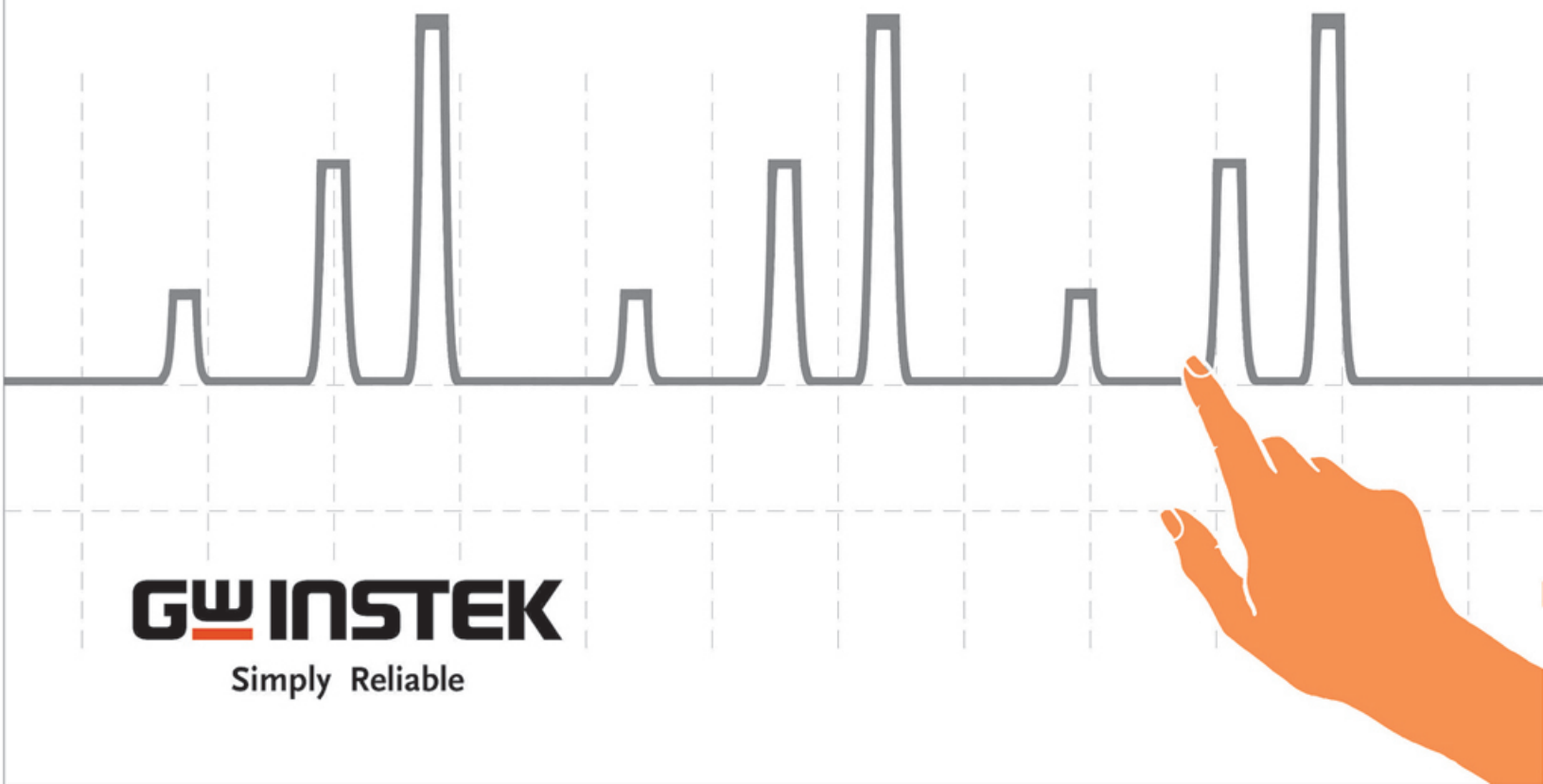


Angel
in the Test and Measurement Sector
Sexy and Beyond



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.....!



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 the airport 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 [3.31lb] | |
| Traits | | |
| <ul style="list-style-type: none">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 | | |
| <ul style="list-style-type: none">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. | | |
| <div> Caution PATENT PENDING !!</div> | | |



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



APPLICATIONS

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



SPECIFICATIONS

| | | GDS-307 | GDS-310 | GDS-320 | GDS-207 | GDS-210 | GDS-220 | |
|-------------------------|-----------------------|--|---|------------------|-----------------|-----------------|------------------|--|
| VERTICAL | Channels | 2 (BNC-Shield) | | | | | | |
| | Input Impedance | 1M Ω \pm 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 | \pm (3% x Readout + 0.1 div + 1mV) | | | | | | |
| SIGNAL ACQUISITION | Bandwidth Limit | 20MHz(-3dB) | | | | | | |
| | Polarity | Normal, Invert | | | | | | |
| | Offset Position Range | 2mV/div~50mV/div : \pm 0.4V; 100mV/div~500mV/div : \pm 4V; 1V/div~5V/div : \pm 40V; 10V/div : \pm 300V | | | | | | |
| | 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 | | | | | | |
| HORIZONTAL | 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. | | | | | | |
| | Post-trigger | 1,000 div max(depend on time base) | | | | | | |
| XY MODE | Accuracy | \pm 20ppm over any > 1ms time interval | | | | | | |
| | Phase Shift | \pm 3° at 100KHz | | | | | | |
| CURSOR AND MEASUREMENT | Cursors | Voltage difference between cursors(Δ V), Time difference between cursors(Δ T), frequency measure(1/ Δ 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 | 50mV, 500mV, 5V, 50V, 500V, 1000V 6 ranges | | | | | | |
| | Range Accuracy | 50mV, 500mV, 5V, 50V, 500V \pm (0.05% + 5 digits); 1000V \pm (0.1% + 5 digits) | | | | | | |
| | Input Impedance | 10M Ω | | | | | | |
| | DC Current | 50mA, 500mA, 10A 3 ranges | | | | | | |
| | Range Accuracy | 50mA ~ 500mA, 2 Range , \pm (0.1% + 5 digits); 10A \pm (0.5% + 5 digits) | | | | | | |
| | AC Voltage | 500mV, 5V, 50V, 500V, 1000V 5 ranges | | | | | | |
| | Range Accuracy | 500mV, 5V, 50V, 500V \pm (1.5% + 15 digits) at 50Hz~1kHz; 1000V \pm (3% + 15 digits) at 50Hz~1kHz | | | | | | |
| | AC Current | 5mA, 50mA, 500mA, 5A, 10A 5 ranges | | | | | | |
| DIMENSIONS & WEIGHT | Range Accuracy | 5mA, 50mA, 500mA, 5A \pm (1.5% + 15 digits) at 50Hz~1kHz; 10A \pm (3% + 15 digits) at 50Hz~1kHz | | | | | | |
| | RESISTANCE | 50 Ω , 500 Ω , 5K Ω , 50K Ω , 500K Ω , 5M Ω , 10M Ω 6 range | | | | | | |
| | Range Accuracy | 50 Ω \pm (0.5% + 5 digits); 500 Ω , 5K Ω , 50K Ω , 500K Ω \pm (0.2% + 3 digits); 5M Ω , 10M Ω \pm (0.5% + 5 digits) | | | | | | |
| | Diode Test | Maximum forward voltage 1.5V, Open voltage 2.8V | | | | | | |
| | Continuity Beep | < 15 Ω | | | | | | |
| | Functions | Auto Range, Max, Min, Hold, Trend plot | | | | | | |
| | POWER ADAPTOR | Line Voltage | AC 100V~240V, 48~63Hz, Power Consumption 40W; DC Output : 12V/3A, Double Shield | | | | | |
| | OPTION | Differential Probe | Dual-channel, 40MHz, CAT II 600V | | | | | |
| | DIMENSIONS & WEIGHT | | 240(W) x 136(H) x 60(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 |

ACCESSORIES

| | | |
|--|---------|--------------------|
| Quick start guide x 1, User manual CD x 1, Power cord x 1 | GSC-010 | Soft Carrying Case |
| GTP-150B-2 150MHz Probe, Suitable for GDS-307/207, GDS-310/210 | GSC-011 | Soft Carrying Bag |
| GTP-250B-2 250MHz Probe, Suitable for GDS-320/220 | GAP-001 | AC-DC Adaptor |
| GTL-207 Multimeter Test Lead x 2 | GWS-001 | Wrist Strap |

OPTIONAL ACCESSORIES

| | | |
|---|---------|----------------------------------|
| 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 | | |

FREE DOWNLOAD

| | |
|--------------|----------|
| OpenWave 200 | Software |
|--------------|----------|

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