GDS-1000-U Specifications

The specifications apply when the GDS-1000-U is powered on for at least 30 minutes under +20°C~+30°C.

Model-specific specifications

GDS-1052-U	Bandwidth (–3dB)	DC coupling: DC ~ 50MHz AC coupling: 10Hz ~ 50MHz
	Bandwidth Limit	20MHz (–3dB)
	Trigger Sensitivity	0.5div or 5mV (DC ~ 25MHz) 1.5div or 15mV (25MHz~50MHz)
	External Trigger Sensitivity	~ 50mV (DC~25MHz) ~ 100mV (25MHz~50MHz)
	Rise Time	< 7ns approx.
GDS-1072-U	Bandwidth (–3dB)	DC coupling: DC ~ 70MHz AC coupling: 10Hz ~ 70MHz
	Bandwidth Limit	20MHz (–3dB)
	Trigger Sensitivity	0.5div or 5mV (DC ~ 25MHz) 1.5div or 15mV (25MHz~70MHz)
	External Trigger Sensitivity	~ 50mV (DC~25MHz) ~ 100mV (25MHz~70MHz)
	Rise Time	< 5ns approx.
GDS-1102-U	Bandwidth (–3dB)	DC coupling: DC ~ 100MHz AC coupling: 10Hz ~ 100MHz
	Bandwidth Limit	20MHz (–3dB)
	Trigger Sensitivity	0.5div or 5mV (DC ~ 25MHz) 1.5div or 15mV (25MHz~100MHz)
	External Trigger Sensitivity	~ 50mV (DC~25MHz) ~ 100mV (25MHz~100MHz)
	Rise Time	< 3.5ns approx.

Common specifications

Vertical	Sensitivity	2mV/div~10V/Div (1-2-5 increments)
	Accuracy	± (3% x |Readout|+0.1div + 1mV)
	Bandwidth	See model-specific specifications
	Rise Time	See model-specific specifications
	Input Coupling	AC, DC, Ground
	Input Impedance	1MΩ±2%, ~15pF
	Polarity	Normal, Invert
	Maximum Input	300V (DC+AC peak), CAT II
	Math Operation	+, –, FFT
	Offset Range	2mV/div~50mV/div: ±0.4V 100mV/div~500mV/div: ±4V 1V/div~5V/div: ±40V 10V/div : ±300V
Trigger	Sources	CH1, CH2, Line, EXT
	Modes	Auto, Normal, Single, TV, Edge, Pulse
	Coupling	AC, DC, LF rej, HF rej, Noise rej
	Sensitivity	See model-specific specifications
External trigger	Range	DC: ±15V, AC: ±2V
	Sensitivity	See model-specific specifications
	Input Impedance	1MΩ±2%, ~15pF
	Maximum Input	300V (DC+AC peak), CATII
Horizontal	Range	1ns/div~50s/div, 1-2.5-5 increment Roll: 50ms/div – 50s/div
	Modes	Main, Window, Window Zoom, Roll, X-Y
	Accuracy	±0.01%

	Pre-Trigger	10 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	250M Sa/s maximum
	Equivalent	25G Sa/s maximum
	Vertical Resolution	8 bits
	Record Length	4k points maximum
	Acquisition	Normal, Peak Detect, Average
	Peak Detection	10ns (500ns/div ~ 50s/div)
	Average	2, 4, 8, 16, 32, 64, 128, 256
Cursors and Measurement	Voltage	Vpp, Vamp, Vavg, Vrms, Vhi, Vlo, Vmax, Vmin, Rise Preshoot/ Overshoot, Fall Preshoot/ Overshoot
	Time	Freq, Period, Rise Time, Fall Time, + Width, – Width, Duty Cycle
	Cursors	Voltage difference (ΔV) and Time difference (ΔT) between cursors
	Auto Counter	Resolution: 6 digits, Accuracy: ±2% Signal source: All available trigger source except the Video trigger
Control Panel Function	Autoset	Automatically adjust Vertical Volt/div, Horizontal Time/div, and Trigger level
	Save/Recall	Up to 15 sets of measurement conditions and waveforms
Display	LCD	5.7 inch, TFT, brightness adjustable
	Resolution (dots)	234 (Vertical) x 320 (Horizontal)
	Graticule	8 x 10 divisions
	Display Contrast	Adjustable
Interface	USB Slave Connector	USB 2.0 full speed (CDC-ACM)
	USB Host connector	Image (BMP) and waveform data (CSV)
Probe Compensation Signal	Frequency range	1kHz ~ 100kHz adjustable, 1kHz step
	Duty cycle	5% ~ 95% adjustable, 5% step
	Amplitude	2Vpp±3%
Power Source	Line Voltage	100V~240V AC, 47Hz~63Hz
	Power Consumption	18W, 40VA maximum
	Fuse Rating	1A slow, 250V
Operation Environment	Ambient temperature 0 ~ 50°C Relative humidity ≤ 80% @35°C	
Storage Environment	Ambient temperature –20 ~ 70°C Relative humidity ≤ 80% @70°C	
Dimensions	310(W) x 142(H) x 140(D) mm	
Weight	Approx. 2.5kg	

Probe Specifications

GDS-1052-U & GDS-1072-U Probe

Applicable model & probe		GDS-1052-U, GDS-1072-U GTP-070B-4
Position x 10	Attenuation	10
	Bandwidth	DC ~ 70MHz
	Input Resistance	10MΩ (when used with oscilloscopes which have 1MΩ input)
	Input Capacitance	14.5~17.5pF
	Maximum Input Voltage	≤600V DC +ACpk
	Compensation Range	10~35pF
Position x 1	Attenuation	1
	Bandwidth	DC ~ 6MHz
	Input Resistance	1MΩ (oscilloscope input resistance)
	Input Capacitance	85~115pF
	Maximum Input Voltage	≤200V DC +ACpk
Operating Cond.	Temperature	–10°C ~ 50°C
	Humidity	≤85% (Relative Humidity)
Net Weight	<55g	
Length	130cm±1.5cm	

GDS-1102-U Probe

Applicable model & probe		GDS-1102-U GTP-100B-4
Position x 10	Attenuation	10
	Bandwidth	DC ~ 100MHz
	Input Resistance	10MΩ (when used with oscilloscopes which have 1MΩ input)
	Input Capacitance	14.5~17.5pF
	Maximum Input Voltage	≤600V DC +ACpk
	Compensation Range	5~30pF
Position x 1	Attenuation	1
	Bandwidth	DC ~ 10MHz
	Input Resistance	1MΩ (oscilloscope input resistance)
	Input Capacitance	85~115pF
	Maximum Input Voltage	≤200V DC +ACpk
Operating Cond.	Temperature	–10°C ~ 50°C
	Humidity	≤85% (Relative Humidity)
Net Weight	<55g	
Length	130cm±1.5cm	

GOOD WILL INSTRUMENT CO., LTD.
N0. 7-1, Jhongsing Road, Tucheng Dist., New Taipei City, 236, Taiwan
T (886) 2 2268-0389 F (886)2 2268-0639 www.gwinstek.com