



GDS-840C/820C/810C/806C
(250/150/100/60MHz)



GDS-840S/820S/810S/806S
(250/150/100/60MHz)



GDS-800 Series at 250MHz/150MHz/100MHz/60MHz bandwidth with Color or Monochrome LCD display, are designed and built to meet the demands of a modern Digital Storage Oscilloscope (DSO) in the main stream market today. With 125k points memory and 25GSa/s ET sampling rate per channel, GDS-800 Series provides a good balance of DSO performance in terms of memory length and sampling speed. The easy-to-remember menu tree, the analog-scope-like front panel design, the advanced trigger functions of Pulse Width, TV Line, Event and Time-Delay, and the availability of RS-232C, GPIB, USB and Printer Port, make GDS-800 Series a general purpose product to meet most of the waveform measurement applications in the market.

FEATURES

- * 250/150/100/60MHz Bandwidth With Either Color or Monochrome LCD Display
- * 125k Points Long Memory and 12 Division Horizontal Display
- * 25GSa/s Sampling Rate for Repetitive Waveforms
- * Advanced Trigger : Pulse Width, TV Line, Event Delay And Time Delay
- * Go/NoGo and Auto Setup Sequence
- * FFT Function
- * Built-In Help Manual, Multi-Language and PC Software
- * Standard Interface : RS-232C (for GDS-800 Series) USB, Printer Port, Go/NoGo Output (for GDS-820/840 Series)
- * Option 01: GPIB interface
- * Option 11: USB interface, Printer Port and Go/NoGo Output (for GDS-806/810 Series)

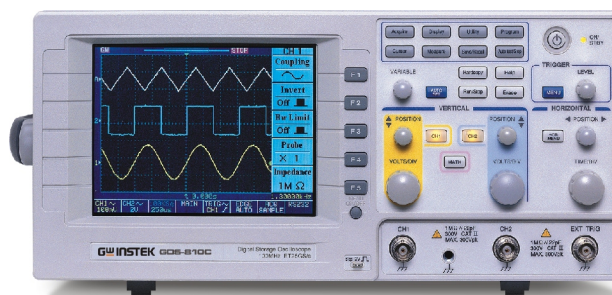
SPECIFICATIONS

| | | GDS-806S | GDS-806C | GDS-810S | GDS-810C | GDS-820S | GDS-820C | GDS-840S | GDS-840C |
|------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------|
| DISPLAY SYSTEM | Display Device | Mono (320 x 240) 5.7 LCD | Color (320 x 240) 5.7 LCD | Mono (320 x 240) 5.7 LCD | Color (320 x 240) 5.7 LCD | Mono (320 x 240) 5.7 LCD | Color (320 x 240) 5.7 LCD | Mono (320 x 240) 5.7 LCD | Color (320 x 240) 5.7 LCD |
| | Display Contrast Waveform Display Graticule Display Mode | Adjustable 8 x10 divisions (8 x 12 div, when menu off) Dot, Vector, Accumulate | | | | | | | |
| VERTICAL SYSTEM | Bandwidth | 60MHz (-3dB) | | 100MHz (-3dB) | | 150MHz (-3dB) | | 250MHz (-3dB) | |
| | Channels | 2 | | | | | | | |
| | Vertical Resolution | 8-Bit | | | | | | | |
| | Vertical Sensitivity | 2mV/div ~ 5V/div | | | | | | | |
| | Vertical Accuracy | ± 3% | | | | | | | |
| | Rise Time | < 5.8ns | | < 3.5ns | | < 2.3ns | | < 1.4ns | |
| Input Impedance | 1MΩ ±2%, ~18pF | | | | 1MΩ ±2%, ~22pF | | 1MΩ ±2%, ~18pF | | |
| Input Coupling | AC, DC, & Ground | | | | | | | | |
| Polarity | Normal & Invert | | | | | | | | |
| Maximum Voltage Between Signal & Common at Input BNC | 300V (DC+AC peak), CATII | | | | | | | | |
| Waveform Signal Process | CH1+CH2, CH1-CH2, FFT | | | | | | | | |
| Offset Range | 2mV/div ~ 50mV/div : ±0.5V ; 100mV/div ~ 500mV/div : ±5V ; 1V/div ~ 5V/div : ±50V | | | | | | | | |
| BW Limit | 20MHz (-3dB) | | | | | | | | |
| HORIZONTAL SYSTEM | Time Base Range | 1ns/div ~ 10s/div (1-2.5 increments) ; Roll : 250ms/div ~ 10s/div | | | | | | | |
| | Time Base Mode | Main, Window, Window Zoom, Roll, X-Y | | | | | | | |
| | Time Base Accuracy | ± 0.01% | | | | | | | |
| Delay Range | Pre-trigger : 20 div maximum ; Post-trigger : 1000 div | | | | | | | | |
| SIGNAL ACQUISITION SYSTEM | Real-Time Sample Rate | 100MSa/s maximum on each channel | | | | | | | |
| | Equivalent Sample Rate | 25GSa/s E.T. maximum on each channel | | | | | | | |
| | Record Length | 125k Points/CH | | | | | | | |
| | Peak Detection | 10ns (500ns/div ~ 10s/div) | | | | | | | |
| | Acquisition Mode | Sample, Peak Detect, Average | | | | | | | |
| Average | 2, 4, 8, 16, 32, 64, 128, 256 | | | | | | | | |
| TRIGGER | Trigger Source | CH1, CH2, Line, Ext | | | | | | | |
| | Mode | Auto Level, Auto, Normal, Single, TV, Edge, Pulse Width, Time Delay, Event Delay | | | | | | | |
| | Coupling | AC, DC, HF, LF, Noise Reject | | | | | | | |
| Sensitivity | DC ~ 25MHz : 0.5div or 5mV 25MHz~60MHz : Approx. 1.5div or 15mV | | DC ~ 25MHz : 0.5div or 5mV 25MHz~100MHz : Approx. 1.5div or 15mV | | DC ~ 30MHz : Approx. 0.5div or 5mV ; 30MHz~150MHz : Approx. 1.5div or 15mV | | DC ~ 30MHz : Approx. 0.5div or 5mV ; 30MHz~150MHz : Approx. 1.5div or 15mV 150MHz ~ 250MHz : Approx. 2.0div or 20mV | | |
| X-Y MODE | X-Axis Input / Y-Axis Input | Channel 1 / Channel 2 | | | | | | | |
| Phase Shift | ± 3° at 100kHz | | | | | | | | |
| CURSOR & MEASUREMENT | Auto Voltage Measurement | V _{pp} , V _{amp} , V _{avg} , V _{rms} , V _h , V _o , V _{max} , V _{min} | | | | | | | |
| | Auto Time Measurement | Freq, Period, Rise Time, Fall Time, Positive Width, Negative Width, Duty Cycle | | | | | | | |
| | Cursor Measurement | Voltage difference between cursors (ΔV) Time difference between cursors (ΔT) Frequency difference between cursors (1/ΔT) | | | | | | | |

| SPECIFICATIONS | | GDS-806S | GDS-806C | GDS-810S | GDS-810C | GDS-820S | GDS-820C | GDS-840S | GDS-840C |
|--------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------|----------|-----------------------------------------------|----------|---------------------------------------------------------------------------|----------|
| FREQUENCY COUNTER | Readout Resolution Frequency Range Signal Source | 6 digits AC Coupled, 20Hz ~ bandwidth; Resolution: 10Hz 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 | | | | 1kHz (Approx. 3%) 50% | | | |
| EXTERNAL TRIGGER | Range | $\pm 15V$ | | | | | | | |
| | Sensitivity | DC ~ 25MHz : ~50mV 25MHz ~ 60MHz : ~100mV | | DC ~ 25MHz : ~50mV 25MHz ~ 100MHz : ~100mV | | DC ~ 30MHz : ~50mV 30MHz ~ 150MHz : ~100mV | | DC ~ 30MHz : ~50mV 30MHz ~ 150MHz : ~100mV 150MHz ~ 250MHz : ~150mV | |
| CONTROL PANEL FUNCTION | AutoSet Save/Recall Waveform Trace Save/Recall | "Autoset" can adjust vertical (Volt/div), Horizontal (Sec/div) and Trigger level automatically Up to 15 sets of measurement conditions can be saved and recalled 2 sets of waveform can be saved and recalled | | | | | | | |
| | INTERFACE | Standard | RS-232C | | | RS-232C, USB, Printer Port, Go/NoGo Output | | | |
| POWER SOURCE | Standard | GPIB (Factory Installed) | | | GPIB | | | | |
| | Optional Opt. 01 | USB, Printer Port, Go/NoGo Output (Factory Installed) | | | - | | | | |
| POWER SOURCE | AutoSet | 100V ~ 240V AC, 47Hz ~ 63Hz, Auto selection | | | | | | | |
| DIMENSIONS & WEIGHT | Waveform Trace Save/Recall | 310W x 142H x 254D (mm), Approx. 4.1kg | | | | | | | |

| ORDERING INFORMATION | |
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| GDS-806C 60MHz, 2-channel, Color LCD Display DSO | GDS-820C 150MHz, 2-channel, Color LCD Display DSO |
| GDS-806S 60MHz, 2-channel, Mono LCD Display DSO | GDS-820S 150MHz, 2-channel, Mono LCD Display DSO |
| GDS-810C 100MHz, 2-channel, Color LCD Display DSO | GDS-840C 250MHz, 2-channel, Color LCD Display DSO |
| GDS-810S 100MHz, 2-channel, Mono LCD Display DSO | GDS-840S 250MHz, 2-channel, Mono LCD Display DSO |
| ACCESSORIES : User manual x 1, Power Cord x 1 Probe-GTP-060A-2 : 60MHz (10 : 1/1 : 1) Switchable Passive Probe for GDS-806S/806C (one per channel) Probe-GTP-100A : 100MHz (10 : 1/1 : 1) Switchable Passive Probe for GDS-810S/810C (one per channel) Probe-GTP-150A : 250MHz (10 : 1/1 : 1) Switchable Passive Probe for GDS-820S/820C (one per channel) Probe-GTP-250A : 250MHz (10 : 1/1 : 1) Switchable Passive Probe for GDS-840S/840C (one per channel) | |
| Option | |
| Opt.01 : GPIB Interface (Factory Installed) | Opt.11 : USB Interface, Printer Port, Go/NoGo Output (Factory Installed) (for GDS-806/810 Series Only) |
| Optional Accessories | |
| GRA-405 Rack Mounting (19", 4U) | GTL-110 Test Lead, BNC-BNC Heads |
| GSC-005 Soft Carrying Case | GTL-232 RS-232C Cable, 9-pin Female to 9-pin, Null Modem for Computer |
| GTC-001 Instrument Cart, 450(W) x 430(D) mm (120V Input Socket) | GTL-242 USB2.0 A-B Type Cable |
| GTC-002 Instrument Cart, 330(W) x 430(D) mm (120V Input Socket) | |

NOTE : Only one kind of opt.01 and opt.11 could be selected.



Rear Panel



GRA-405 Rack Adapter Panel
Rack Mounting (19", 4U)



GSC-005 Soft Carrying Case

