GDS-2000HD/HG

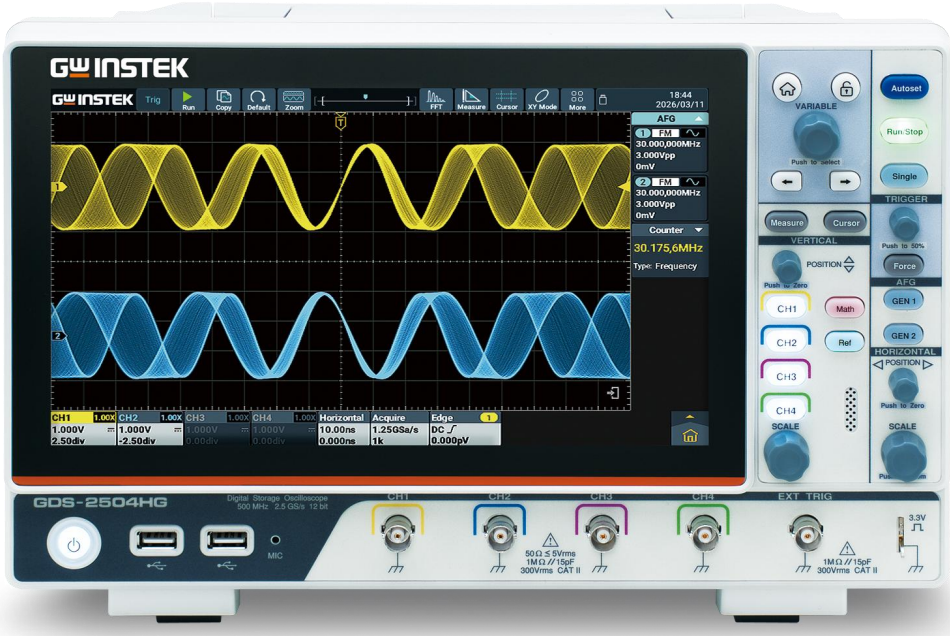
Precise, compact, and intelligent — meeting the needs of every application scenario

GOOD WILL INSTRUMENT CO., LTD

Accuracy

Vertical : ± 1.5 % ≥ 5 mV

Horizontal : ± 1 ppm



12 Bits

android

GDS-2000 HD Digital Storage Oscilloscope

GDS-2000HG Digital Storage Oscilloscope with 50 MHz AFG

Bandwidth	Record Length	Analog Channels	Sample Rate
Up to **500** MHz	**500** M points(Max.)	**4**	Up to **2.5** GS/s

Precise, compact, and intelligent — meeting the needs of every application scenario

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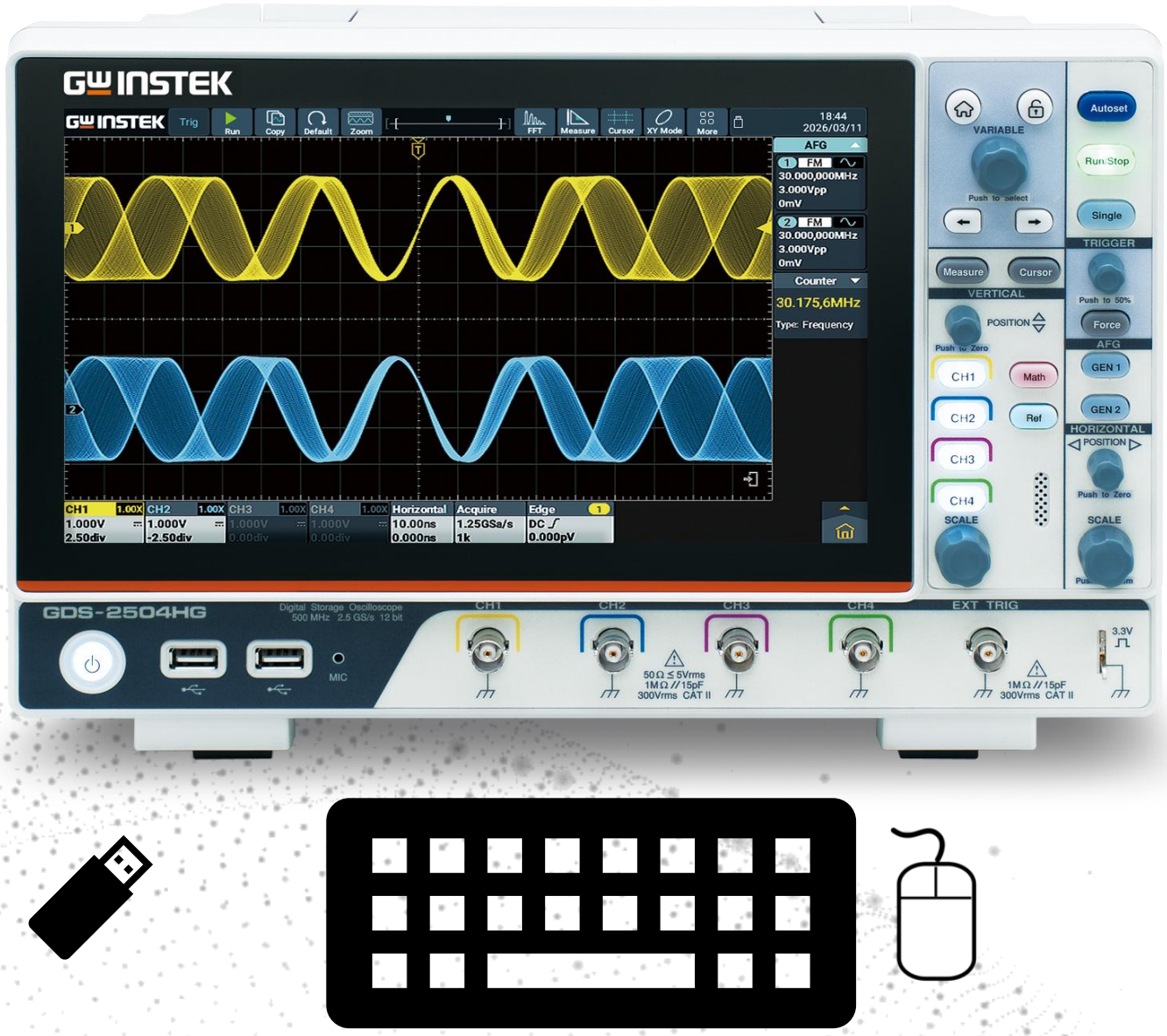
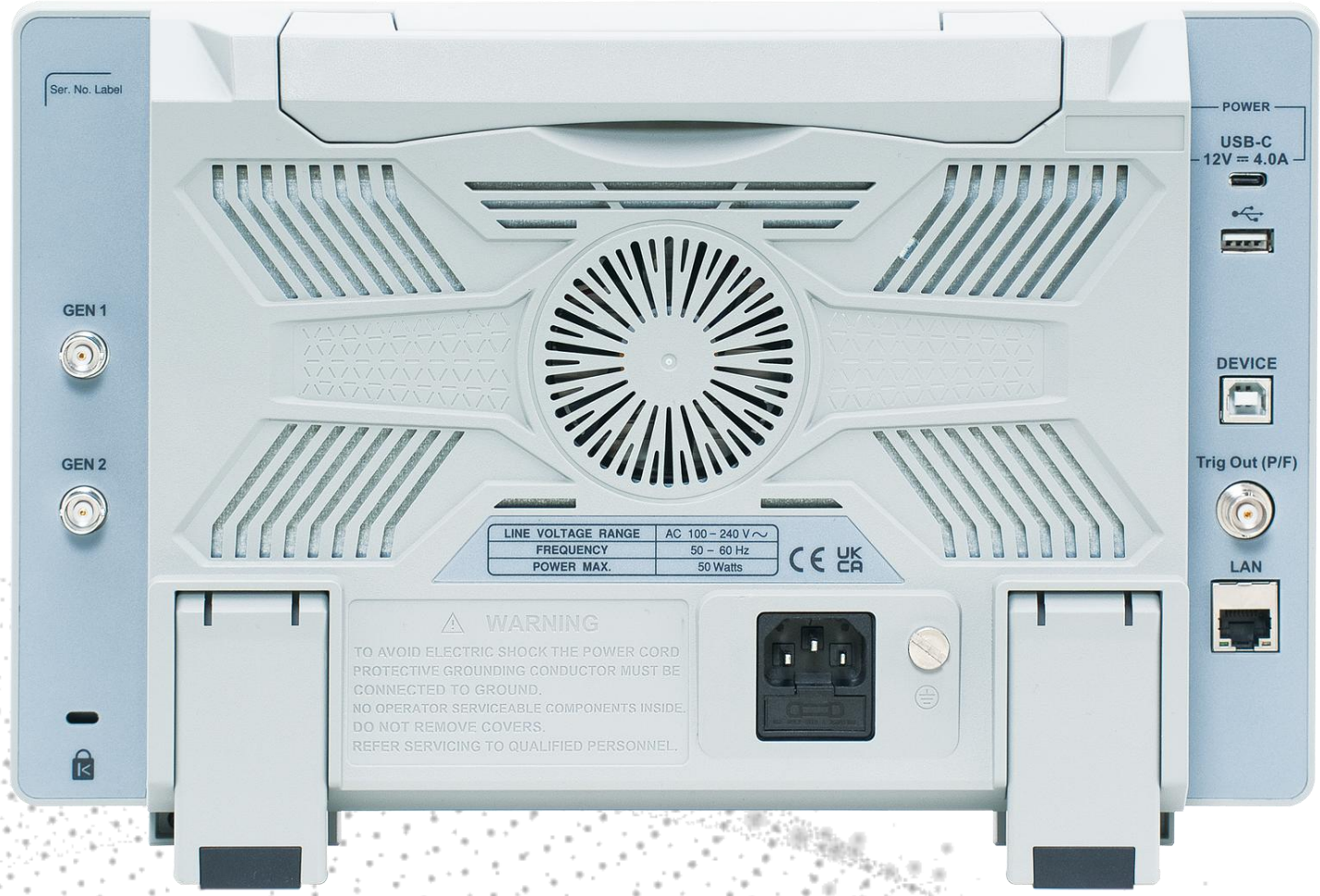
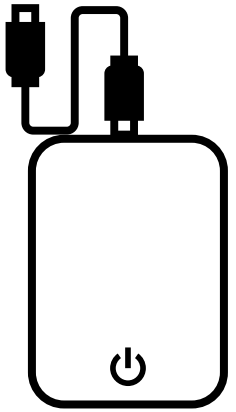
GDS-2000HG front panel



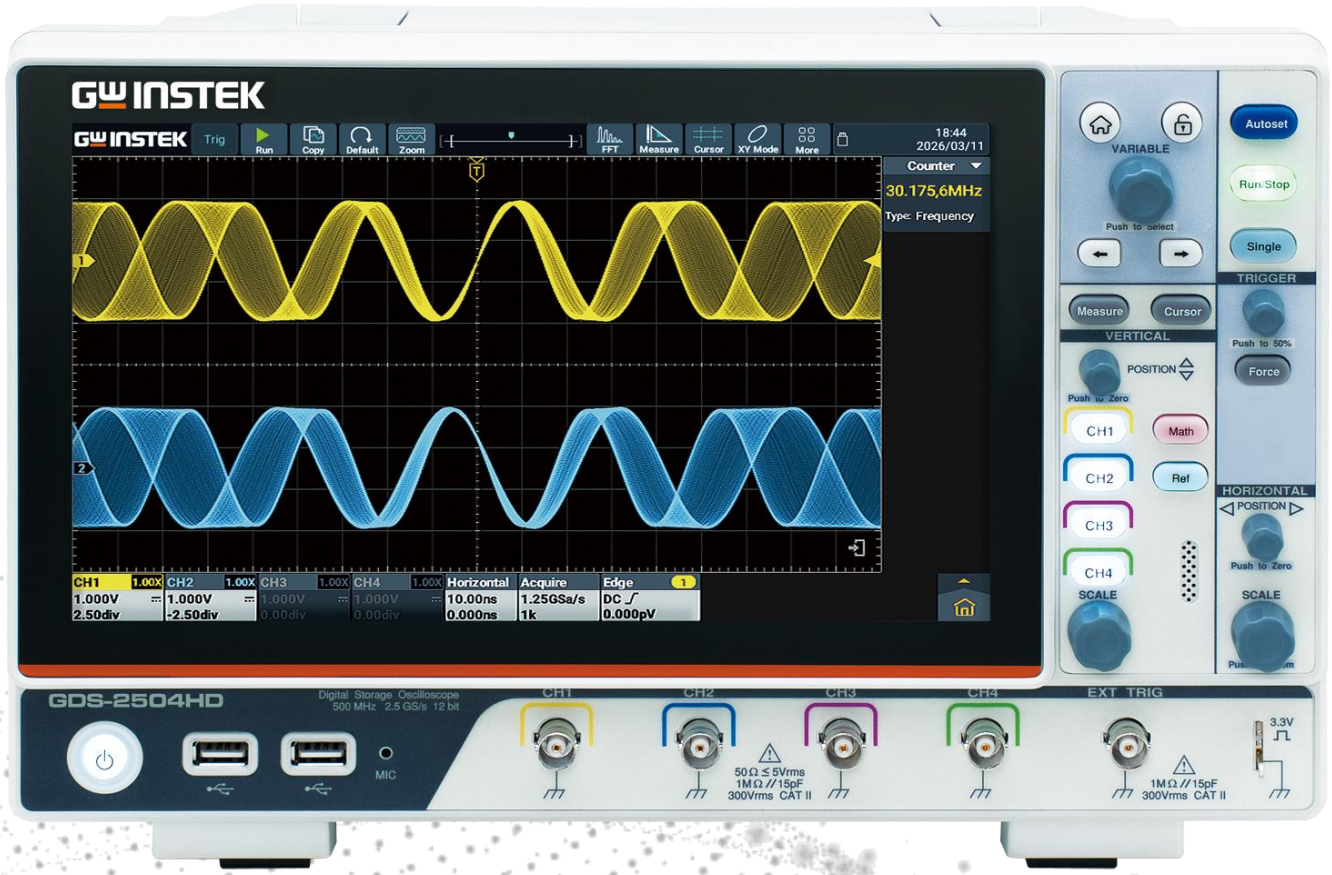
GDS-2000HG back panel





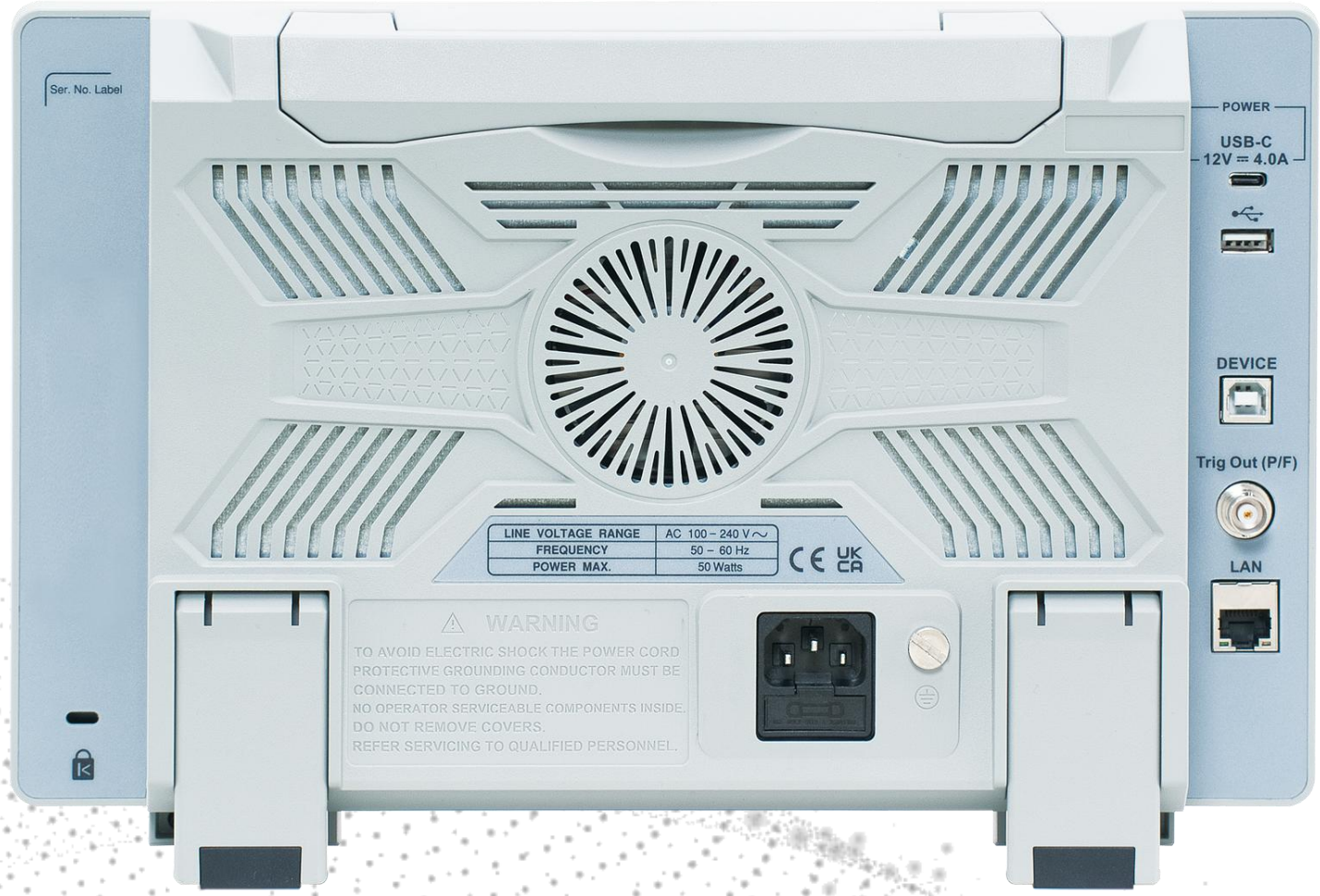
Weight ≈ 3.2 kg，Powered via USB Type-C – ideal for outdoor field measurements and automotive road testing.

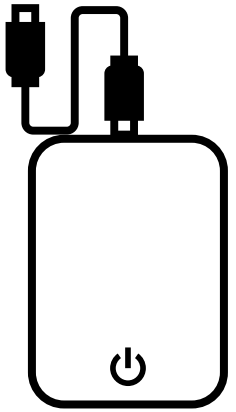
GDS-2000HD front panel



Created by Stephen Wu

GDS-2000HD back panel



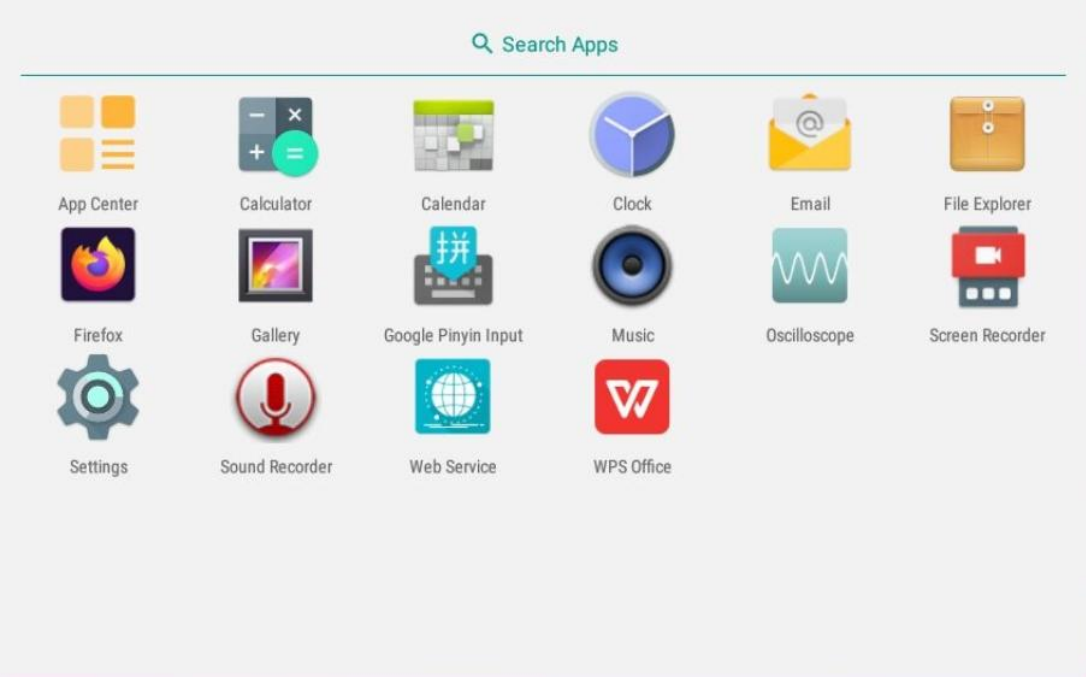


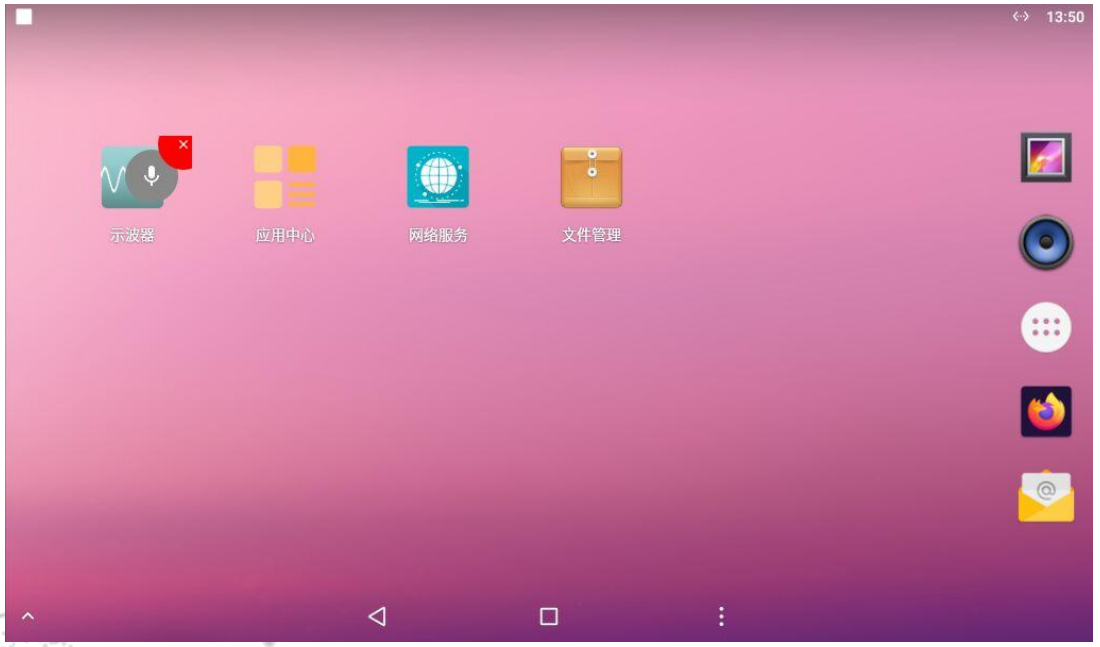
Weight ≈ 3.2 kg，Powered via USB Type-C – ideal for outdoor field measurements and automotive road testing.

Android System Homepage Window

Easy to Use

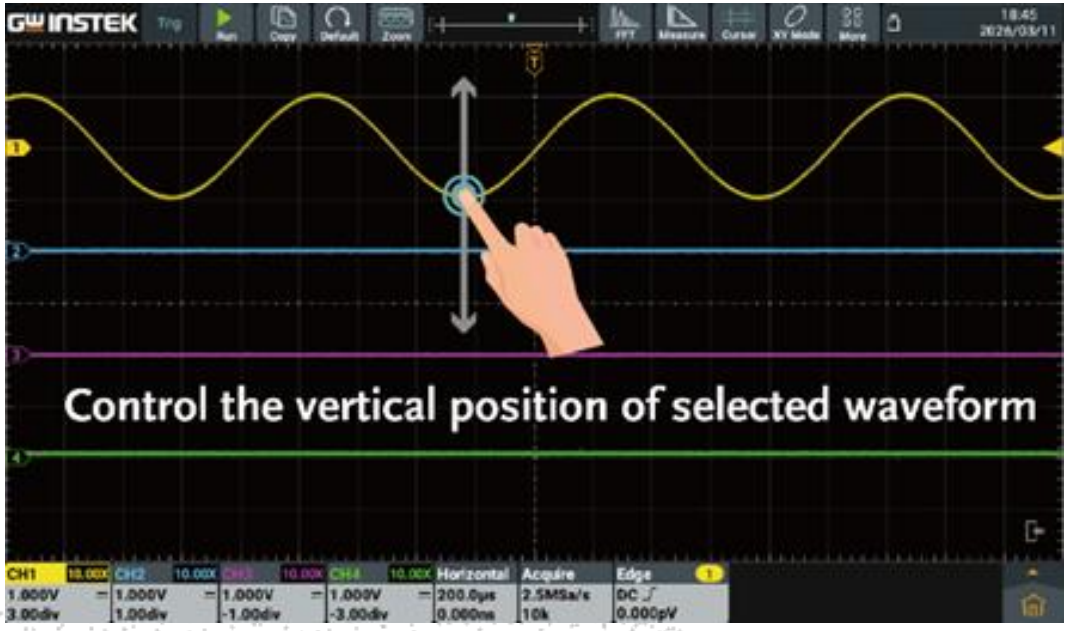
Built-in WPS Office (Word, Excel, PPT) + smooth playback of audio, video, and PDF teaching files. Perfect for digital teaching environments and makes limited lab time far more efficient.



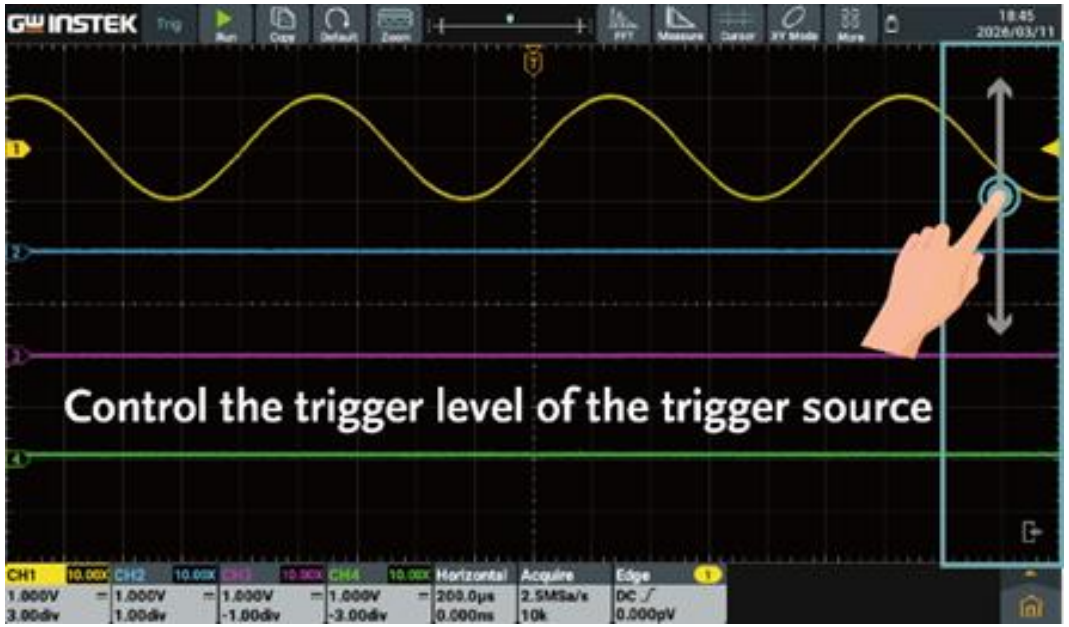


Touch Gestures

Easy to Use



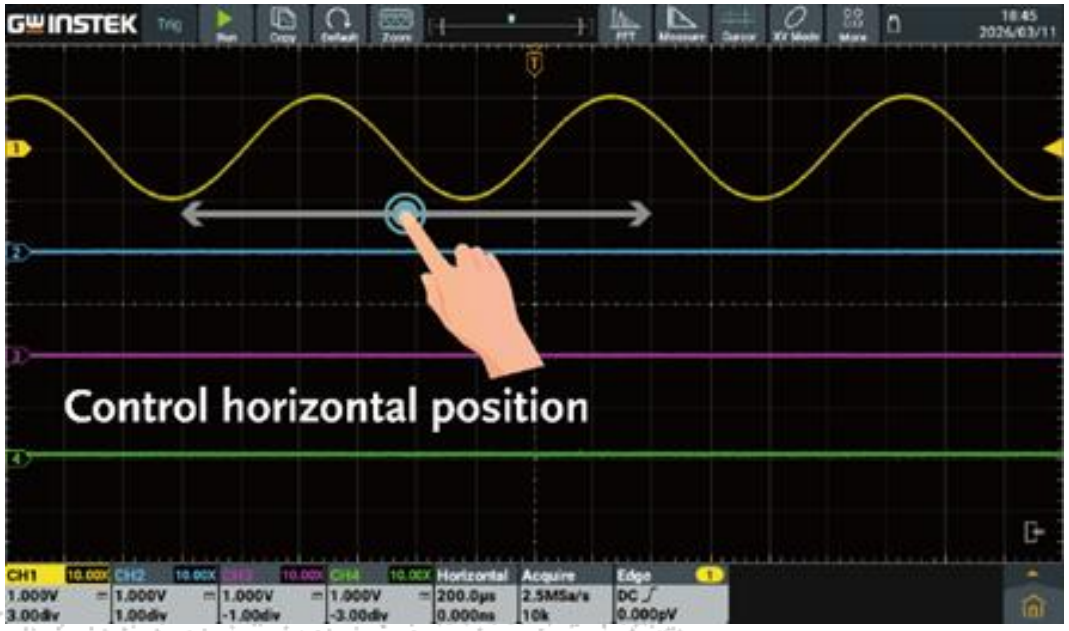
The vertical position of the waveform can be changed by swiping your finger up and down in the blank position of the waveform display area, as shown in the figure below.



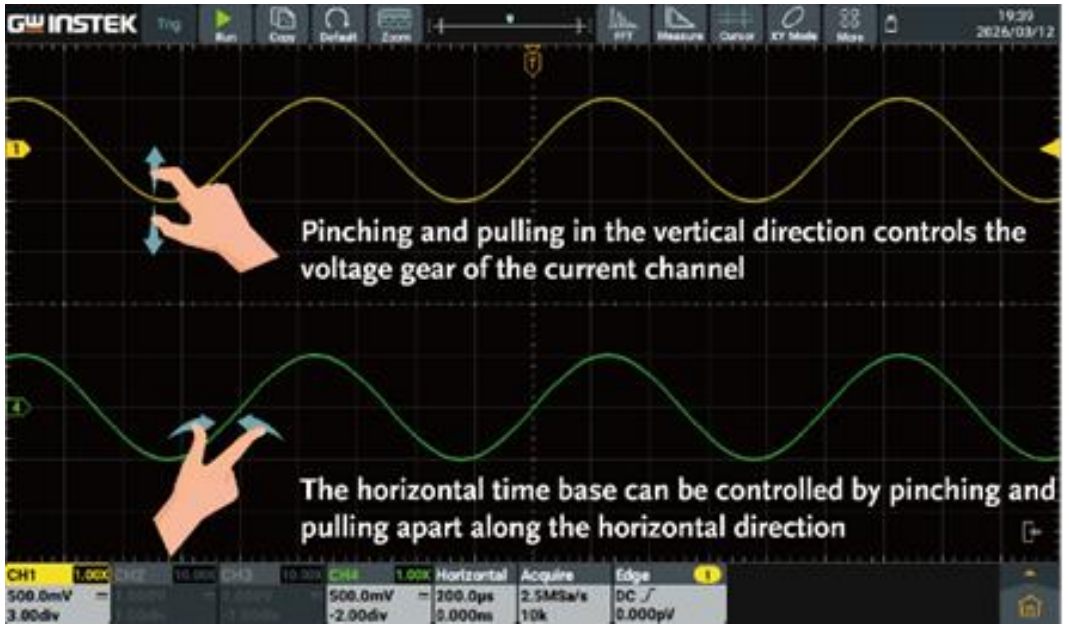
The two grids on the right of the waveform area are the trigger level touch moving area, and the trigger level can be changed by sliding up and down in this area, as shown in the figure below.

Touch Gestures

Easy to Use



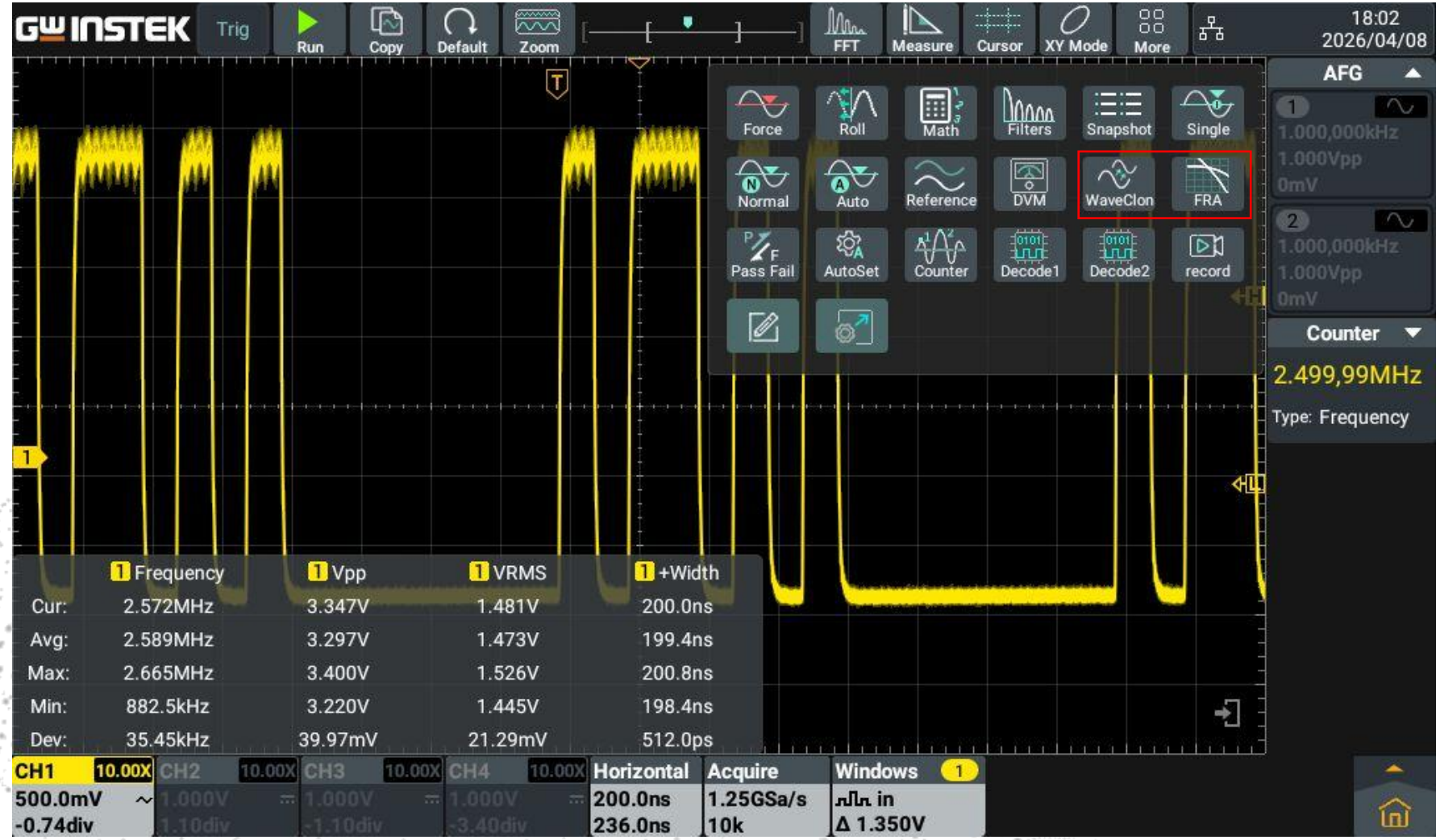
The horizontal position of the waveform can be changed by swiping your finger around the waveform display area, as shown in the figure below.



In the waveform display area, up and down/left and right zoom thumb and index finger to zoom control voltage scale and time base, as shown in the figure below.

Touch screen interface 1

Easy to Use

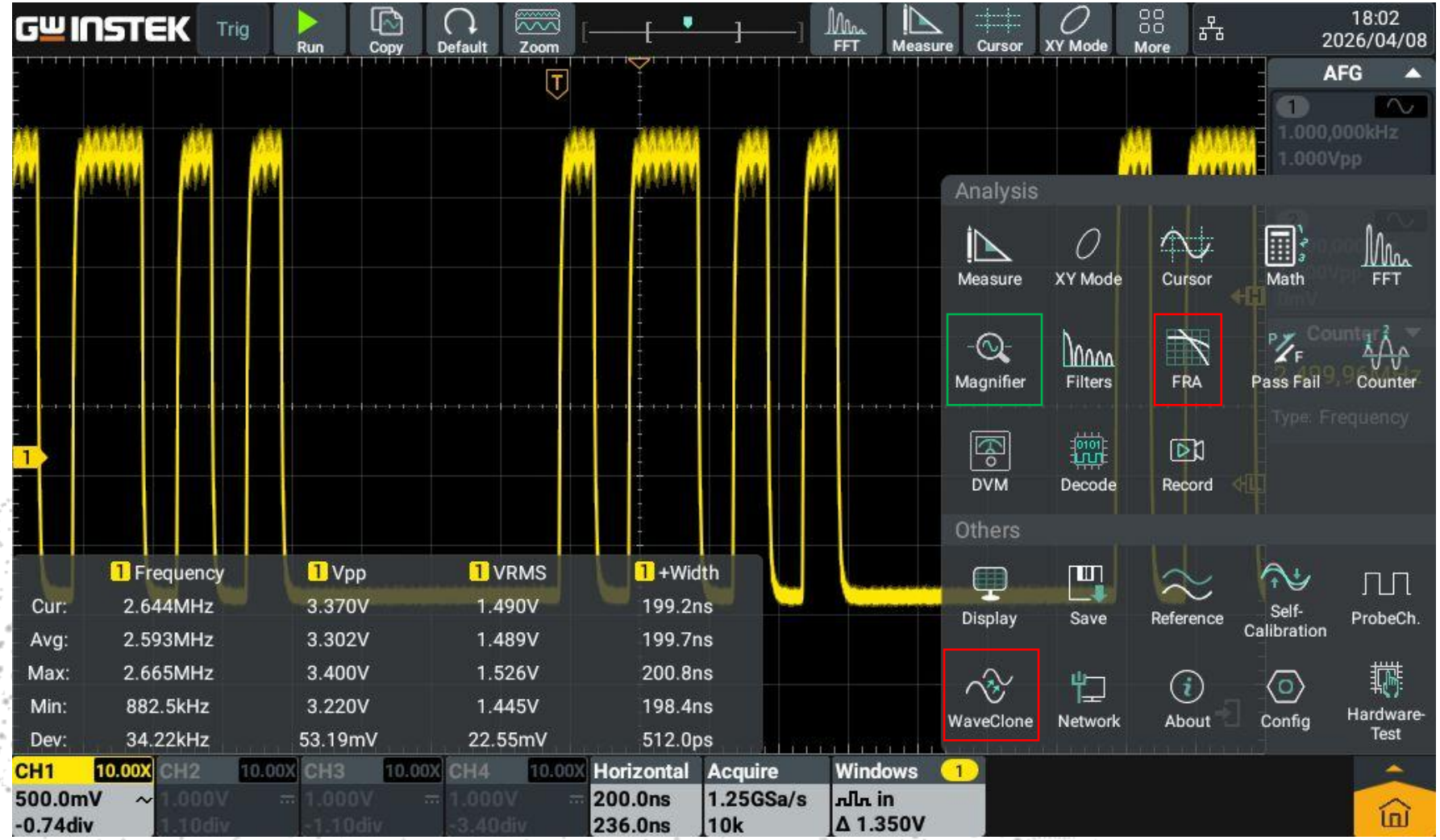


Created by Stephen Wu

FRA and WaveClone icons are HG only

Touch screen interface 2

Easy to Use

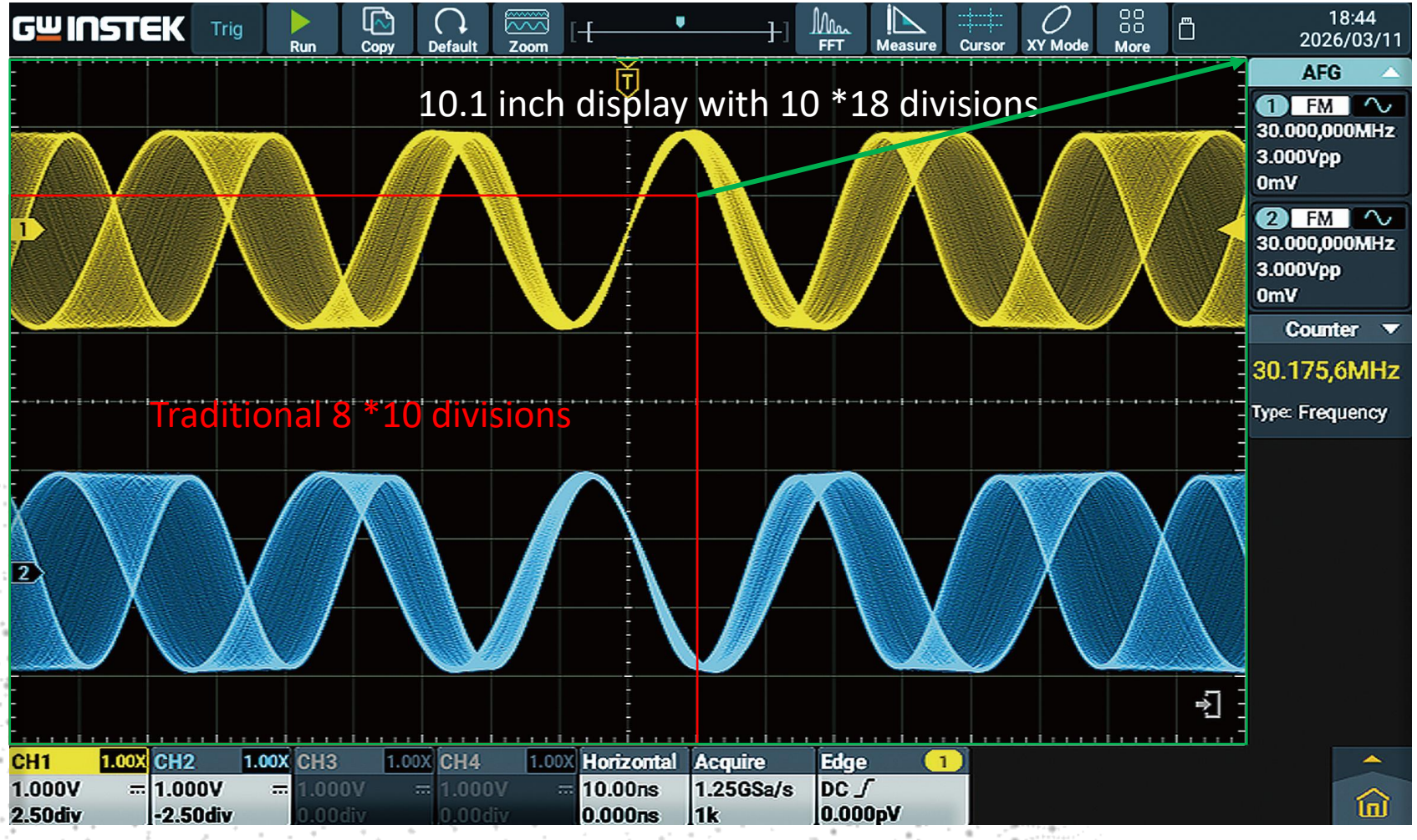


Created by Stephen Wu

FRA and WaveClone icons are HG only

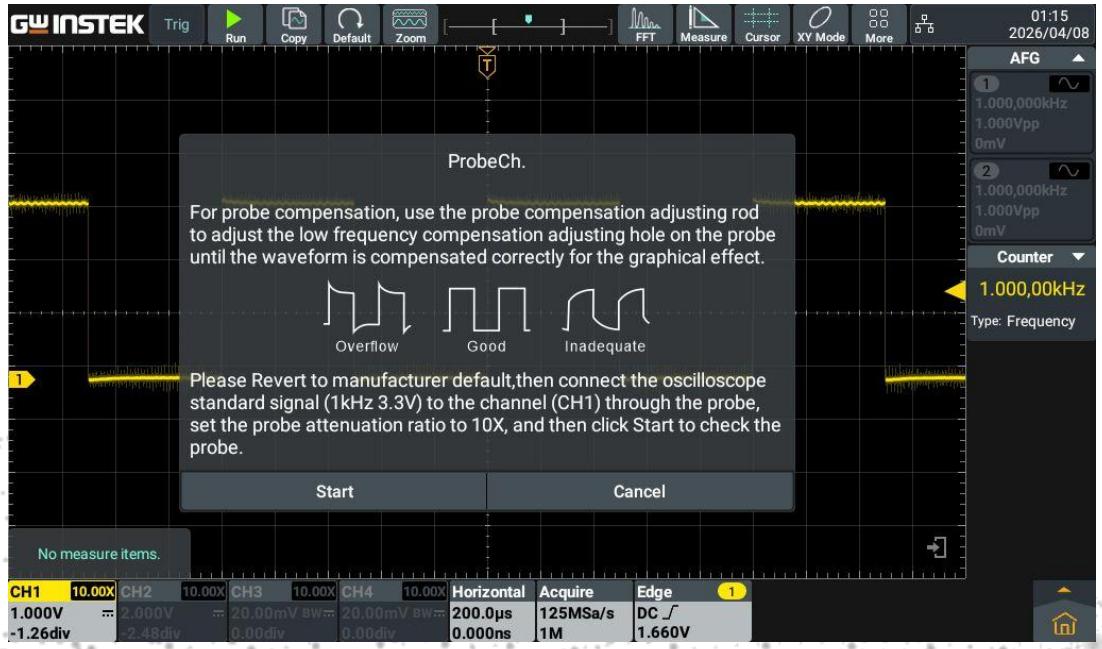
offering more signal display area.

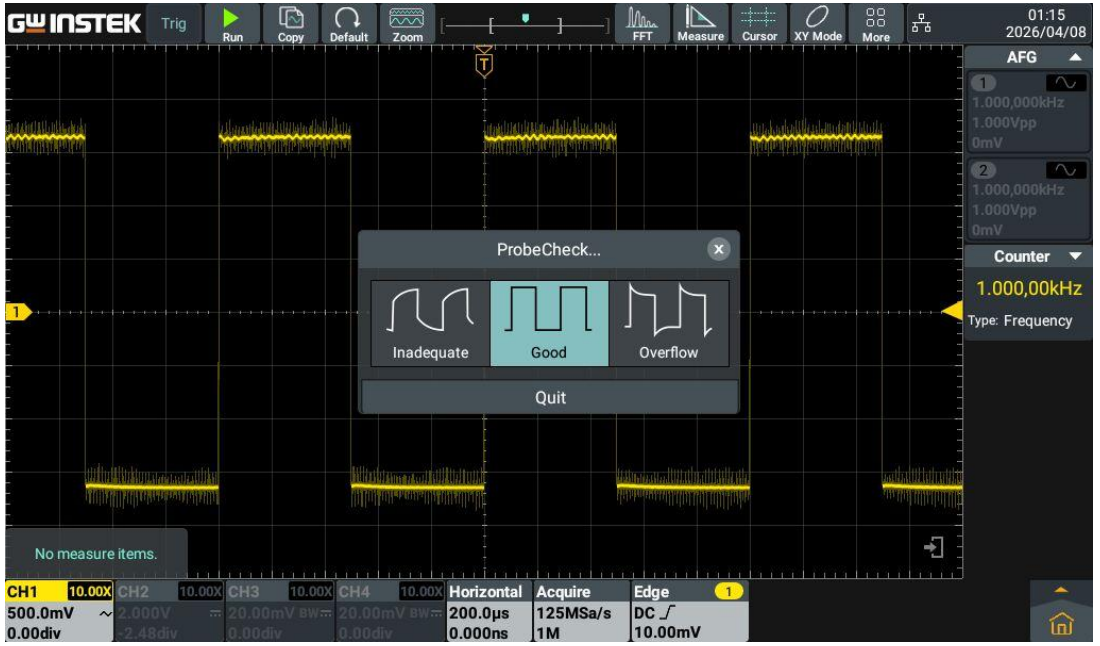
Easy to Use



Thoughtful Design to Prevent Human Error

Easy to Use





To prevent measurement errors, a passive probe compensation test is included. If the test result indicates under- or over-compensation, users can adjust the variable capacitor on the passive probe and re-test after proper compensation is achieved.

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Judge waveform type by Autoset

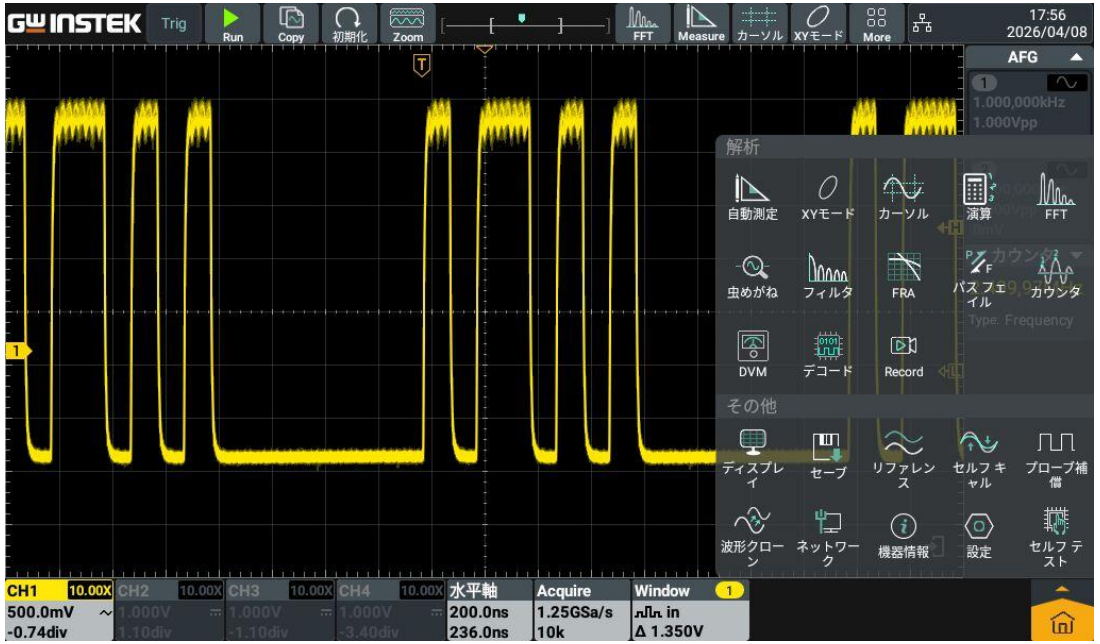
Easy to Use

There are four types: Sine wave or Ramp wave、Square wave or Pulse wave、DC level、unknown source and a second-level auto setup menu to speed up and improve measurement accuracy.

Example：Detected square or pulse on CH1, a second menu is provided to optimize the automatic settings of the pulse width, rise time, and fall time measurements.

Multi-language interface supports 11 languages

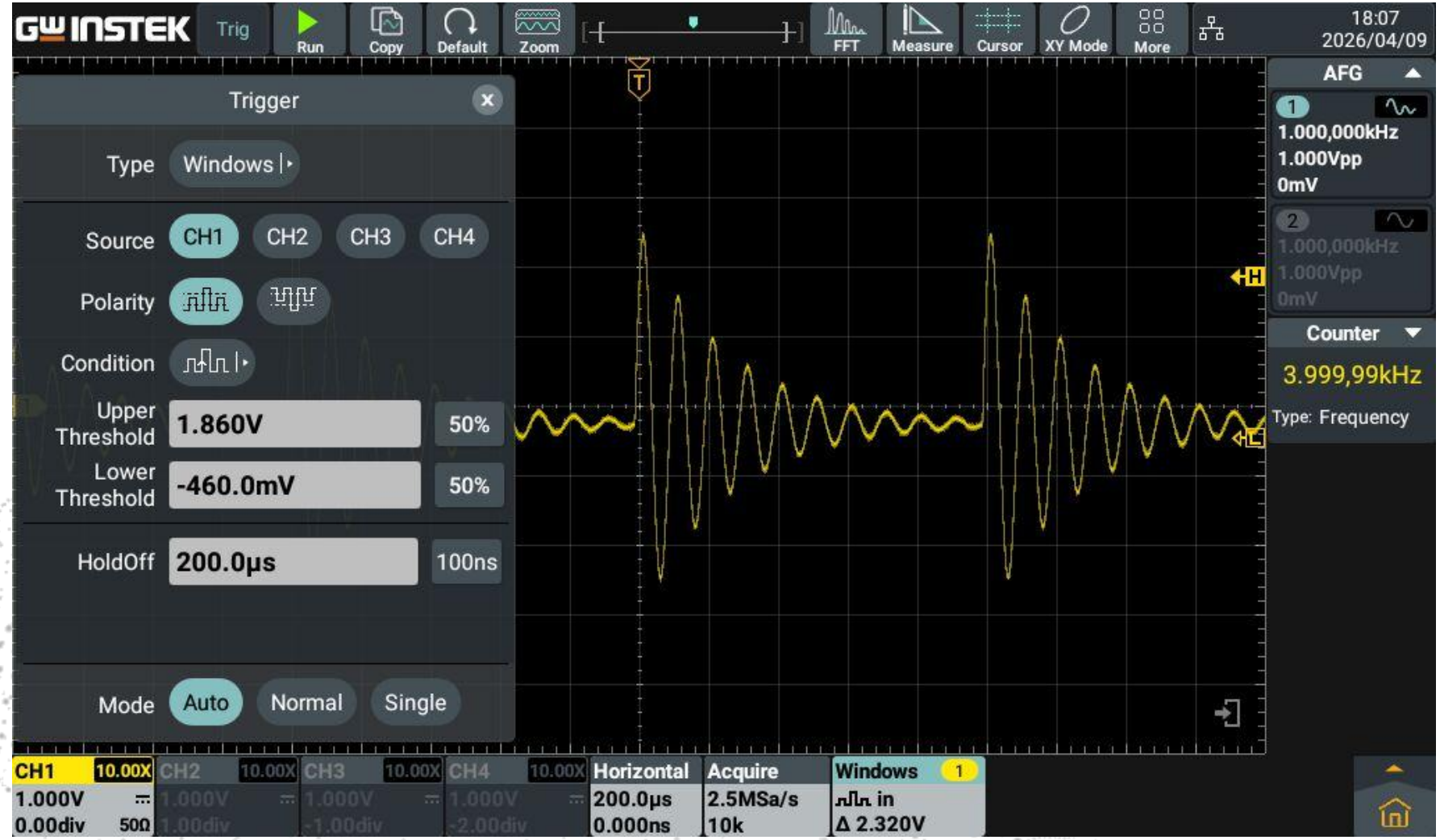
Easy to Use



The series' multi-language interface supports 11 languages—Traditional Chinese, Simplified Chinese, English, Russian, German, Spanish, French, Italian, Japanese, Korea and Nederlands—helping reduce the learning curve for users worldwide.

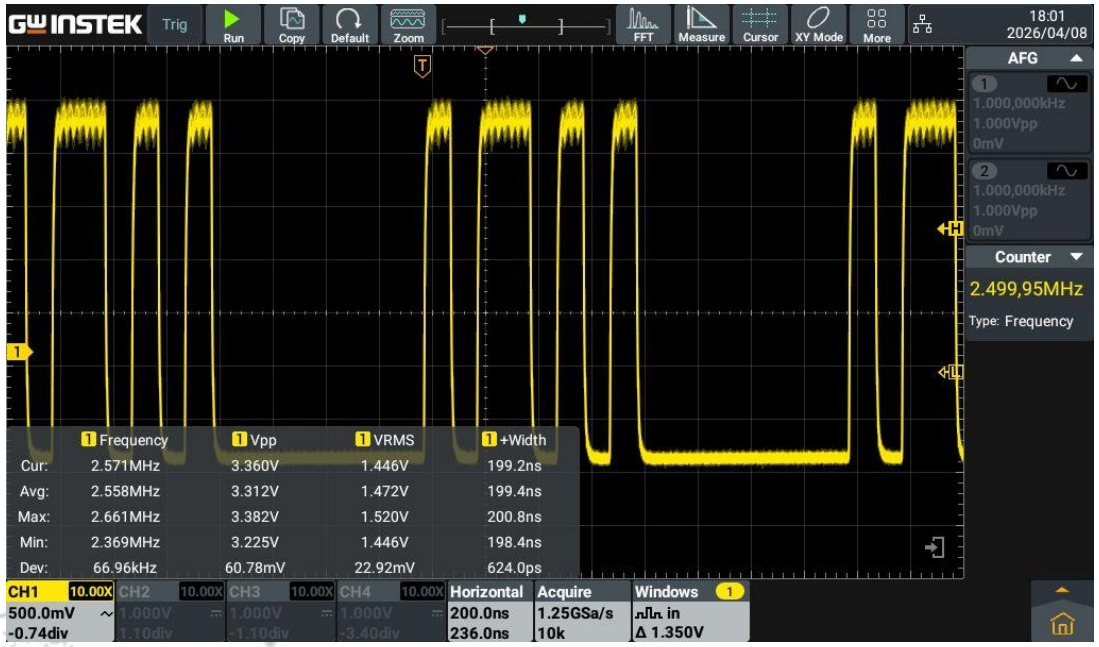
Trigger Menu：14 Trigger Types

Trigger Type：Windows



Support 43 Automatic Waveform Measurements

43 sets：Period, Frequency, +Width, -Width, Rise Time, Fall Time, Scr Duty, +Duty, -Duty, Vavg, Vpp, VRMS, Overshoot, Vmax, Vmin, Vtop, CycRms, Vbase, Vamp, Preshoot, Std Dev, +Pulse Cnt, -Pulse Cnt, Rise Cnt, Fall Cnt, Area, Cyc Area, Delay(A↑-B↑), Delay(A↑-B↓), Delay(A↓-B↑), Delay(A↓-B↓), Phase(A↑-B↑), Phase(A↑-B↓), Phase(A↓-B↑), Phase(A↓-B↓), FRR(A↑-B↑), FRF(A↑-B↓), FFR(A↓-B↑), FFF(A↓-B↓), LRR(A↑-B↑), LRF(A↑-B↓), LFR(A↓-B↑), LFF(A↓-B↓)



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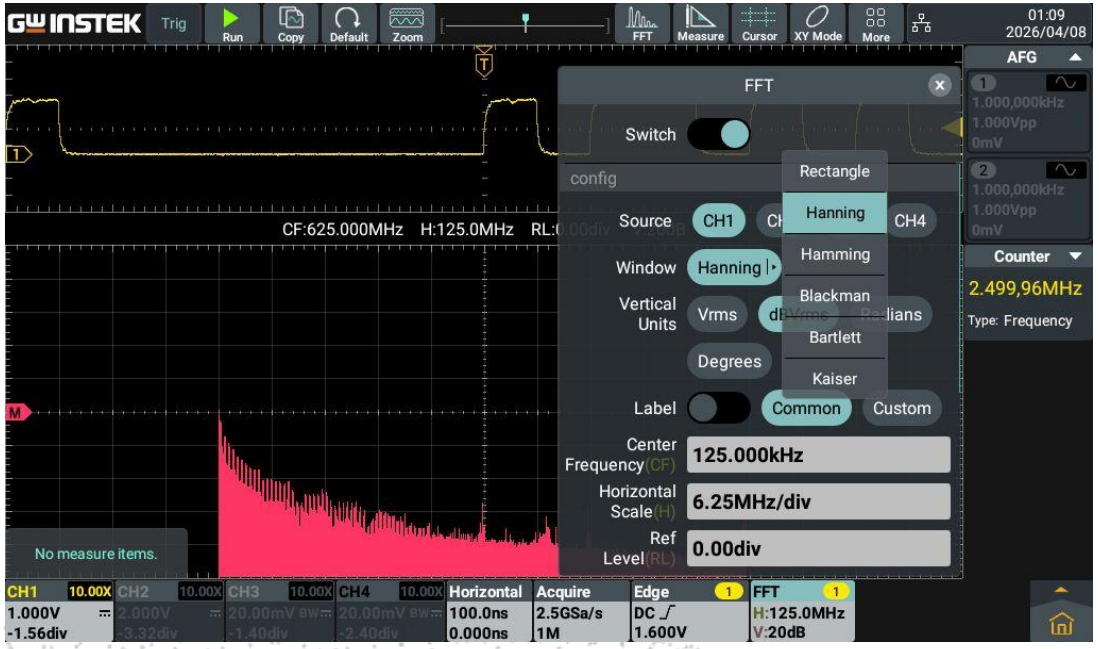
1 Mpts FFT Frequency Domain Signal Display and provided 6 window types



- 1 Mpt FFT analysis – dramatically improves both vertical and horizontal resolution in frequency-domain analysis.
- The built-in FFT function offers six window types: Hamming, Rectangular, Blackman, Hanning, Kaiser, and Bartlett. It supports simultaneous display of time and frequency domains, helping users understand the signal's frequency content.

Type	Descriptions	Window
Rectangle	Best solution for frequency, worst for amplitude. Best type for measuring the frequency spectrum of nonrepetitive signals and measuring frequency components near DC. Recommend to use for: ● Transients or bursts, the signal level before and after the event are nearly equal. ● Equal-amplitude sine waves with frequencies those are very close. Broadband random noise with a relatively slow varying spectrum.	
Hanning	Good for amplitude, but poorer frequency resolution than Hamming. Recommend to use for: ● Sine, periodic and narrow band random noise. ● Transients or bursts where the signal levels before and after the event are significantly different.	
Hamming	Better solution for amplitude than Rectangle, and good for frequency as well. It has slightly better frequency resolution than Hanning. Recommend to use for: ● Sine, periodic and narrow band random noise. ● Transients or bursts where the signal levels before and after the event are significantly different.	
Blackman	Best solution for amplitude, worst for frequency. Recommend to use for: ● Single frequency waveforms, to find higher order harmonics.	
Bartlett	The Bartlett window is a slightly narrower variant of the triangular window, with zero weight at both ends.	
Kaiser	The frequency resolution when using the Kaiser window is fair; the spectral leakage and amplitude accuracy are both good. The Kaiser window is best used when frequencies are very close to the same value but have widely	

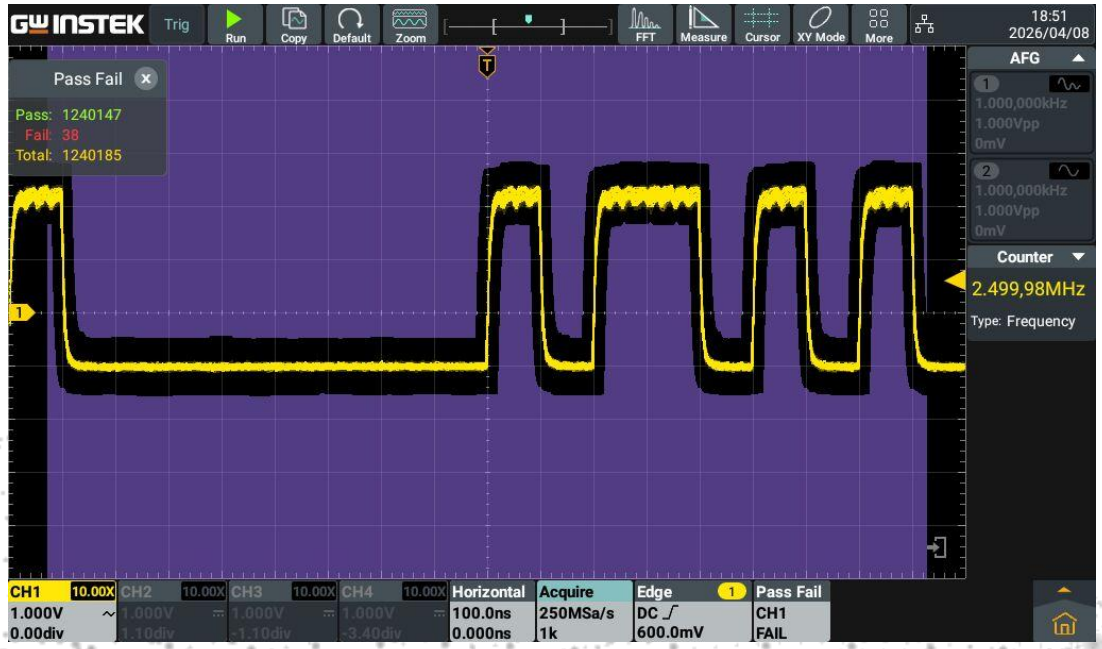
Created by Stephen Wu

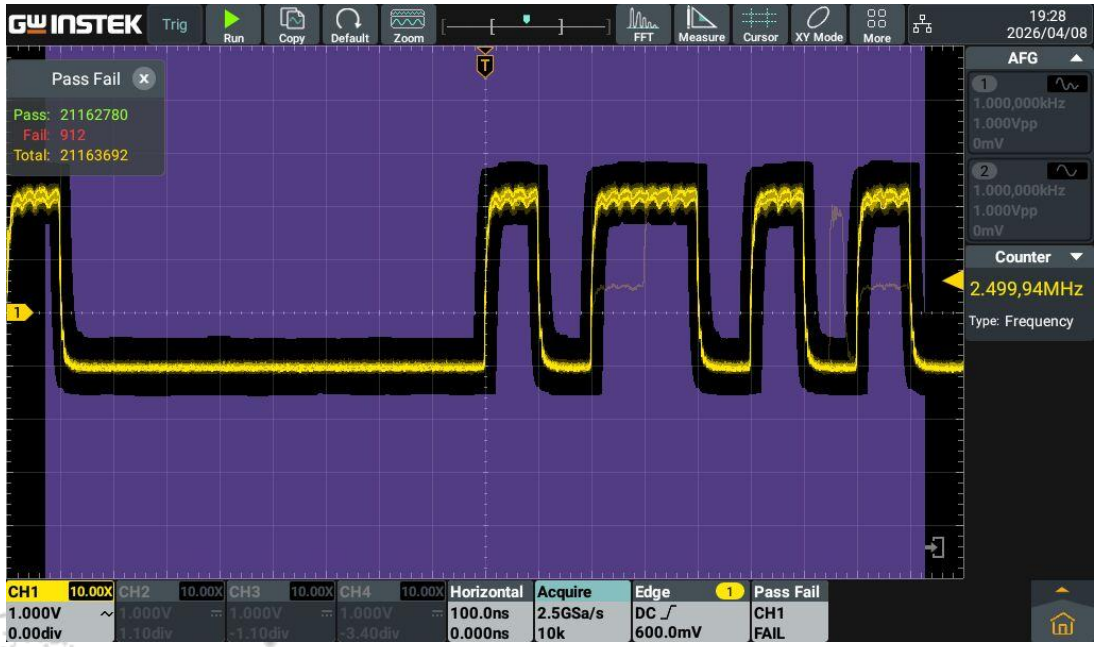
GW INSTEK

Built-in digital voltmeter (DVM), 6-digit frequency counter, and digital filters.

Six-digit frequency counter: Provides high-resolution, high-accuracy measurement results. 14.318 MHz is the system clock of many electronic products. The accuracy of the clock affects the operation of the entire system. The frequency parameters in the automatic parameter measurement of digital oscilloscopes are calculated by software after sampling, which cannot provide sufficient resolution and accuracy. Therefore, a hardware frequency counter is needed to measure the system clock. The GDS-2000HD/HG series provides a six-digit hardware frequency counter, which can accurately verify the clock frequency.

Pass/Fail





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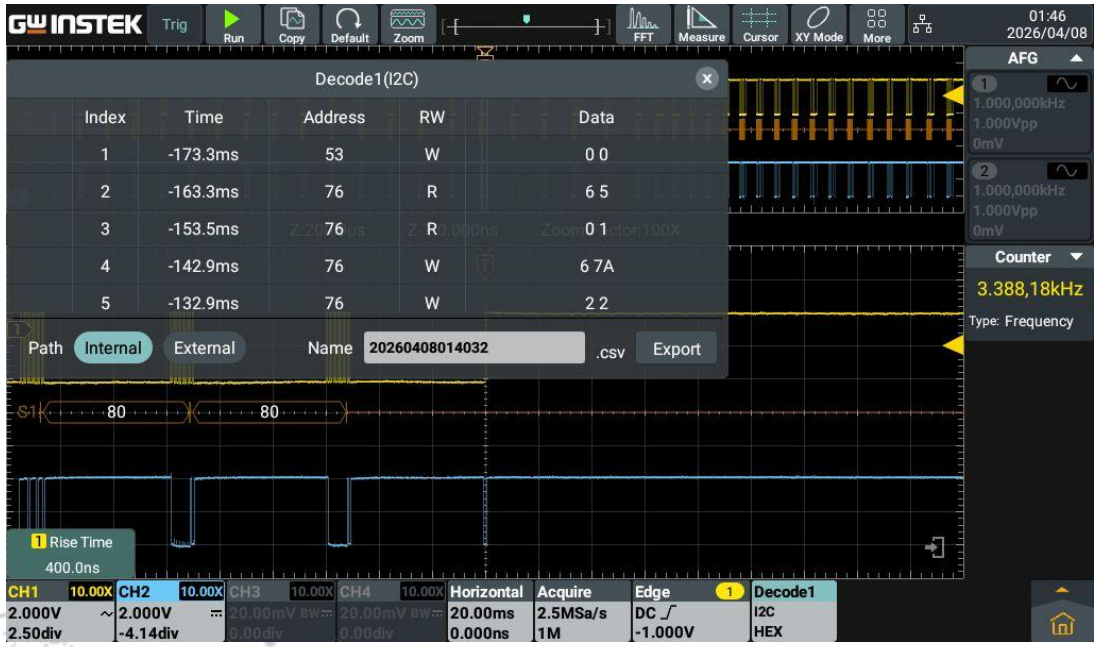
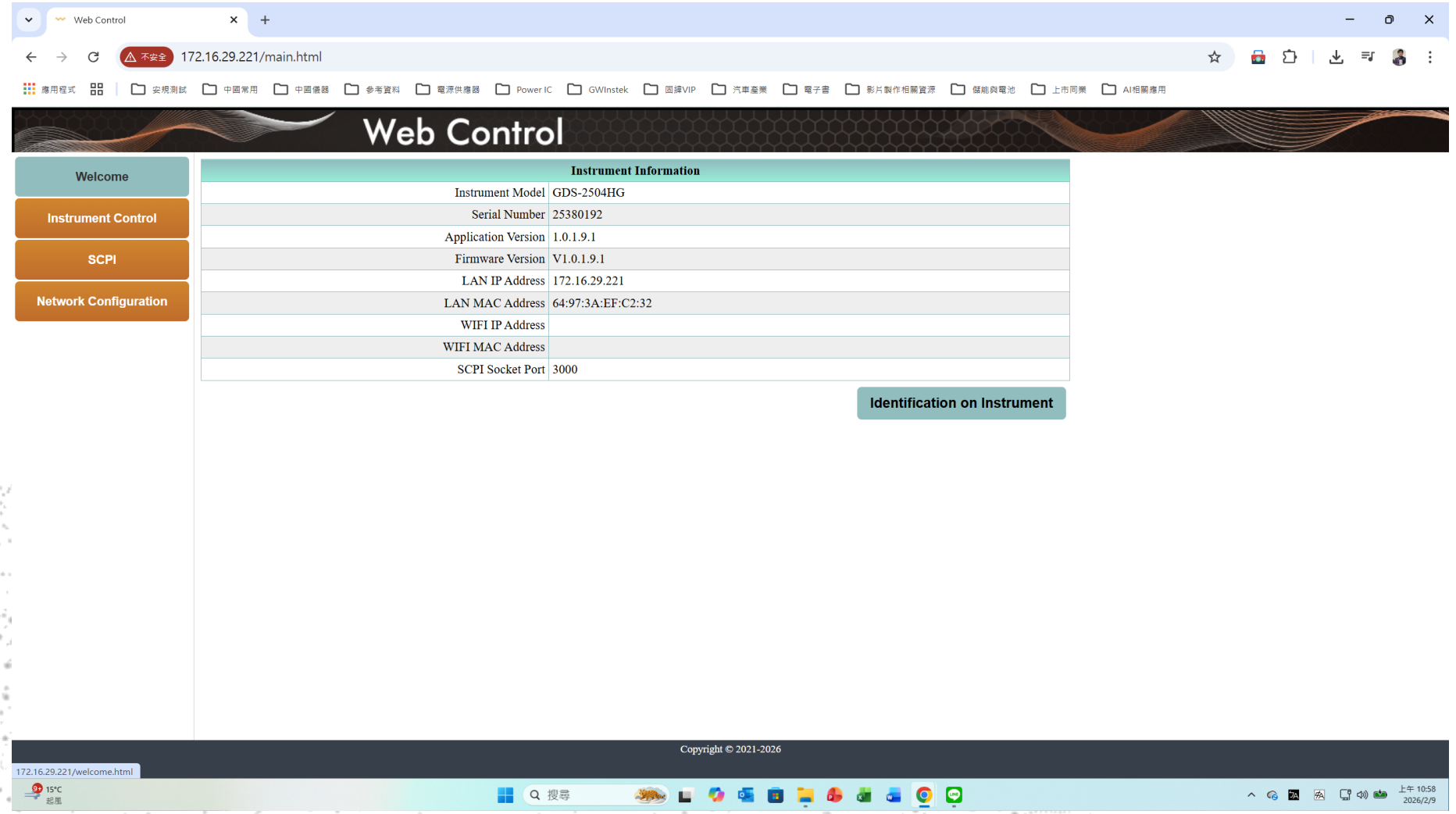
GW INSTEK

Standard 5 serial bus trigger & decode functions

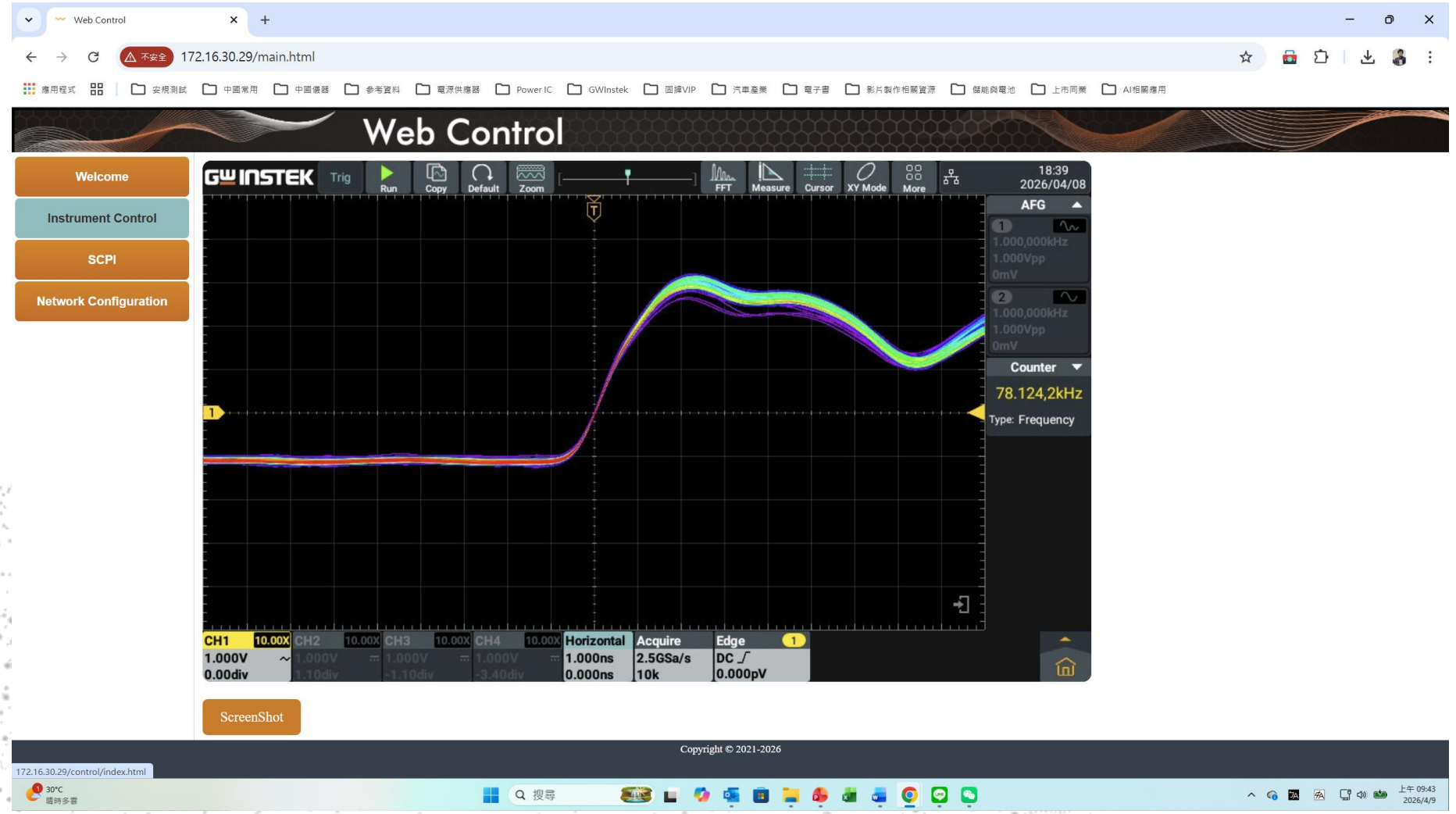


Created by Stephen Wu

Web Control


Web Control
172.16.29.221/main.html
Web Control
Welcome
Instrument Control
SCPI
Network Configuration
Instrument Information
Instrument Model GDS-2504HG
Serial Number 25380192
Application Version 1.0.1.9.1
Firmware Version V1.0.1.9.1
LAN IP Address 172.16.29.221
LAN MAC Address 64:97:3A:EF:C2:32
WIFI IP Address
WIFI MAC Address
SCPI Socket Port 3000
Identification on Instrument
Copyright © 2021-2026
172.16.29.221/welcome.html

Web Control



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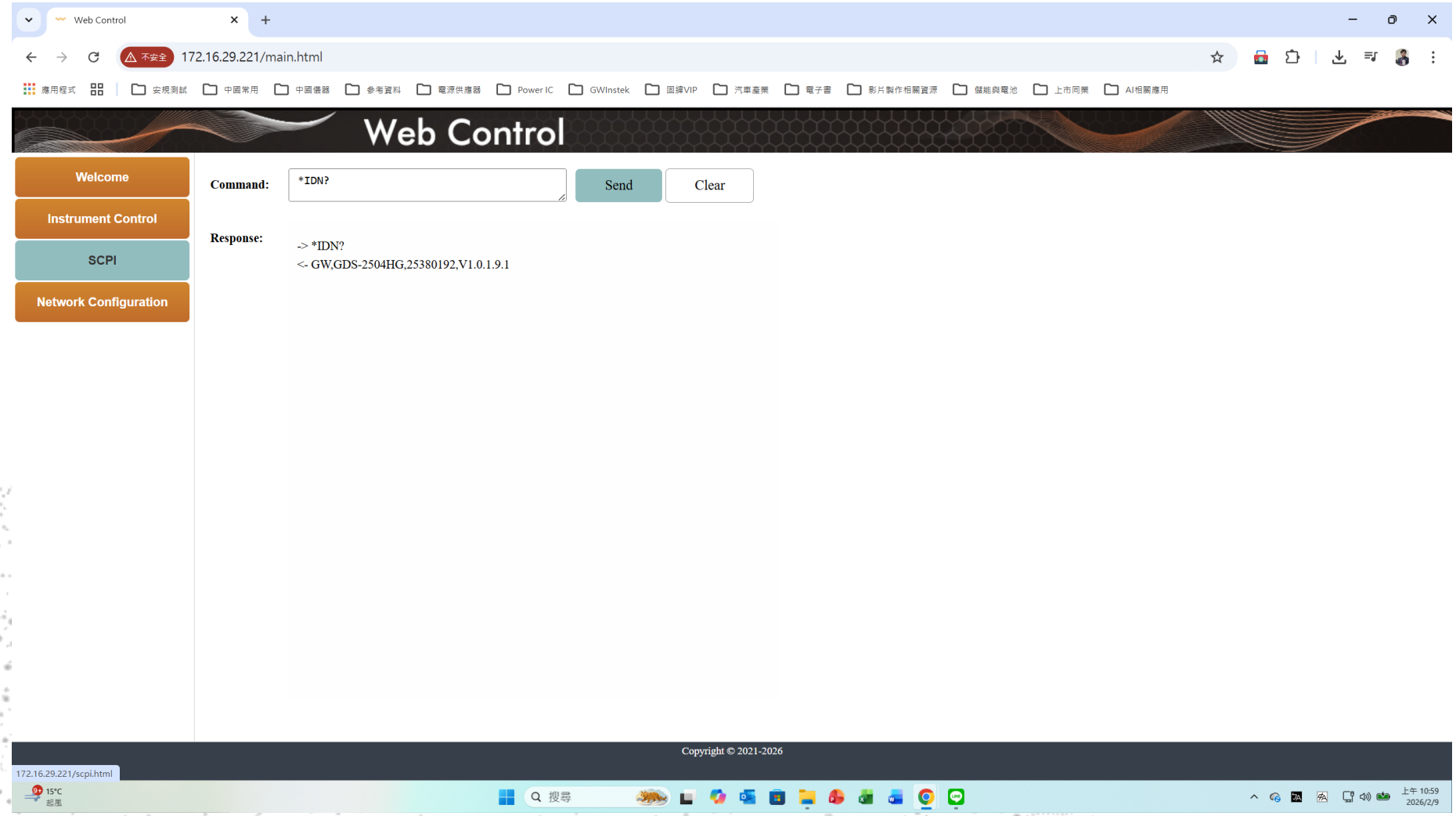
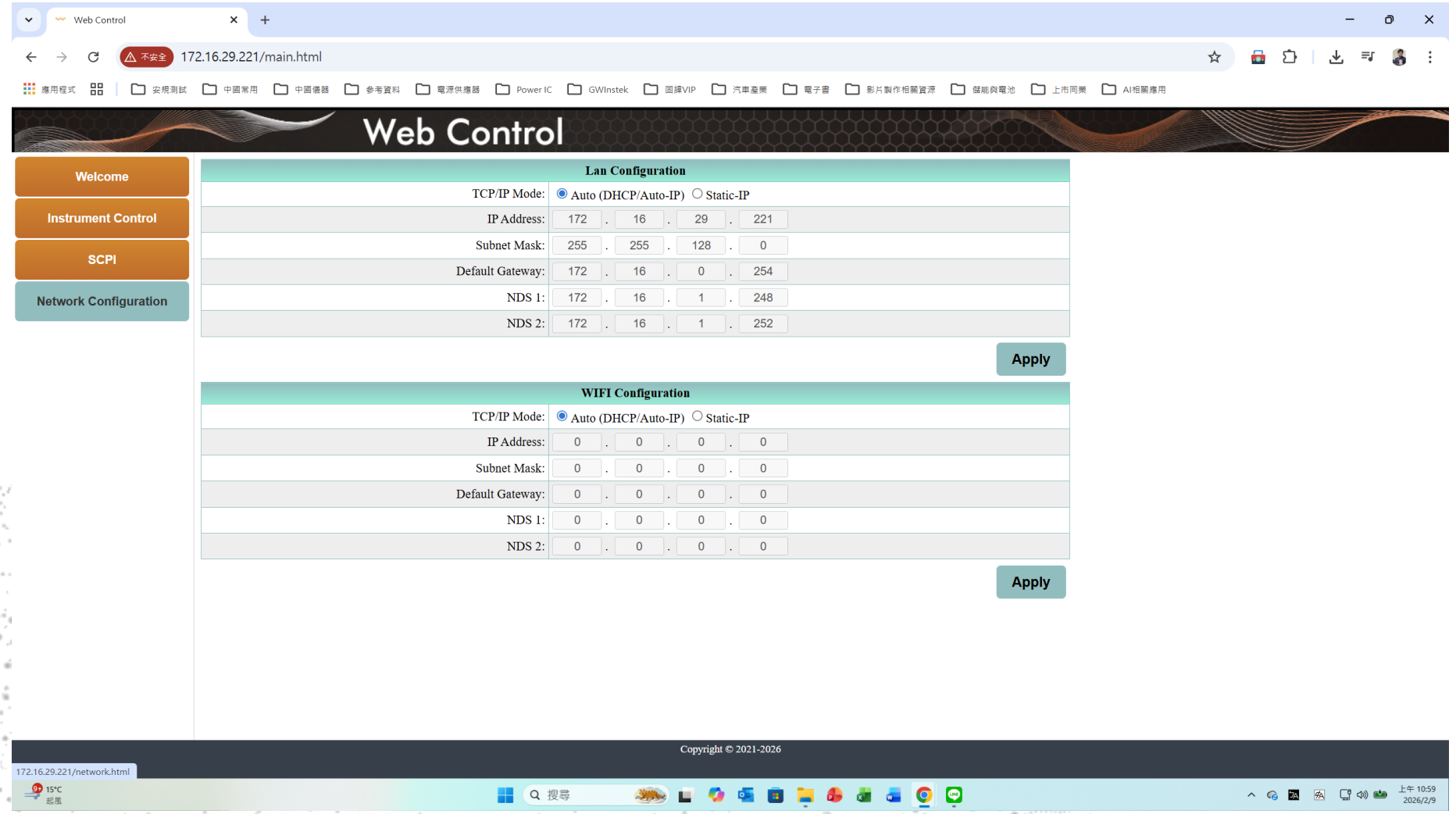
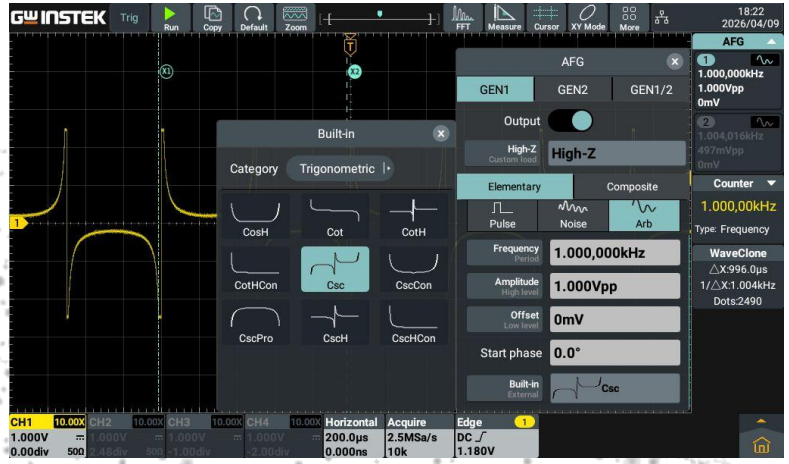

Web Control
172.16.29.221/main.html
Web Control
Welcome
Instrument Control
SCPI
Network Configuration
Command:
*IDN?
Send
Clear
Response:
-> *IDN?
<- GW,GDS-2504HG,25380192,V1.0.1.9.1
Copyright © 2021-2026
172.16.29.221/scpi.html

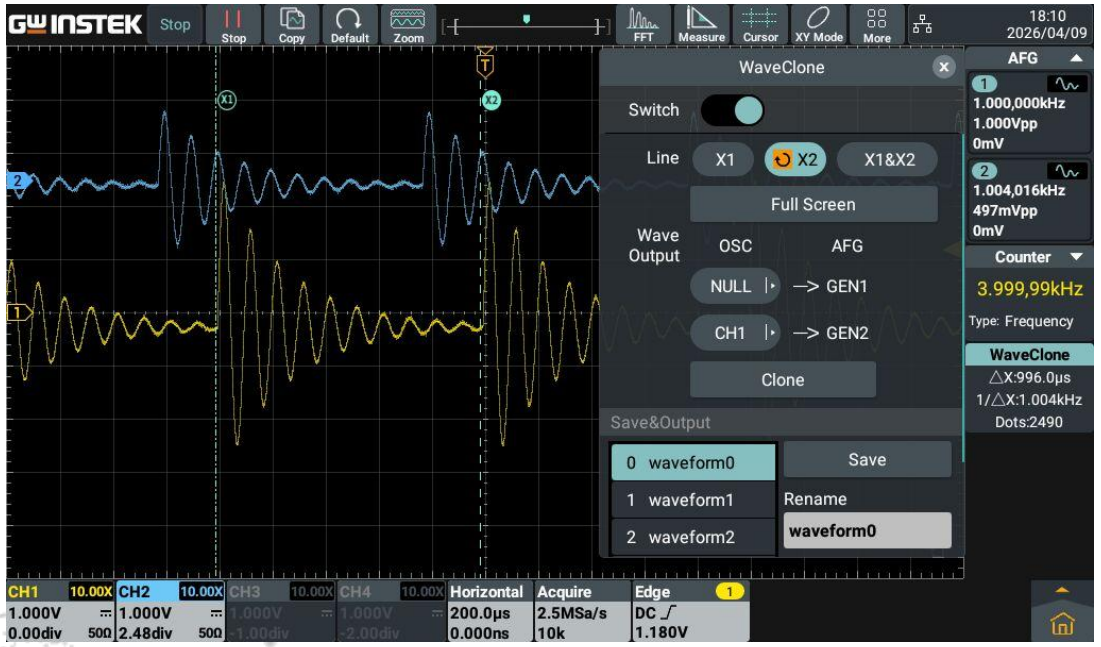
Web Control


Web Control
172.16.29.221/main.html
Web Control
Welcome
Instrument Control
SCPI
Network Configuration
Lan Configuration
TCP/IP Mode: Auto (DHCP/Auto-IP) Static-IP
IP Address: 172 . 16 . 29 . 221
Subnet Mask: 255 . 255 . 128 . 0
Default Gateway: 172 . 16 . 0 . 254
NDS 1: 172 . 16 . 1 . 248
NDS 2: 172 . 16 . 1 . 252
Apply
WIFI Configuration
TCP/IP Mode: Auto (DHCP/Auto-IP) Static-IP
IP Address: 0 . 0 . 0 . 0
Subnet Mask: 0 . 0 . 0 . 0
Default Gateway: 0 . 0 . 0 . 0
NDS 1: 0 . 0 . 0 . 0
NDS 2: 0 . 0 . 0 . 0
Apply
Copyright © 2021-2026
172.16.29.221/network.html

GDS-2000HG Arb. Waveforms



GDS-2000HG WaveClone



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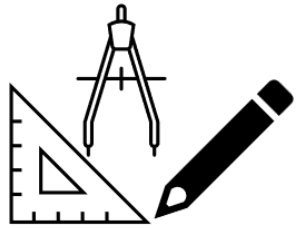

APPLICATIONS

Educational Application

- General Purpose Instruction

Industrial Application

- Fundamental R&D Measurement Applications
- SOHO (Small Office and Home Office)

Order Information and EAN code

GDS-2 _ _ _ H _

Bandwidth
25、35、50

Channel
4

D：DSO
G：DSO+AFG

Model name	Part No.	Description	EAN-13 code
GDS-2254HD	03LLDS2254DR/S	Digital Storage Oscilloscope 250MHz/4 Ch GDS-2254HD (CE)	4711458123703
GDS-2254HG	03LLDS2254GR/S	Digital Storage Oscilloscope 250MHz/4 Ch/AFG GDS-2254HG (AFG) (CE)	4711458123710
GDS-2354HD	03LLDS2354DR/S	Digital Storage Oscilloscope 350MHz/4 Ch GDS-2354HD (CE)	4711458123727
GDS-2354HG	03LLDS2354GR/S	Digital Storage Oscilloscope 350MHz/4 Ch/AFG GDS-2354HG (AFG) (CE)	4711458123734
GDS-2504HD	03LLDS2504DR/S	Digital Storage Oscilloscope 500MHz/4 Ch GDS-2504HD (CE)	4711458123741
GDS-2504HG	03LLDS2504GR/S	Digital Storage Oscilloscope 500MHz/4 Ch/AFGGDS-2504HG (AFG) (CE)	4711458123758

GW INSTEK

www.gwinstek.com

For more details,
please search on the official website.

Thank You

Wide Selection

Warranty

Worldwide Sales & Services

Worthiness

Website

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