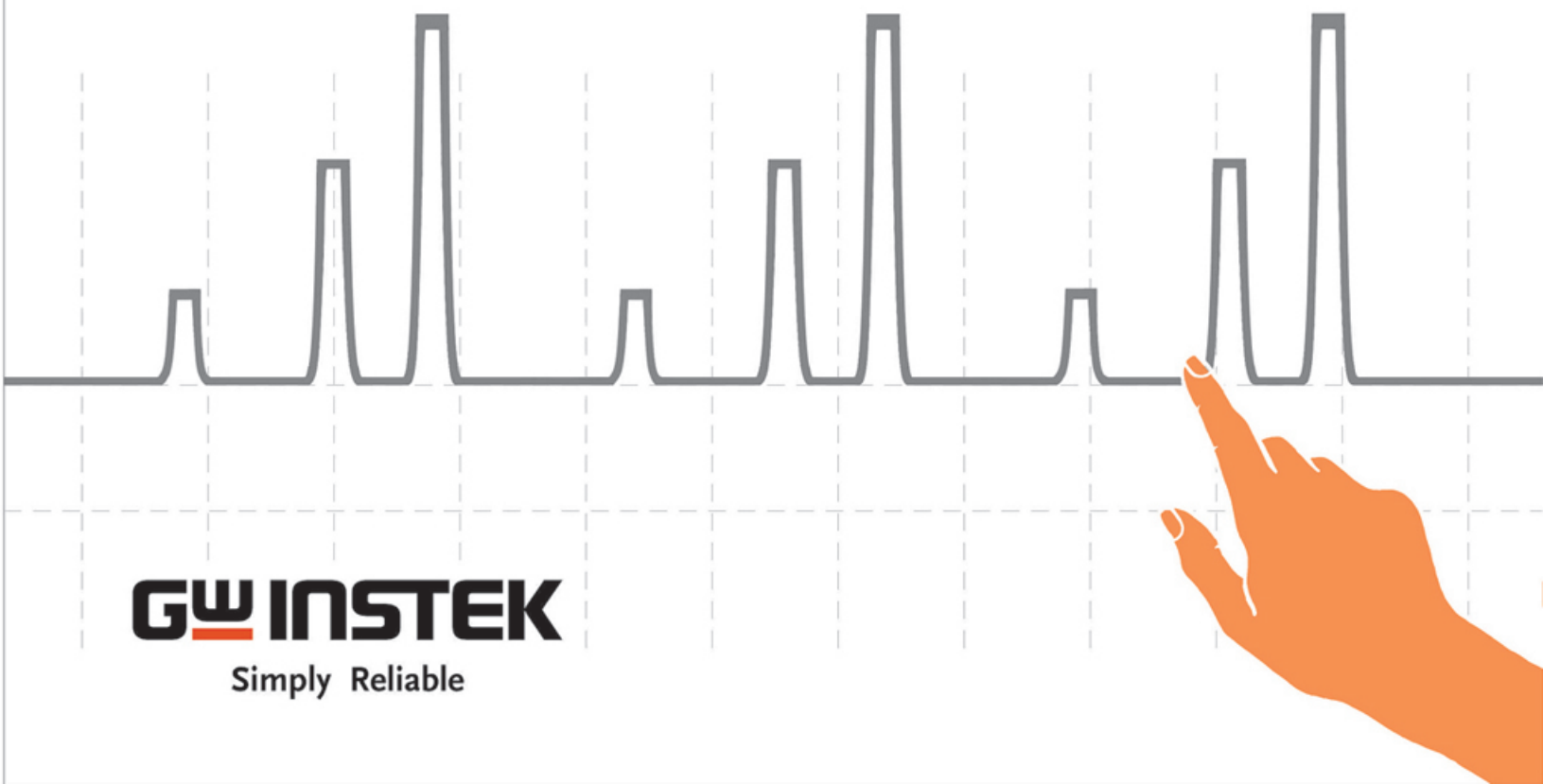**Angel**

in the Test and Measurement Sector

Sexy and Beyond

GW INSTEK

Simply Reliable

The Origin of The Story... A Mission Impossible

The fact-finding task force received an urgent mission. The mission stated the task force must infiltrate into enemy's territory to reconnoiter its secret equipment. Four engineers from the strategic equipment department gathering around a round table were testing their new equipments. One male engineer was holding a notebook computer and downloading enemy's latest infrastructure information. Engineer right next to him was planning avenues of approach with his tablet computer.

Another engineer was installing the latest version of instant messenger. Tom, the youngest, was holding a new device which was neither a cell phone nor a tablet computer.

A signal-like waveform appeared on the device. He said " **This is an Oscilloscope.** " " **Oscilloscope ?** " With no time to clarify, " **Fall In !** " it is time for mission briefing.

After the mission briefing was over, commanding officer announced " **Commence the Equipment Selection** ". Female agent Angel discovered a piece of very eye-catching and extraordinary new equipment from a pile of equipment. The very sharp intuition drove her to check out the equipment's tag - " **Angel Sexy Scope** ". It is she! Angel, demonstrated a superb perspective from the very beginning, put it into her bag without hesitation.

Michael from the other team was picking up oscilloscope and DMM. When he was putting them in his bag, someone reminded him "don't forget to bring a calculator and a Data Book".

While arriving enemy's Customs, Customs officials were vigilantly checking Angel's small bag. Opened her bag and looked inside. They let her through without any speculation that Angel was carrying a test and measurement instrument in her bag. Michael, with a very noticeable large suitcase, was asked to open all his belongs. He was checked very thoroughly. When Angel was sitting back and enjoying champagne after checking in the hotel, Michael was just about to dump everything back into his suitcase at the airport and was ready to flag down a cab.

Sneaking into the suspicious scene, Angel, with a very light load, opened Sexy Scope in hand and operated by smooth and rapid touching screen. Signals were measured within the designated time even under the most urgent situation. A built-in engineering calculator was applied to obtain data. Enemy cut off power once found out intrusion. In the meantime, Angel was communicating with the HQs. Angel was not only able to send back waveforms via cell phone App-LINE, but also sent data to Charlie in the US and Yuki in Japan simultaneously by the HQs' request. Both English and Japanese reports must be compiled in order to swiftly read data. Angel utilized built-in languages and immediately sent out the required reports. She left the scene without a trace.

At this moment, Michael was just about to prepare instruments to measure signals and talked to the HQs. When the power was out, the HQs was demanding waveforms to be sent back immediately. Michael replied "wait a minute". Five seconds later, the emergency backup generator of the building was activated and Michael did the measurement all over again. Michael's team started to look for a USB to store waveforms, and turned on the computer, transmitted the saved waveforms from the USB to computer. They finally sent out the data by the computer. The HQs demanded data to be sent again to Charlie and Yuki is different languages. Michael unplugged the USB, plugged into oscilloscope and stored the data again.......At this moment, enemy forces had been approaching quickly.......!

GDS-320 Digital Storage Oscilloscope 200 MHz 1GSa's

09:47

After the mission was over, Angel quickly finished the check-in process at the airport. Michael, with the heavy and over-sized baggage, was repacking the entire baggage to avoid overweight fee. Not only was the repacking trouble, language issue also lead Michael to have a quarrel with theairport personnel. When Angel was gracefully listening to the music with her earphones in the departure lounge Michael dragged his heavy baggage and sweated like a pig. He just arrived in the lounge.

New mission briefing....All tasks had been assigned.. Commanding officer said "commence the equipment selection". Everyone was fighting to get the eye-catching GDS-300......

Angel in Hand,
Unrestricted Strength
Missions Impossible Become Possible!

New Generation, New Choice
Subvert Tradition, Remarkable Achievement

Sexy and Beyond

Agent ID	Angel
Height	240 mm [9.45 "]
Weight	1.5kg [3.3lb]

Traits

1. New generation waveform test and measurement expert.
2. Petite yet sexy. Powerful inside.
3. Full touch-screen operation. Pale old oscilloscopes in comparison.
4. Omnipotent expert faces all challenges and always surprise and conquer all enemies.
5. Smart connection with all devices. Complete measurement data transmission with a fingertip.
6. Double power packs support. Fear no changing combat environment.

Battle Performance

1. Unexpected appearance and functions. Even enemies' customs' sharp eyes can not discover.
2. Any contingency in any country, always simultaneously monitor waveform and duty voltage. Save 10 minutes in key assignment time outperforming ordinary agents.
3. Even under emergency power outage, always transmit complex reports back to the headquarters and allies in 20 seconds. Always rapidly and safely withdraw from the scene. Complete Mission Impossible every single time.

⚠ Caution

PATENT PENDING !!

SELECTION GUIDE

MODEL	GDS-307	GDS-310	GDS-320	GDS-207	GDS-210	GDS-220
Bandwidth	70MHz	100MHz	200MHz	70MHz	100MHz	200MHz
Sample Rate	1GSa/s	1GSa/s	1GSa/s	1GSa/s	1GSa/s	1GSa/s
Memory Length	5M pts	5M pts	5M pts	1M pts	1M pts	1M pts
DMM Count	50,000	50,000	50,000	5,000	5,000	5,000
Temperature Measurement	✓	✓	✓	–	–	–

GDS-300/200 Series

Digital Storage Oscilloscope

- 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 50,000/5000 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

CE | USB | PC Software | Labview Driver

APPLICATIONS

- **Large Electric System Tests**

- **Power Product Tests**

- **Motor Tests**

- **Solar Power Battery Inspection and Repair**

- **Maintenance Personnel Always on Field Assignments**

		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		

DMM section continued:

		CAT II 600VRMS, CAT III 300VRMS
DC Voltage	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	Range	50mA, 500mA, 10A 3 ranges
	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
	Accuracy	50mV, 500mV, 5V, 50V, 700V ±(1.5% + 15 digits) at 50Hz~1kH
AC Current	Range	50mA, 500mA, 10A 3 ranges
	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
	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
	Resolution	0.1°C
	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.   DS300200GD1BH

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-100A-4   100MHz Probe, Suitable for GDS-307/207, GDS-310/210
GTP-200A-4   200MHz Probe, Suitable for GDS-320/220
GTL-207   Multimeter Test Lead x 2

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

OPTIONAL ASSESSORIES

GDP-040D   40MHz Dual-channel Differential Probe, Suitable for GDS-300/200 Series
GTL-253   Mini USB Cable   GCL-001   Vertical Calibration Cable

FREE DOWNLOAD

OpenWave 200   Software