GDS-2000A Specifications

The specifications apply when the GDS-2000A is powered on for at least 30 minutes under +20°C~+30°C.

	Channels	Bandwidth (-3dB)	Rise time	Bandwidth Limit (-3dB)
GDS-2072A	2ch+Ext	DC~70MHz	5ns	20MHz
GDS-2074A	4ch+Ext	DC~70MHz	5ns	20MHz
GDS-2102A	2ch+Ext	DC~100MHz	3.5ns	20MHz
GDS-2104A	4ch+Ext	DC~100MHz	3.5ns	20MHz
GDS-2202A	2ch+Ext	DC~200MHz	1.75ns	20M/100MHz
GDS-2204A	4ch+Ext	DC~200MHz	1.75ns	20M/100MHz
GDS-2302A	2ch+Ext	DC~300MHz	1.17ns	20M/100M /200MHz
GDS-2304A	4ch+Ext	DC~300MHz	1.17ns	20M/100M /200MHz

Specification	
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	300Vrms, 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,d/dt ,∫dt ,√
	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, time out , Alternate, Event-Delay(1~65535 events), Time-Delay(10nS~10S), Logic*, Bus* * request DS2-08LA or DS2-16LA option
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) ,Parallel bus
Thresholds	Quad-D0~D3, D4~D7,D8~D11* ,D12~D15*(*:DS2-16LA only)
Threshold selections	TTL, CMOS, ECL, PECL, User Defined

User-defined Threshold Range	±10V
Maximum Input Voltage	±40 V
Minimum Voltage Swing	±500 mV
Input Impedance	101KΩ probe loading 8pF
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
Dimensions	380mmX220mmX145mm
Weight	4.2kg