, Line, EXT for GDS-2062, GDS-2102, GDS-2202 CH1, CH2, CH3, CH4, Line for GDS-2064, GDS-2104, GDS-2204		
Modes	Auto-Level, AUTO, NORMAL, SINGLE, TV, Edge, Pulse Width Time-delay (for 2CH model only), Event-delay (for 2CH model only)		
Coupling	AC, DC, LF rej., HF rej., Noise rej.		
Sensitivity	DC ~ 25MHz : Approx. 0.5div or 5mV 25MHz ~ 60/100/200MHz : Approx. 1div or 10mV		
EXT TRIGGER (2CH Only)			
Range	±15V		
Sensitivity	DC ~ 30MHz : ~ 50mV ; 30M ~ 60/100/200MHz : ~100mV		
Input Impedance	1MΩ ±2%, ~ 16pF		
Maximum Input	300V (DC+AC peak), CATII		
HORIZONTAL			
Range	1ns/div ~ 10s/div (1-2.5 increments); ROLL : 250ms/div ~ 10s/div		
Modes	MAIN, WINDOW, WINDOW ZOOM, ROLL, SCAN, X-Y		
Accuracy	±0.01%		
Pre-Trigger	20 div maximum		
Post-Trigger	1000 div		
X-Y MODE			
X-Axis Input	Channel 1		
Y-Axis Input	Channel 2		
Phase Shift	±3° at 100kHz		
SIGNAL ACQUISITION			
Real-Time Sample Rate	1GSa/s maximum		
Equivalent Sample Rate	25GSa/s maximum		
Vertical Resolution	8 Bits		
Record Length	25K Points maximum		
Acquisition Mode	Normal, Peak Detect, Average		
Peak Detection	10ns		
Average	2, 4, 8, 16, 32, 64, 128, 256		
CURSORS AND MEASUREMENT			
Voltage Measurement	V _{pp} , V _{amp} , V _{avg} , V _{rms} , V _{hi} , V _{lo} , V _{max} , V _{min} , Rise Preshoot/ Overshoot, Fall Preshoot/Overshoot		
Time Measurement	Freq, Period, Rise Time, Fall Time, Positive Width, Negative Width, Duty Cycle		
Delay Measurement	Eight different delay measurement		
Cursors Measurement	Voltage difference between cursors (ΔV) Time difference between cursors (ΔT)		
Auto Counter	Resolution : 6 digits Accuracy : ±2% Signal Source: All available trigger source except the Video trigger mode		
CONTROL PANEL FUNCTION			
Autoset	Adjust Vertical VOLT/DIV, Horizontal TIME/DIV, and Trigger level automatically		
Save Setup	Up to 20 sets of measurement conditions		
Save Waveform	24 sets of waveform		



GDS-2000 Series

Rear Panel



SPECIFICATIONS	
ADJUSTABLE PROBE COMPENSATION SIGNAL	
Frequency Range	1kHz ~ 100kHz , 1kHz/STEP
Duty Cycle Range	5% ~ 95%; 5%/STEP
DISPLAY	
TFT LCD Type	5.6 inch
Display Resolution	234 (Vertically) x 320 (Horizontally) Dots
Display Graticule	8 x 10 divisions ; 8 x 12 divisions (menu off)
Display Brightness	Adjustable
INTERFACE	
Go/NoGo Output	5V Maximum/10mA TTL Open Collector Output
RS-232 Interface	DB 9-pin male DTE RS-232 interface
GPIB Interface (Option)	Fully programmable with IEEE 488.2 compliance
USB	USB Host/Device 2.0 full speed supported
POWER SOURCE	
Line Voltage Range	AC 100V ~ 240V , 48Hz ~ 63Hz , Auto selection
Battery Power(Option)	Battery : 10.8V Li-Ion battery pack Charge Time : 8 hours (Power ON) Operating Time : 3 hours , depending on operating condition
MISCELLANEOUS	
Multi-Language Menu	Available
Online Help	Available
Time Clock	Time and Date, Provide the Date/Time for saved data
DIMENSIONS & WEIGHT	
310(W) x 142 (H) x 254(D)mm, Approx. 4.3kg	

ORDERING INFORMATION	
GDS-2062	60MHz, 2-channel, Color LCD Display DSO
GDS-2064	60MHz, 4-channel, Color LCD Display DSO
GDS-2102	100MHz, 2-channel, Color LCD Display DSO
GDS-2104	100MHz, 4-channel, Color LCD Display DSO
GDS-2202	200MHz, 2-channel, Color LCD Display DSO
GDS-2204	200MHz, 4-channel, Color LCD Display DSO
Accessories :	
User manual x1 , Power cord x1	
Probe-GTP-060A-2 : 60MHz (10 : 1/1 : 1) Switchable Passive Probe for GDS-2062/2064 (one per channel)	
Probe-GTP-100A-2 : 100MHz (10 : 1/1 : 1) Switchable Passive Probe for GDS-2102/2104 (one per channel)	
Probe-GTP-250A : 250MHz (10 : 1/1 : 1) Switchable Passive Probe for GDS-2202/2204 (one per channel)	
Option	
Opt. 01 : GPIB Interface	
Opt. 02 : Battery power operation	
(Factory installed, include additional DC Power & Battery charger circuits and Li-Ion Battery pack x 2)	
Optional Accessories	
GRA-405 Rack Mounting, 19" 4U Type	
GSC-005 Soft Carrying Case	
GTC-001 Instrument Cart, 450(W) x 430(D) mm (120V Input Socket)	
GTC-002 Instrument Cart, 330(W) x 430(D) mm (120V Input Socket)	
GTL-110 Test Lead, BNC-BNC Heads	
GTL-232 RS-232C Cable, 9-pin Female to 9-pin Female, Null Modem for Computer	
GTL-242 USB Cable, USB 2.0 A-B TYPE CABLE, 4P	

GRA-405 Rack Adapter Panel

Rack Mounting (19", 4U)



GSC-005 Soft Carrying Case



Li-Ion Battery Pack



GDB-02 Oscilloscope Education and Training Kit

For : GDS-2000/1000/800 Series

