



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

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.



GDS-300/200 Series Front



GDS-300 Series Rear Panel



GDS-200 Series Rear Panel

APPLICATIONS

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

GDS-300/200 Series

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.					
SIGNAL ACQUISITION	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					
	Realtime Sample Rate	1GSa/s					
TRIGGER	Memory Depth	5Mpoints per ch			1Mpoints per ch		
	Acquisition Mode	Average : 2~256 waveforms; Peak detect : 10ns; sin (x)/x or ET					
HORIZONTAL	Replay Wfms.	30,000 wfms.					
	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					
XY MODE	Sensitivity	DC~25MHz : approx. 0.5div or 5mV; 25MHz~ 70/100/200MHz : approx. 1.5div or 15mV					
	Range	5ns~100s/Div (1-2.5 increments)					
	Roll	100ms/div ~ 100s/div					
	Pre-trigger	10 div max.					
CURSOR AND MEASUREMENT	Post-trigger	1,000 div max(depend on time base)					
	Accuracy	±20ppm over any > 1ms time interval					
	Phase Shift	±3° at 100KHz					
TEMPERATURE MEASUREMENT	Cursors	Voltage difference between cursors(ΔV), Time difference between cursors(ΔT), frequency measure(1/ΔT)					
	Auto-measurement	36 sets.					
	Auto-counter	6 digits. Range: 2Hz to rated bandwidth					
MISCELLANEOUS	Autoset						
		Available			Non-Available		
	Multi-Language Menu	Available					
BATTERY	On-line Help	Available					
	Time and Clock	Available					
	Battery power	Li-polymer 6100mA/hr, 7.4V (Built-in)					
PROBE COMPENSATION	Charge time	2.0 hour (75%)					
	Operation time	4.1 hour, depending on operating condition.					
		2V, 1kHz, 50% Duty cycle					
DISPLAY	USB	USB Device (Isolation)					
	Internal Flash Disk	120MB					
	Type	7 inch					
DMM	Display Resolution	480 x 800 pixels					
	Display Direction	Landscape & Portrait					
	Backlight Control	Manual adjustable, ECO mode					
OPTION	Touch Panel	Capacitive					
	Digit Level	50,000 counts			5000 counts		
	DC Voltage	CAT II 600VRMS, CAT III 300VRMS					
	Range	50mV, 500mV, 5V, 50V, 500V, 1000V 6 ranges					
	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	50mA, 500mA, 10A 3 ranges					
	Range	GDS-320/310/307:50mA ~ 500mA, 2 range , ±(0.1% + 5 digits), 10A±(0.5% + 1 digit)					
	Accuracy	GDS-220/210/207:50mA~500mA, 10A 3 ranges, ±(0.5% + 1 digit)					
	AC Voltage	50mV, 500mV, 5V, 50V, 700V 5 ranges					
DIMENSIONS & WEIGHT	Accuracy	50mV, 500mV, 5V, 50V, 700V ±(1.5% + 15 digits) at 50Hz~1kHz					
	AC Current	50mA, 500mA, 10A 3 ranges					
	Range	50mA, 500mA, ±(1.5% + 15 digits) at 50Hz~1kHz; 10A ±(3% + 15 digits) at 50Hz~1kHz *Measurement range:>10mA					
	Accuracy	500Ω, 5KΩ, 50KΩ, 500KΩ, 5MΩ 6 range					
	RESISTANCE	500Ω, 5KΩ, 50KΩ, 500KΩ ±(0.3% + 3 digits); 5MΩ±(0.5% + 5 digits) *Measurement range:50Ω~5MΩ					
	Range	Maximum forward voltage 1.5V, Open voltage 2.8V					
	Accuracy	-50°C ~ +1000°C					
	Diode Test	0.1°C					
	Temperature (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.					
	Resolution	< 15 Ω					
Thermocouple	Auto Range, Max, Min, Hold, Trend plot						
Continuity Beep	AC 100V~240V, 47~63Hz, Power Consumption 40W; DC Output : 12V/3A, Double Shield						
POWER ADAPTOR	Line Voltage	Dual-channel, 40MHz, CAT II 600V					
OPTION	Differential Probe	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



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
GTP-250B-2 250MHz Probe, Suitable for GDS-320/220
GTL-207 Multimeter Test Lead x 2



GDP-040D 40MHz Dual-channel Differential Probe
GPF-700 Protective Films for 7" Touch Screen
GTL-253 USB Cable, USB 2.0, A-mini B Type, 1400mm



OpenWave 200 Software

GSC-010 Soft Carrying Case
GSC-011 Soft Carrying Bag
GAP-001 AC-DC Adaptor
GWS-001 Wrist Strap

GCL-001 Vertical Calibration Cable
GTL-131 Test Clip, Suitable for GDP-040D