DIGITAL STORAGE OSCILLOSCOPE

CE | USB | PC Software | Labview Driver

GDS-300/200 Series

FEATURES

- 200/100/70MHz Bandwidth Selections, Two Input Channels
- 1GSa/s Maximum Sample Rate
- Maximum 5M/1M Memory Depth Per Channel
- 7" 800 x 480 Full Touch Panel Capacitive LCD Multi-Point Control, Landscape and Portrait Display
- Built-In 50,000/5,000 Counts DMM
- 30,000 Consecutive Waveform Records Logging Function, Replay Measurement Results Any Time
- Temperature Measurement and Logging Function
- Built-In Engineering Calculator, SMD Resistance Coding, Color Coding Info, and Attenuator Calculation Application Software
- Optional Differential Probe to Achieve Isolation Effect

GDS-300/200 Series Front

GDS-300 Series Rear Panel

GDS-200 Series Rear Panel

The brand new portable 7" full touch panel capacitive LCD, featuring multi-point touch panel method which allows engineers to move waveform position, adjust waveform size, and set trigger conditions easily, subverts the traditional handheld instrument. With this unique feature, engineers can retrieve DUT's signals easily under the complex working environment. Landscape or portrait measurement display not only clearly shows waveforms under full screen status but also combines multi-functional measurement environment to achieve unimaginable measurement results.

Built-in, the second to none, the longest 5M sample memory depth helps engineers diagnose waveforms in great details. The long memory depth can record detailed waveform data and help engineers reproduce the original waveforms while engineers are conducting long observation or retrieving detailed transient signals. Any delicate changes of analog waveforms can be clearly presented in front of engineers when they adjust time scale from long to short that leaves no measurement problems unanswered.

Built-in 50,000 counts (GDS-300) or 5,000 counts (GDS-200) DMM helps engineers accurately measure DUT's electric parameters including not only measurements of D.C. voltage, A.C. voltage, D.C. current, A.C. current, resistance and diode polarity, but also temperature measurement and monitoring. The analysis of trend diagrams further completes test and measurement. DMM can simultaneously work with oscilloscope to conduct multi-measurement tasks.

Normally, engineers wish to effectively record intermittent signals while retrieving a series of signals during a long period of time. GDS-300/GDS-200's built-in 30,000 consecutive waveform records logging function not only records 30,000 waveform records in a long period of time but also replays the recorded data that allows engineers to identify intermittent problems occurred during the recorded time. Leave no problems unidentified.

Engineers need to isolate power and solve corresponding grounding issue while conducting circuit debugging. One of the criteria engineers must overcome is to maintain system grounding and isolation safety in the strict test and measurement environment such as no grounding system or no isolation. GDS-300/200 provide optional differential probe to effectively assist engineers in solving isolation and grounding problems that elevates the efficiency and safety of test and measurement.

Engineers often need some calculation tool software to conduct circuit design and debugging analysis during the R&D process. GDS-300/200 oscilloscopes, with the built-in standard engineering calculator, allow engineers to verify parameters during the test and measurement process. While using unknown resistance, engineers can obtain resistance value via color coding calculation software. If any attenuator was designed in the circuit, GDS-300/200 can also provide corresponding attenuator model and attenuation value calculation.

APPLICATIONS

- Large Electric System Tests
- Power Product Tests
- Motor Tests
- Solar Power Battery Inspection and Repair
- Maintenance Personnel Always on Field Assignments

GW INSTEK
Simply Reliable

SPECIFICATIONS

		GDS-307	GDS-310	GDS-320	GDS-207	GDS-210	GDS-220
VERTICAL	Channels	2 (BNC-Shield)					
	Input Impedance	1MΩ±2%, 16.5pf approx.					
	Maximum Input	CAT II 300VRMS					
	Input Coupling	AC, DC, GND					
	Bandwidth	DC~70MHz(-3dB)	DC~100MHz (-3dB)	DC~200MHz (-3dB)	DC~70MHz (-3dB)	DC~100MHz(-3dB)	DC~200MHz (-3dB)
	Rise Time	<5ns	<3.5ns	<1.75ns	<5ns	<3.5ns	<1.75ns
	Sensitivity	2mV/div~10V/div (1-2-5 increments)					
	Accuracy	±(3% x Readout + 0.1 div + 1mV)					
	Bandwidth Limit	20MHz(-3dB)					
	Polarity	Normal, Invert					
	Offset Position Range	2mV/div~50mV/div : ±0.4V; 100mV/div~500mV/div : ±4V; 1V/div~5V/div : ±40V; 10V/div : ±300V					
SIGNAL ACQUISITION	Realtime Sample Rate	1GSa/s					
	Memory Depth	5Mpoints per ch			1Mpoints per ch		
	Acquisition Mode	Average : 2~256 waveforms; Peak detect : 10ns; sin(x)/x or ET					
	Replay Wfms.	30,000 wfms.					
TRIGGER	Source	Ch1 or Ch2					
	Trigger mode	Auto, Normal, Single, Force					
	Trigger type	Edge, Pulse Width, Video, Alternate					
	Trigger Holdoff	10ns ~ 10s					
	Coupling	AC, DC, LFR, HFR, NR					
	Sensitivity	DC~25MHz : approx. 0.5div or 5mV; 25MHz~ 70/100/200MHz : approx. 1.5div or 15mV					
HORIZONTAL	Range	5ns~100s/Div (1-2-5 increments)					
	Roll	100ms/div ~ 100s/div					
	Pre-trigger	10 div max.					
	Post-trigger	1,000 div max(depend on time base)					
	Accuracy	±20ppm over any > 1ms time interval					
XY MODE	Phase Shift	±3° at 100KHz					
CURSOR AND MEASUREMENT	Cursors	Voltage difference between cursors(△V), Time difference between cursors(△T), frequency measure(1/△T)					
	Auto-measurement	36 sets.					
	Auto-counter	6 digits. Range: 2Hz to rated bandwidth					
	Autoset						
TEMPERATURE MEASUREMENT		Available			Non-Available		
MISCELLANEOUS	Multi-Language Menu	Available					
	On-line Help	Available					
	Time and Clock	Available					
BATTERY	Battery power	Li-polymer 6100mA/hr, 7.4V (Built-in)					
	Charge time	2.0 hour (75%)					
	Operation time	4.1 hour, depending on operating condition.					
PROBE COMPENSATION		2V, 1kHz, 50% Duty cycle					
INTERFACE	USB	USB Device (Isolation)					
	Internal Flash Disk	120MB					
DISPLAY	Type	7 inch					
	Display Resolution	480 x 800 pixels					
	Display Direction	Landscape & Portrait					
	Backlight Control	Manual adjustable, ECO mode					
	Touch Panel	Capacitive					
DMM	Digit Level	50,000 counts			5000 counts		
		CAT II 600VRMS, CAT III 300VRMS					
	DC Voltage Range	50mV, 500mV, 5V, 50V, 500V, 1000V 6 ranges					
	DC Voltage Accuracy	GDS-320/310/307:50mV,500mV,5V,50V,500V±(0.05%+5digits); GDS-220/210/207:50mV,500mV,5V,500V,1000V±(0.1%+5digits)					
	Input Impedance	10MΩ					
	DC Current Range	50mA, 500mA, 10A 3 ranges					
	DC Current Accuracy	GDS-320/310/307:50mA ~ 500mA, 2 range , ±(0.1% + 5 digits),10A±(0.5% + 1 digit)					
		GDS-220/210/207:50mA~500mA, 10A 3 ranges, ±(0.5% + 1 digit)					
	AC Voltage Range	50mV, 500mV, 5V, 50V, 700V 5 ranges					
	AC Voltage Accuracy	50mV, 500mV, 5V, 50V, 700V ±(1.5% + 15 digits) at 50Hz~1kH					
	AC Current Range	50mA, 500mA, 10A 3 ranges					
	AC Current Accuracy	50mA, 500mA, ±(1.5% + 15 digits) at 50Hz~1kHz; 10A ±(3% + 15 digits) at 50Hz~1kHz *Measurement range:>10mA					
	RESISTANCE Range	500Ω, 5KΩ, 50KΩ, 500KΩ, 5MΩ 6 range					
	RESISTANCE Accuracy	500Ω, 5KΩ, 50KΩ, 500KΩ ±(0.3% + 3 digits); 5MΩ±(0.5% + 5 digits) *Measurement range:50Ω~5MΩ					
	Diode Test	Maximum forward voltage 1.5V, Open voltage 2.8V					
	Temperature (thermocouple) Range	-50°C ~ +1000°C					
	Temperature (thermocouple) Resolution	0.1°C					
	Temperature (thermocouple) Thermocouple	B, E, J, K, N, R, S, T *Specifications do not include probe accuracy. Temperature specifications only apply to the GDS-320/310/307.					
	Continuity Beep	< 15 Ω					
	Functions	Auto Range, Max, Min, Hold, Trend plot					
POWER ADAPTOR	Line Voltage	AC 100V~240V, 47~63Hz, Power Consumption 40W; DC Output : 12V/3A, Double Shield					
OPTION	Differential Probe	Dual-channel, 40MHz, CAT II 600V					
DIMENSIONS & WEIGHT		240.2(W) x 136.0(H) x 59.7(D) mm; Approx. 1.5 Kg					

Specifications subject to change without notice. DS300200GD1DH

ORDERING INFORMATION

GDS-320	200MHz, 2 Channels, Digital Oscilloscope
GDS-310	100MHz, 2 Channels, Digital Oscilloscope
GDS-307	70MHz, 2 Channels, Digital Oscilloscope
GDS-220	200MHz, 2 Channels, Digital Oscilloscope
GDS-210	100MHz, 2 Channels, Digital Oscilloscope
GDS-207	70MHz, 2 Channels, Digital Oscilloscope

ASSESSORIES

Quick start guide x 1, User manual CD x 1 ,Power cord x 1

GTP-150B-2	150MHz Probe, Suitable for GDS-307/207, GDS-310/210	**GSC-010**	Soft Carrying Case
GTP-250B-2	250MHz Probe, Suitable for GDS-320/220	**GSC-011**	Soft Carrying Bag
GTL-207	Multimeter Test Lead x 2	**GAP-001**	AC-DC Adaptor
		GWS-001	Wrist Strap

OPTIONAL ASSESSORIES

GDP-040D	40MHz Dual-channel Differential Probe	**GCL-001**	Vertical Calibration Cable
GPF-700	Protective Films for 7" Touch Screen	**GTL-131**	Test Clip, Suitable for GDP-040D
GTL-253	USB Cable, USB 2.0, A-mini B Type, 1400mm		

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OpenWave 200 Software

Global Headquarters
GOOD WILL INSTRUMENT CO., LTD.
T +886-2-2268-0389 F +886-2-2268-0639

China Subsidiary
GOOD WILL INSTRUMENT (SUZHOU) CO., LTD.
T +86-512-6661-7177 F +86-512-6661-7277

Malaysia Subsidiary
GOOD WILL INSTRUMENT (M) SDN. BHD.
T +604-6309988 F +604-6309989

Europe Subsidiary
GOOD WILL INSTRUMENT EURO B.V.
T +31(0)40-2557790 F +31(0)40-2541194

U.S.A. Subsidiary
INSTEK AMERICA CORP.
T +1-909-5918358 F +1-909-3990819

Japan Subsidiary
TEXIO TECHNOLOGY CORPORATION.
T +81-45-620-2305 F +81-45-534-7181

Korea Subsidiary
GOOD WILL INSTRUMENT KOREA CO., LTD.
T +82-2-3439-2205 F +82-2-3439-2207

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