



**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
- * Maximum 25k Points Record Length
- * Large 5.6-in TFT Color Display
- * USB Host/Device: USB Printer and USB Flash Drive Support
- * Battery Operation (optional)
- * Color Printout

SAMPLE RATE

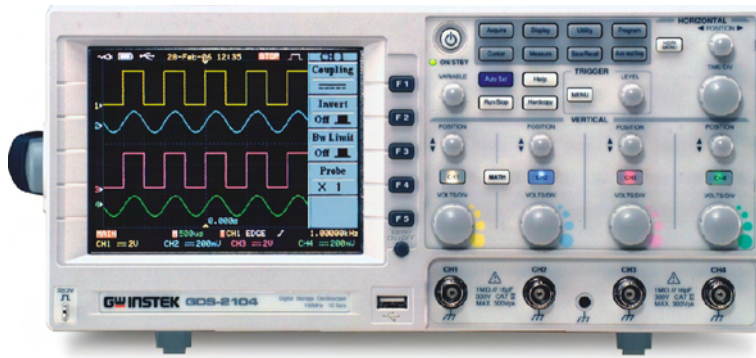
| Mar. Sample | CH1 | CH2 | CH3 | CH4 |
|-------------|-----|-----|-----|-----|
| 1GSa/s | ✓ | — | — | — |
| | — | ✓ | — | — |
| 500MSa/s | ✓ | ✓ | — | — |
| | — | — | ✓ | — |
| 250MSa/s | — | — | — | ✓ |
| | — | — | — | — |

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 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 GDS-2000 Series.

The USB mass storage and programmability, the RS-232C and USB interface included as standard features, and the battery power operation (optional) available for field applications all together make 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 x Volts/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

| | |
|--|--|
| 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(Optional) | 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 : 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-232 RS-232C Cable, 9-pin Female to 9-pin Female, Null Modern 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

