

GDS-2000A Oscilloscope Specification

Specification

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	GDS-2072A	GDS-2074A	GDS-2102A	GDS-2104A	GDS-2202A	GDS-2204A	GDS-2302A	GDS-2304A
Channels	2ch+Ext	4ch+Ext	2ch+Ext	4ch+Ext	2ch+Ext	4ch+Ext	2ch+Ext	4ch+Ext
Bandwidth	DC~70MHz (-3dB)	DC~70MHz (-3dB)	DC~100MHz (-3dB)	DC~100MHz (-3dB)	DC~200MHz (-3dB)	DC~200MHz (-3dB)	DC~300MHz (-3dB)	DC~300MHz (-3dB)
Rise time	5ns	5ns	3.5ns	3.5ns	1.75ns	1.75ns	1.17ns	1.17ns
Bandwidth Limit (-3dB)	20MHz	20MHz	20MHz	20MHz	20M/100MHz	20M/100MHz	20M/100M /200MHz	20M/100M /200MHz
Vertical								
Resolution	8 bit							
	:1mV~10V/div							
Input Coupling	AC, DC, GND							
Input Impedance	1MΩ// 16pF							
DC Gain Accuracy	±(3% X Readout + 0.1div + 1mV)							
Polarity	Normal & Invert							
Maximum Input Voltage	300V (DC+AC Peak), CAT I							
Offset Position Range	1mV/div ~ 20mV/div : ±0.5V							
	50mV/div ~ 200mV/div : ±5V							
	500mV/div ~ 5V/div : ±50V							
	10V/div : ±500V							
Waveform Signal Process	+, -, ×, ÷, FFT, FFTrms							
	FFT:Spectral magnitude. Set FFT Vertical Scale to Linear RMS or dBV RMS, and FFT Window to Rectangular, Hamming, Hanning, or Blackman-Harris.							
Trigger								
Source	CH1 ,CH2, CH3*, CH4*, Line, EXT, D0-D15							
	*four channel models only.							
Trigger Mode	Auto (supports Roll Mode for 100 ms/div and slower), Normal, Single							
Trigger Type	Edge, Pulse Width, Video, Pulse Runt, Rise & Fall, Alternate, Event-Delay(1~65535 events), Time-Delay(10nS~10S), Logic*, Bus*							
Holdoff range	10nS to 10S							
Coupling	AC,DC,LF rej. ,Hf rej. ,Noise rej.							
Sensitivity	DC ~ 100MHz Approx. 1div or 1.0mV							

	100MHz ~ 200MHz Approx. 1.5div or 15mV
	200MHz ~ 300MHz Approx. 2div or 20mV
External Trigger	
Range	±15V
Sensitivity	DC ~ 100MHz Approx. 100mV
	100MHz ~ 200MHz Approx. 150mV
	200MHz ~ 300MHz Approx. 150mV
Input Impedance	1MΩ±3// 16pF
Horizontal	
Time base Range	1ns/div ~ 100s/div (1-2-5 increments)
	ROLL: 100ms/div ~ 100s/div
Pre-trigger	10 div maximum
Post-trigger	1000 div maximum.
Accuracy	±20 ppm over any ≥ 1 ms time interval
Real Time Sample Rate	1CH: 2GSa/s; 2CH: 1GSa/s
ET Sample Rate	100GSa/s maximum for all models
Record Length	1CH: 2Mpts; 2CH: 1Mpts
Acquisition Mode	Normal, Average, Peak Detect, Single
X-Y Mode	
Peak Detection	2nS (typical)
Average	selectable from 2 to 256
X-Axis Input	Channel 1; Channel 3*
	*four channel models only
Y-Axis Input	Channel 2; Channel 4*
	*four channel models only
Phase Shift	±3° at 100kHz
Cursors and Measurement	
Cursors	Amplitude, Time, Gating available
Automatic Measurement	36 sets: Pk-Pk, Max, Min, Amplitude, High, Low, Mean, Cycle Mean, RMS, Cycle RMS, Area, Cycle Area, ROVShoot, FOVShoot, RPREShoot, FPREShoot, Frequency, Period, RiseTime, FallTime, +Width, -Width, Duty Cycle, +Pulses, -Pulses, +Edges, -Edges, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase
Control Panel Function	Cursors measurement
Auto counter	6 digits, range from 2Hz minimum to the rated bandwidth
Autoset	Single-button, automatic setup of all channels for vertical, horizontal and trigger systems, with undo Autoset
Save Setup	20set
Save Waveform	24set

Display	
TFT LCD Type	8" TFT LCD SVGA color display
Display Resolution	800 horizontal × 600 vertical pixels (SVGA)
Interpolation	Sin(x)/x & Equivalent Time Sampling
Waveform Display	Dots, vectors, variable persistence (16ms~10s), infinite persistence
Waveform Update Rate	80,000 waveforms per second, maximum
Display Graticule	8 x 10 divisions
Interface	
RS232C	DB-9 male connector X1
USB Port	USB 2.0 High-speed host port X2, USB High-speed 2.0 device port X1
Ethernet Port	RJ-45 connector, 10/100Mbps with HP Auto-MDIX (option)
Go-NoGo BNC	5V Max/10mA TTL open collector output
SVGA Video Port	SVGA output (option)
GPIB	GPIB module (option)
Kensington Style Lock	Rear-panel security slot connects to standard Kensington-style lock.
Logic Analyzer (Option)	
Sample Rate	500MSa/s
Bandwidth	200MHz
Record Length	2M max
Input Channels	16 Digital (D15 - D0) or 8 Digital (D7~D0)
Trigger type	Edge, Pattern, Pulse Width, Serial bus (I2C, SPI, UART)
Thresholds	Quad-D0~D3, D4~D7. . . . Thresholds
Threshold selections	TTL, CMOS, ECL, PECL, User Defined
User-defined Threshold Range	±10V
Maximum Input Voltage	±40 V
Minimum Voltage Swing	±250 mV
Vertical Resolution	1 bit
Miscellaneous	
Multi-language menu	Available
On-line help	Available
Time clock	Time and Date ,Provide the Date/Time for saved data



Made to Measure

Dimensions	380mmX220mmX145mm
Weight	4.2kg
Order information	
GDS-2072A	70MHz ,2-channel ,Visual Persistence DSO
GDS-2074A	70MHz ,4-channel ,Visual Persistence DSO
GDS-2102A	100MHz ,2-channel ,Visual Persistence DSO
GDS-2104A	100MHz ,4-channel ,Visual Persistence DSO
GDS-2202A	200MHz ,2-channel ,Visual Persistence DSO
GDS-2204A	200MHz ,4-channel ,Visual Persistence DSO
GDS-2302A	300MHz ,2-channel ,Visual Persistence DSO
GDS-2304A	300MHz ,4-channel ,Visual Persistence DSO

Accessories

Quick start guide x1 ,CDX1 ,power cordX1

GTP-070A-4	: 70MHz (10:1/1:1) Switchable passive probe for GDS-2072A/2074A(one per channel)
GTP-150A-2	:150MHz (10:1/1:1) Switchable passive probe for GDS-2102A/2104A(one per channel)
GTP-250A-2	:250MHz (10:1/1:1) Switchable passive probe for GDS-2202A/2204A(one per channel)
GTP-350A-2	:350MHz (10:1/1:1) Switchable passive probe for GDS-2302A/2304A(one per channel)

Options

DS2-LAN	Ethernet & SVGA output
DS2-GPIB	GPIB Interface
DS2-FGN	DDS Function Generator
DS2-08LA	8-Channel Logic Analyzer
DS2-16LA	16-Channel Logic Analyzer

Free Download

PC software :Freewave

Driver :USB driver ,LabView Driver