

FNIRSI-2C53P

3in1 | 2 CH | 50MHz**Touchable Oscilloscope
Multimeter & DDS Generator****250MSa/s****19999 Counts****10M SG**

A One-step¹ Choice

3in1

3in1



4.3 Inch



2 Channel



Automatic

50MHz50
MHz250
MSa/s**19999**19999
counts12
waveformsX-Y
mode**FFT¹**FFT
spectrumCursor
functionMath
function**Ture**Ture
RMS4000
mAhImage
save&exportFirmware
upgrade

"Why" Choose Us?



2C53P

3in1

(O-SCOPE + DMM + SG)

Function

Screen size

4.3" IPS / 480*272 pixels

Screen material

Surface tempered
+ sensor glassHardware
structure

ADC+MCU+FPGA

FPGA

19.6K LUTS logical resources
(Built-in SDRAM, real storage depth)
FFT
spectrum

✓

Cursor
function

✓

Lissajous
Graphics

✓

Infinite
afterglow

✓

20M
bandwidth limit

✓

Signal
generator

10Mhz

Multimeter
recording mode

✓

Computer
connection

✓

Battery
capacity

4000mAh



other oscilloscope

2in1

(O-SCOPE
+ DMM/SG)
2.8" TFT /
320*240 pixels

Acrylic panel

ADC+MCU

X

X

X

X

X

X

None/2MHz

X

X

2000mAh

Premium Hardware

Excellent Performance

Adapt the core powerful
FPGA+MCU+ADC system



4.3" Touchable IPS Color Screen

Explore waveforms freely, move and zoom with ease!



480*272

8 LANGUAGES SUPPORTED



中文



English



Русский



にほんご



español



Português



Deutsch



한국인

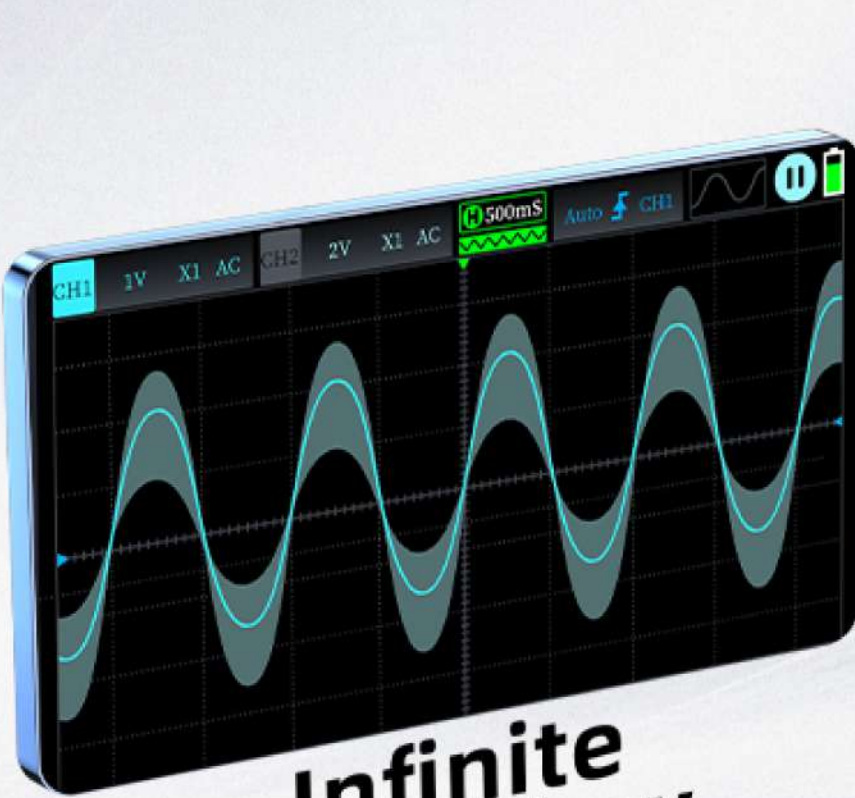


20MHz^L Bandwidth Limit^T

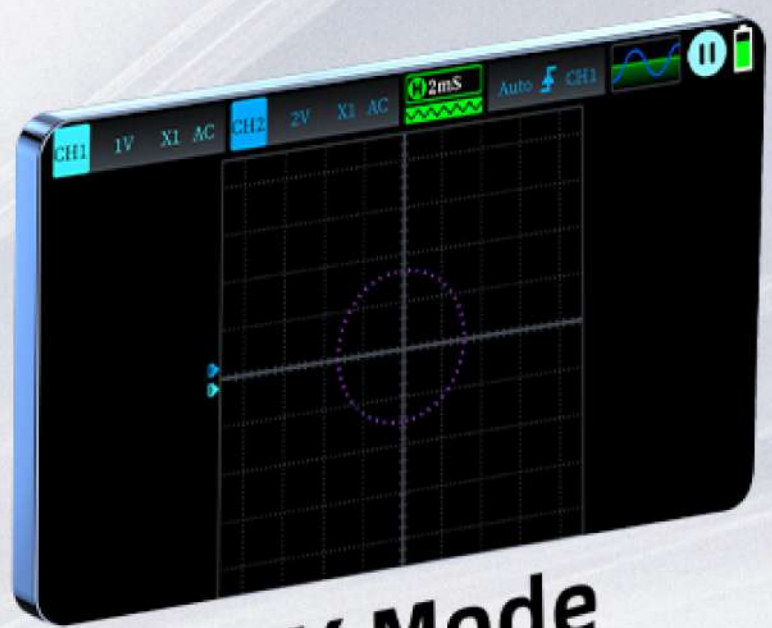
Measuring millivolt-level signals for
power supply ripple



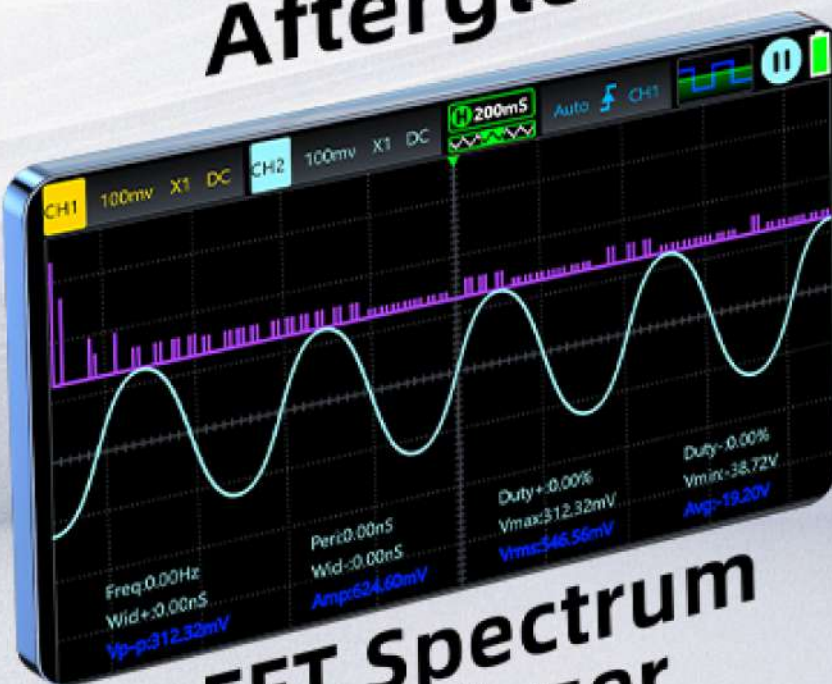
Professional Waveform Insights



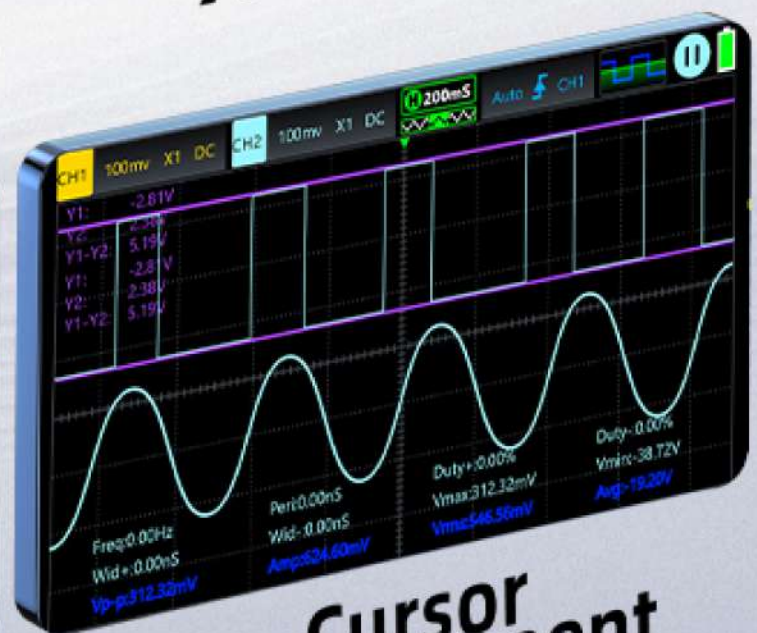
Infinite
Afterglow



X-Y Mode



FFT Spectrum
Analyzer

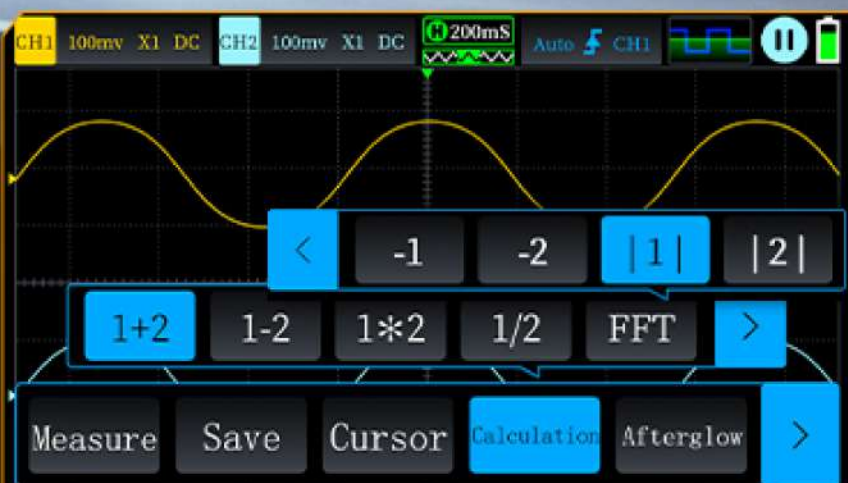
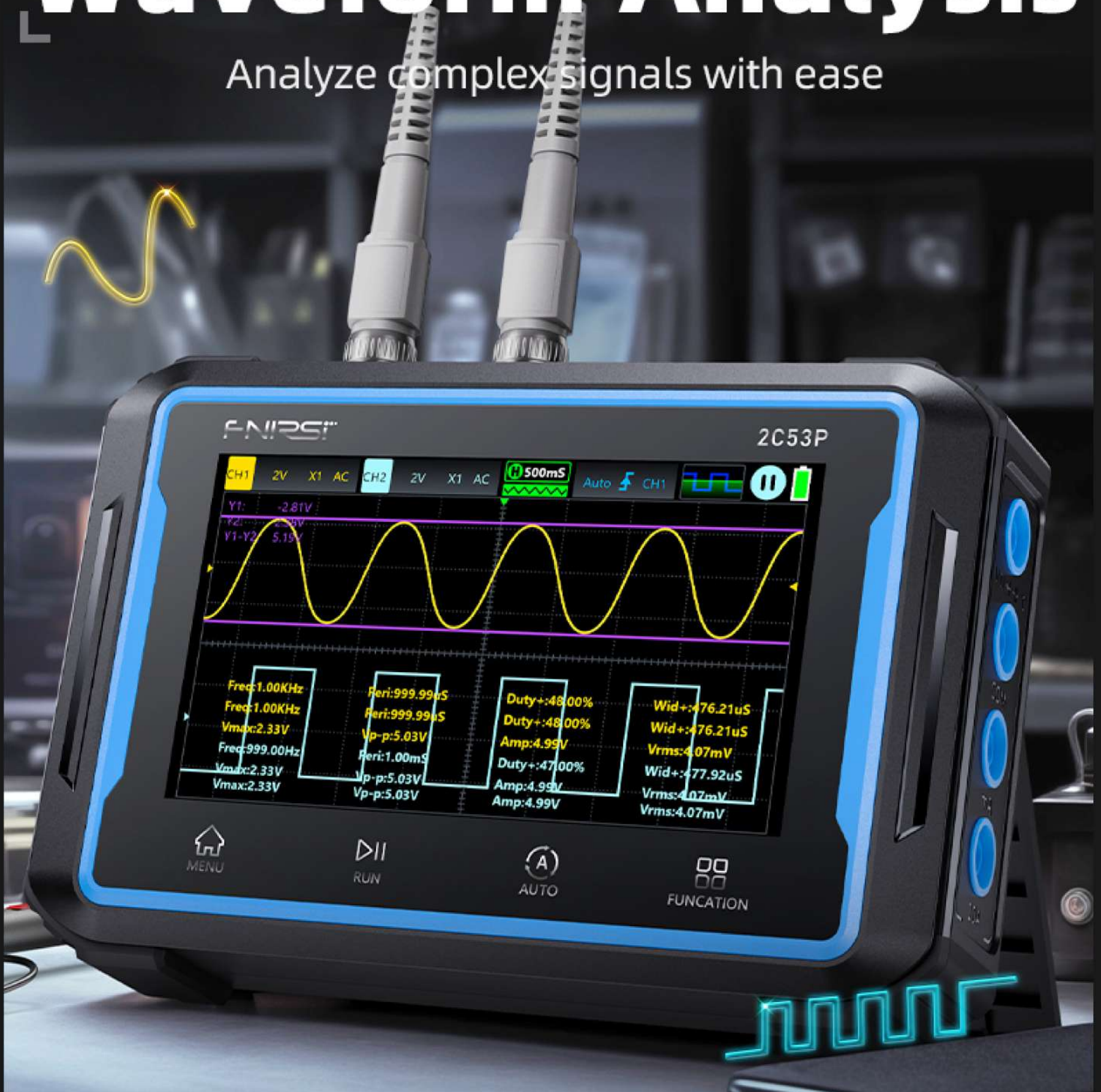


Cursor
Measurement

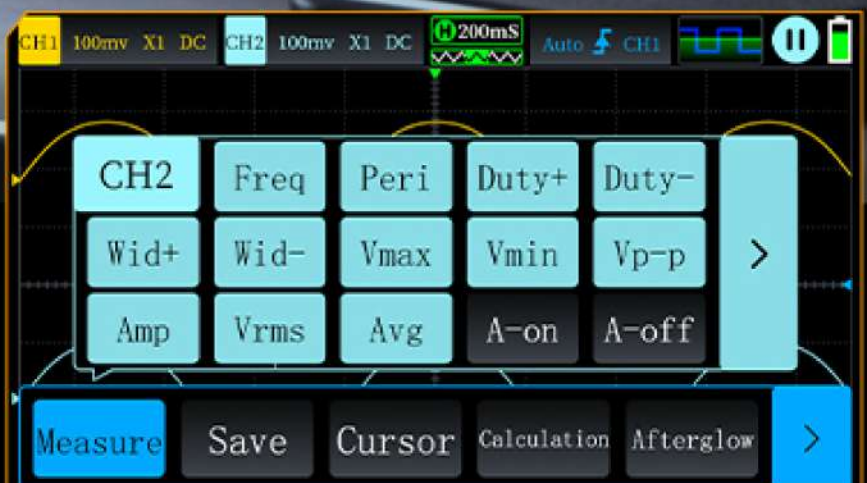


Powerful Waveform Analysis

Analyze complex signals with ease



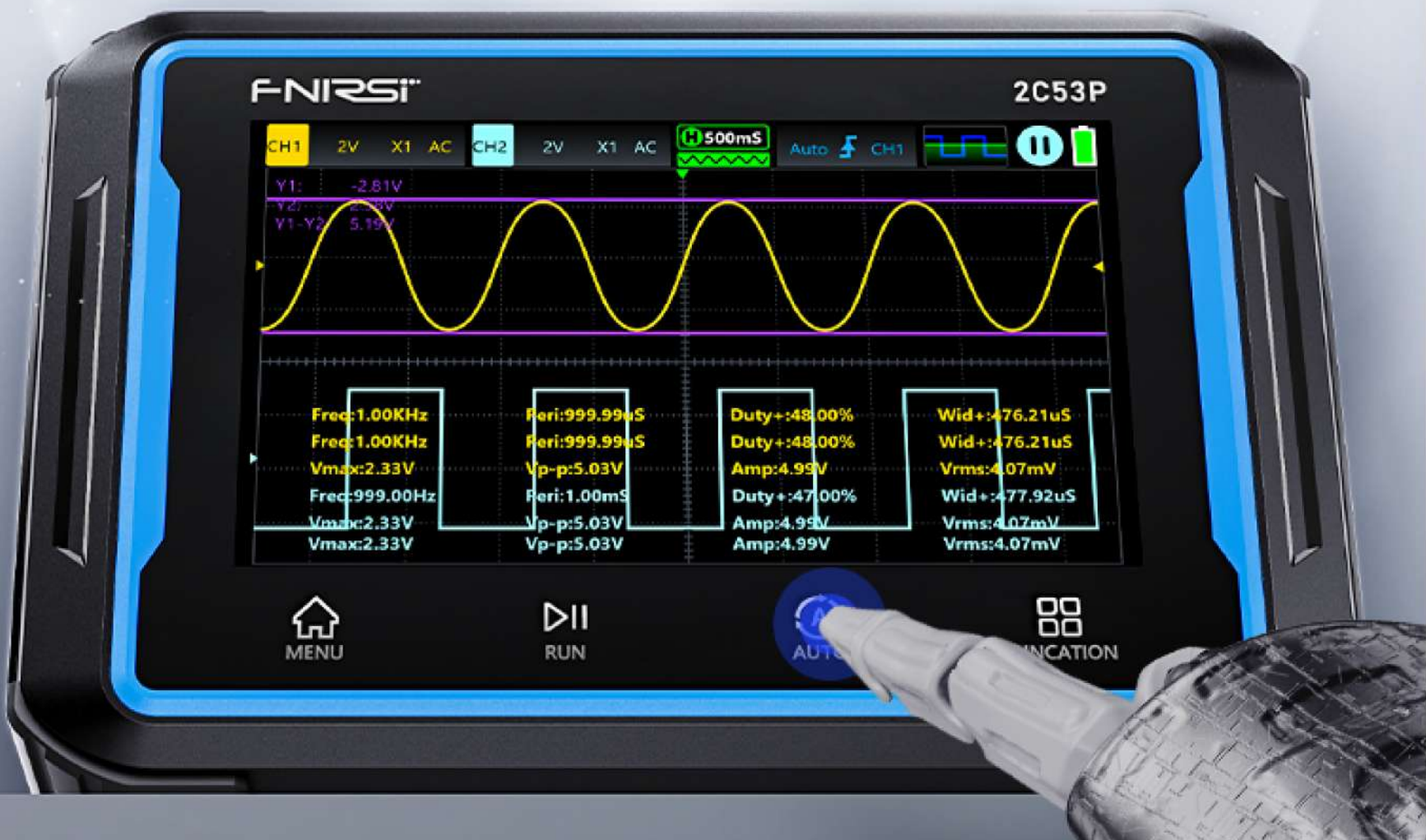
9 Calculations



12 Measurements

Three^L Trigger Modes

One-key **auto** set calibration waveform



Auto Mode

The Auto Mode screen shows a sine wave for CH1 and a square wave for CH2. The timebase is set to 200ms. The screen shows various measurement parameters for two channels.

CH1	CH2
Freq: 0.00Hz	Freq: 0.00Hz
Vmax: 312.32mV	Vmax: 312.32mV
Vp-p: 312.32mV	Vp-p: 312.32mV
Amp: 624.60mV	Amp: 624.60mV
Duty: +0.00%	Duty: +0.00%
Wid: +0.00nS	Wid: +0.00nS
Vrms: 546.56mV	Vrms: 546.56mV
Avg: -19.20V	Avg: -19.20V

Normal Mode

The Normal Mode screen shows a square wave for CH1 and a square wave for CH2. The timebase is set to 200ms. The screen shows various measurement parameters for two channels.

CH1	CH2
Freq: 0.00Hz	Freq: 0.00Hz
Vmax: 312.32mV	Vmax: 312.32mV
Vp-p: 312.32mV	Vp-p: 312.32mV
Amp: 624.60mV	Amp: 624.60mV
Duty: +0.00%	Duty: +0.00%
Wid: +0.00nS	Wid: +0.00nS
Vrms: 546.56mV	Vrms: 546.56mV
Avg: -19.20V	Avg: -19.20V

Single Mode

The Single Mode screen shows a sine wave for CH1 and a square wave for CH2. The timebase is set to 200ns. The screen shows various measurement parameters for two channels.

CH1	CH2
Freq: 10.00KHz	Freq: 99.99us
Vmax: 542.88mV	Vmax: 542.88mV
Vp-p: 1.01V	Vp-p: 1.01V
Amp: 0.97V	Amp: 0.97V
Duty: +52.00%	Duty: +48.00%
Wid: +52.29us	Wid: +47.70us
Vrms: 505.44mV	Vrms: 505.44mV
Avg: 37.44mV	Avg: 37.44mV

19999 Count

High Precision Multimeter

Support ACV, DCV, AC, DC, Capacitance, Resistance, Diode, Continuity, Temp measurement



Visualizing Data

Accurate Records

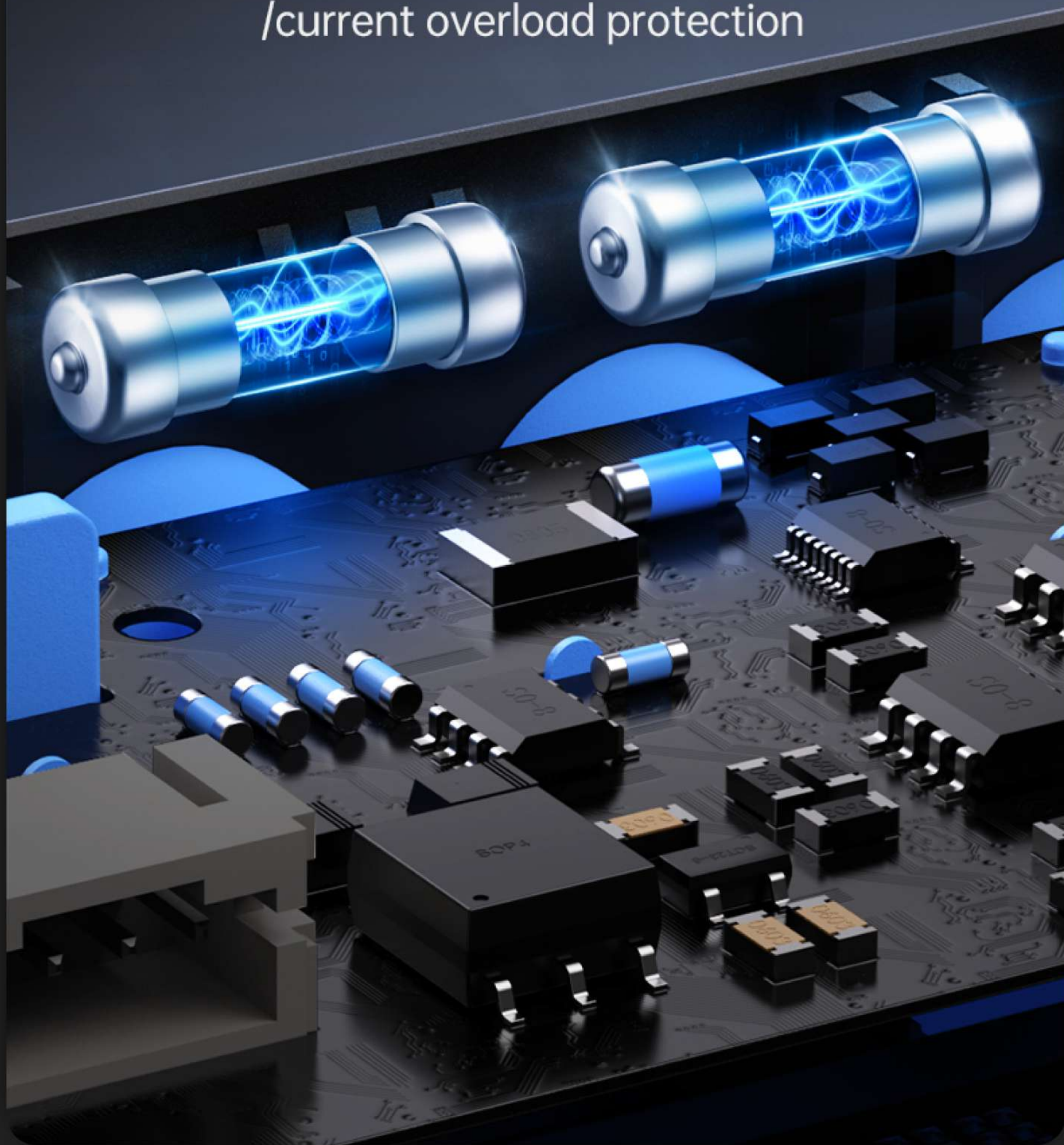
Save up to 5 measurement parameters,
Check Max/Min value change trends



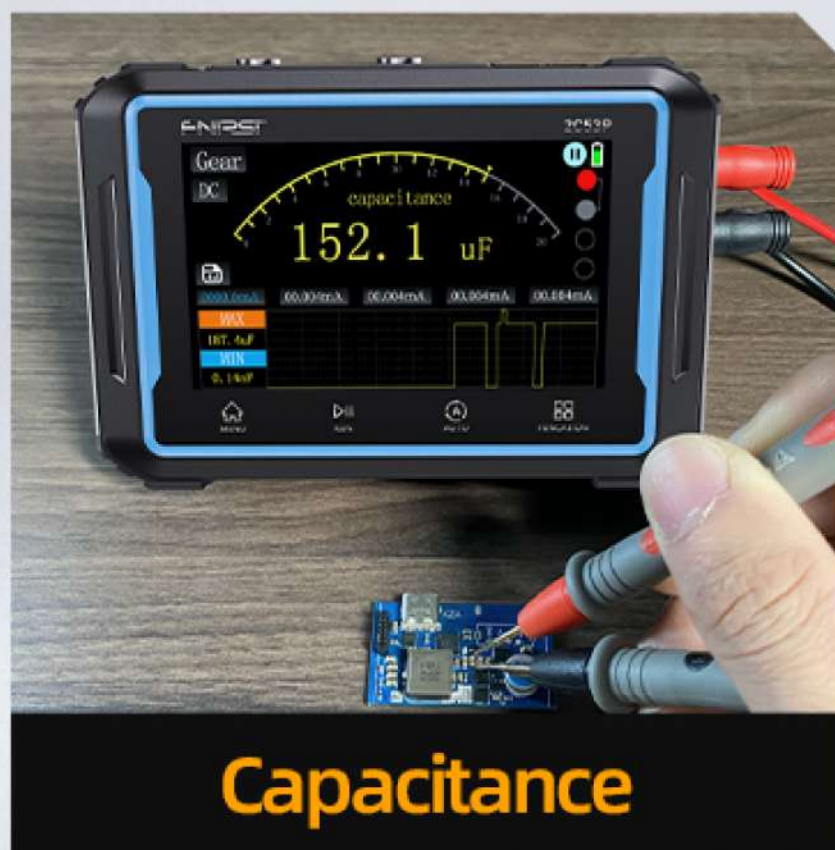
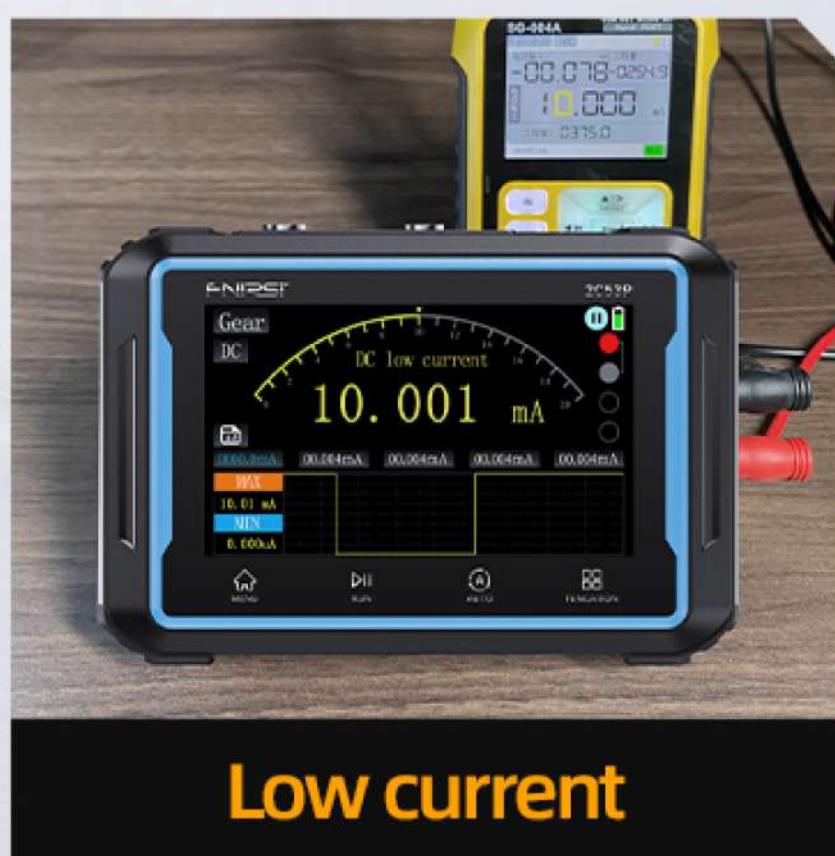
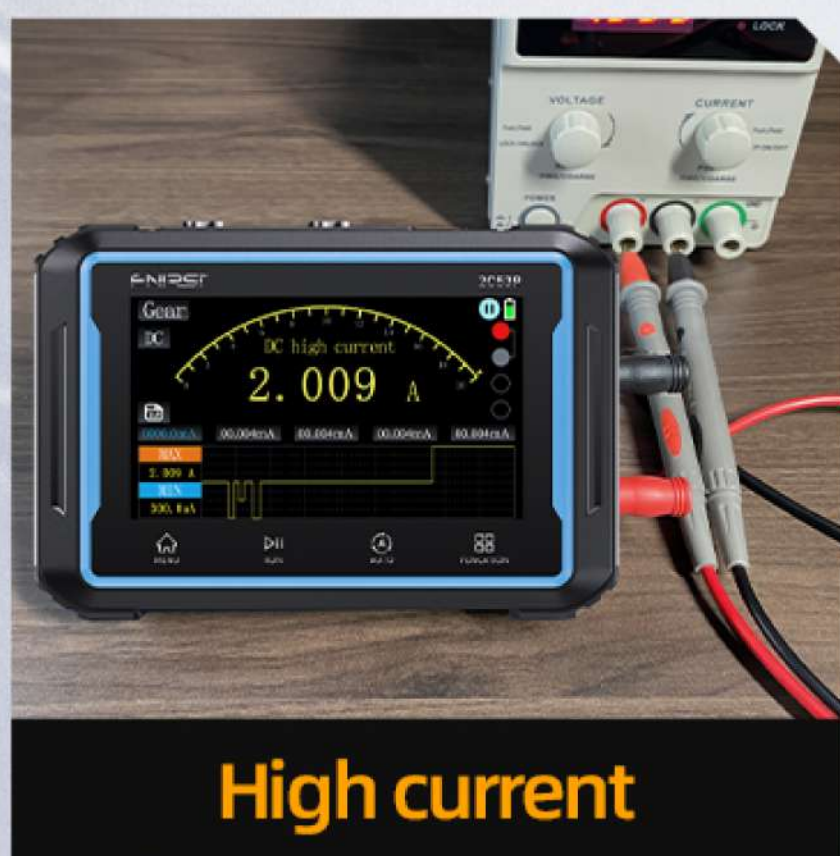
Double Protection

Intelligent Anti-burning

Dual ceramic fuses high-voltage
/current overload protection

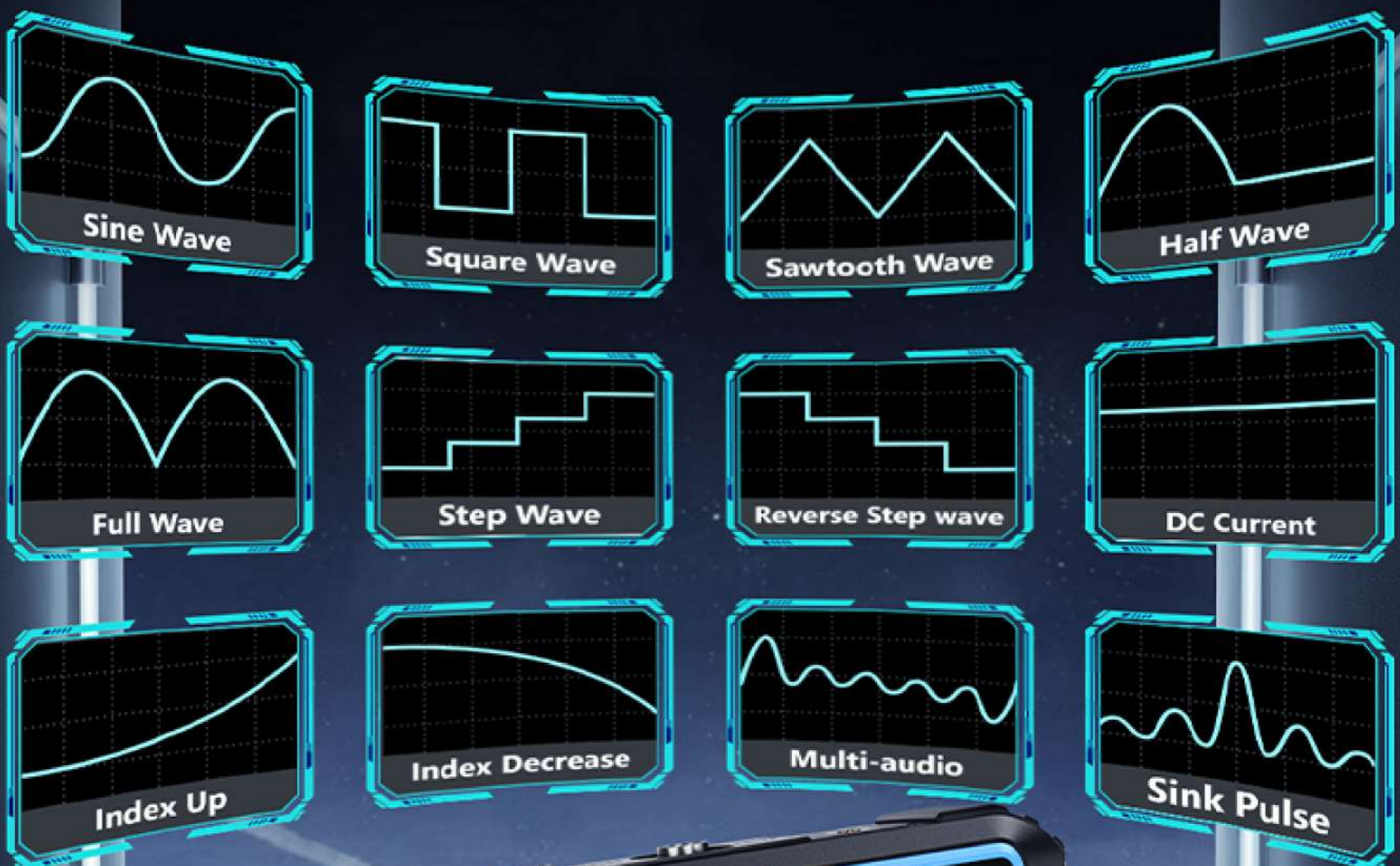


High Precision And More Reliable



12 Waveforms Freely Switchable

Customized to your measurement needs



Computer View Waveform Image

Connect to PC and open
"USB Sharing" to view or export pictures



Save Image



View Image

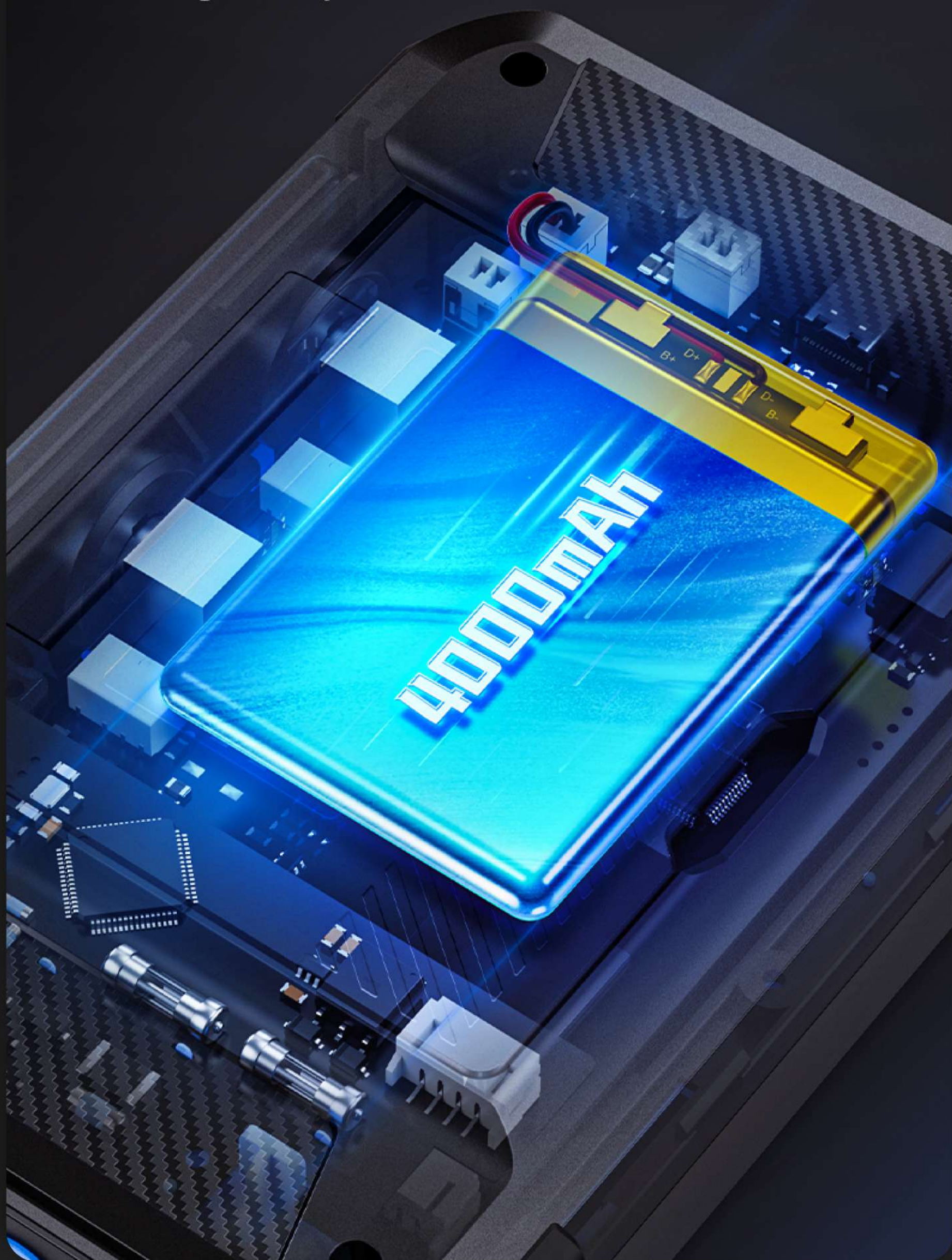


Delete Image

4000MAh Lithium Battery



Ultra-long battery life and efficient work



Excellent Design & Details



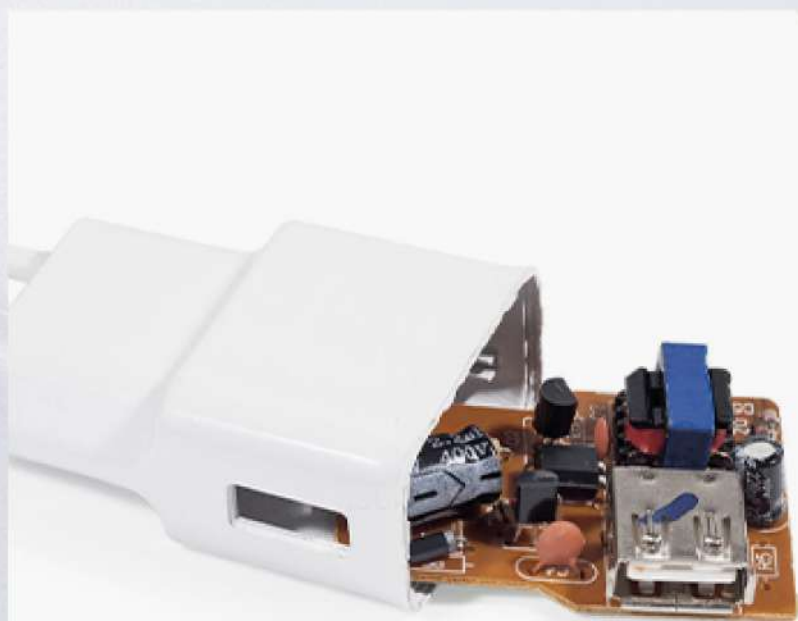
Widely Used to Precision Measurements



220V mains power



Switching power supply



Power supply ripple



Pulse signal



Crystal waveform



Audio signal

FNIRSI | 20

INNOVATIVE IDEA

PARAMETER



-BASIC PARAMETER-

Screen display	4.3 Inch tempered glass+IPS color screen (480*272 pixels)
Backlight	Backlight brightness can be set
Power supply	TYPE-C (5V/2A)
Battery	4000mAh lithium battery
Language	中文, English, Русский, にほんご, español, Português, Deutsch, 한국인
Size and Weight	≈145x98x35mm/360g

-OSCILLOSCOPE PARAMETERS-

Channle	Dual channel	Bandwidth	50MHz
Sampling rate	250MSa/s	Storage depth	Up to 64kByte
Time base range	10ns/div - 10s/div	Vertical sensitivity	10mv/div - 10v/div
Waveform display mode	YT、XY、 Scroll	Vertical resolution	8 bits
Input resistance	1MΩ	Bandwidth limit	Support 20MHz limit
Probe	1x/10x	Input coupling	AC/DC
Trigger type	Rising / Falling edge	Protection voltage	±400V
Trigger level	8 div (positive/negative)	Trigger mode	Auto、 Normal、 Single
Storage space	13M	Measured Data	Prd, Freq, Vpp, Vmax, Vmin, Vrms, Vavg, Vamp, Du+, Du-, Wid+, Wid-
Save waveform screenshot	✓		
USB computer transfer	✓		

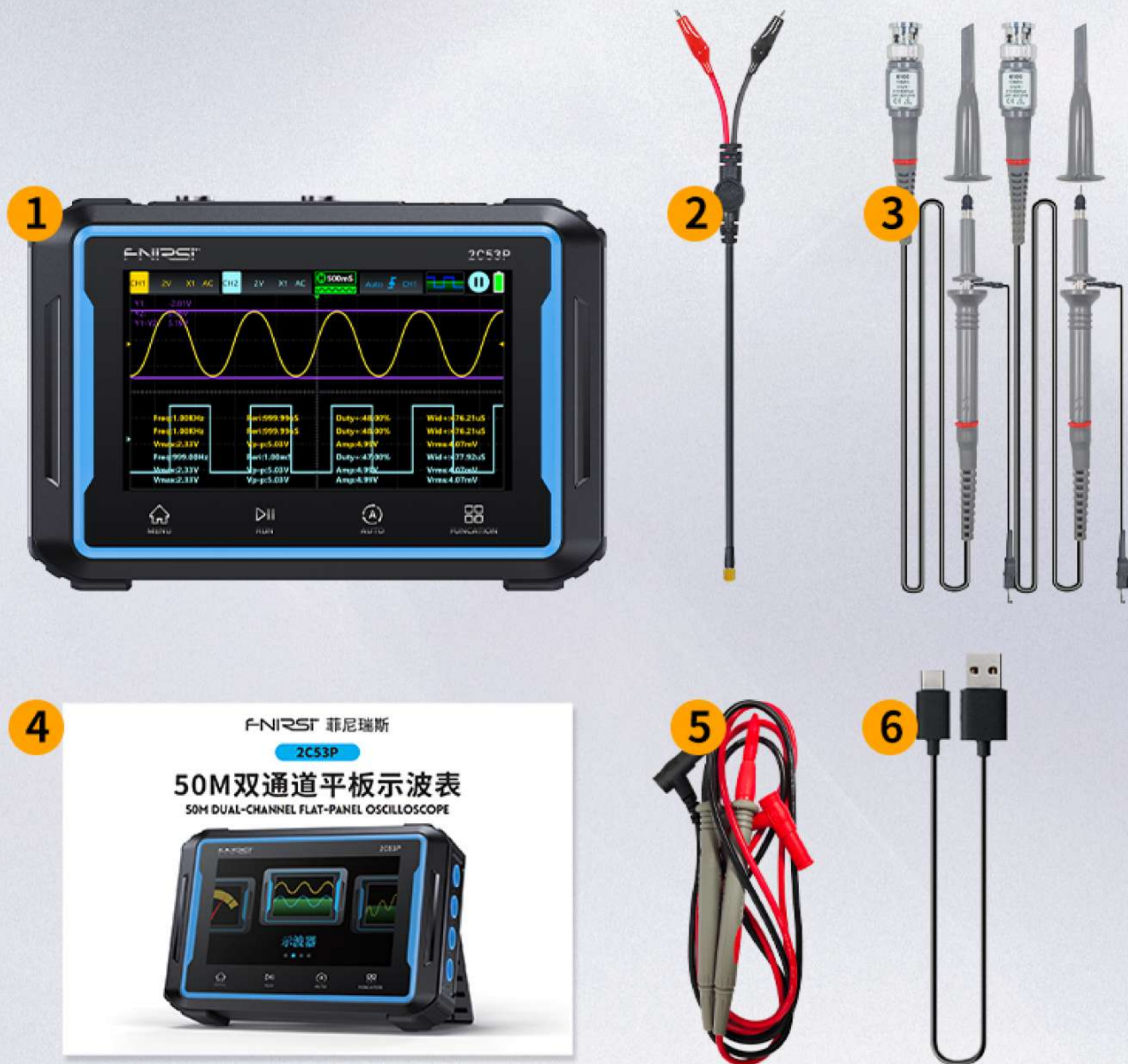
-SIGNAL GENERATOR PARAMETERS-

Wave frequency	0-10MHz (Sine wave: 10MHz / Other waveforms: 5MHz)
Waveform amplitude	0.1V-3.0V
Square wave duty cycle	0-100%

-MULTIMETER PARAMETERS-

Function	Range	Uncertainty
DC Voltage	1.9999V/19.999V/199.99V/1000.0V	±(0.5%+3)
AC Voltage	1.9999V/19.999V/199.99V/760.0V	±(1%+3)
DC Current	19.999mA/199.99mA/1.9999A/9.999A	±(1.2%+3)
AC Current	19.999mA/199.99mA/1.9999A/9.999A	±(1.5%+3)
Resistance	19.999MΩ/1.9999MΩ/199.99KΩ/19.999KΩ/	±(1.5%+3)
	1.9999KΩ/199.99Ω	±(0.5%+3)
Capacitance	999.9uF/99.99uF/9.999uF/999.9nF/99.99nF/9.999nF	±(2.0%+5)
	9.999mF/99.99mF	±(5.0%+20)
Temperature	—55~1300℃ / —67~2372℉	±(2.5%+5)
Diode test	✓	
Continuity test	✓	

Packing list



1. 2C53P Oscilloscope 2. Alligator clip probe 3. P6100*2
 4. Product manual 5. Multimeter probe 6. Data cable