



## One machine in hand, worry-free testing

Suitable for outdoor maintenance, rapid on-site measurement, automobile maintenance, power detection, etc.

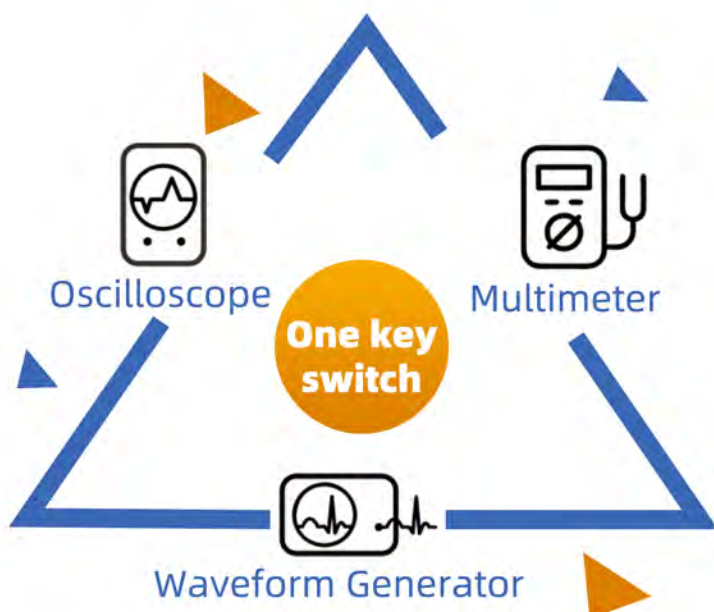
**Mobile phone body, three-in-one function**

### HDS200 Series 2-CH Handheld Oscilloscope

- Oscilloscope + multimeter + waveform generator, multifunction in one
- 3.5-inch high-resolution, high-contrast color LCD display, suitable for outdoor use
- 18650 lithium battery power, providing up to 6 hours working time
- USB Type-C interface, support power bank, support PC software connection
- Self-calibration function
- SCPI supported, facilitate secondary development

# Instrument TRANSFORMERS

*variety of functions in one*



## FUNCTION



### Oscilloscope

Max 10,000 wfms/s waveform refresh rate

- + Dual channels input, bandwidth up to 70 MHz, real-time sampling rate 250MSa/s
- + Max 8k record length
- + Cursor measurement function
- + Multiple auto measurement functions
- + XY function
- + One-key auto set function, easy to detect and debug



### Multimeter

20,000 counts, true RMS

- + Standard voltage, current, resistance, diode, capacitance measuring, and continuity test
- + Auto range function, easy to detect and debug
- + Max AC 750V, DC 1000V input voltage
- + Independent input of multimeter and oscilloscope
- + Reading hold function
- + Relative measurement function



### Waveform Generator

(Only for HDS242S & HDS272S)

Max 25MHz frequency output

- + Output sine, square, ramp, pulse, and built-in special waveforms
- + 0.1Hz frequency resolution
- + 14-bit vertical resolution, 125MSa/s high sampling rate
- + 8k waveform length
- + Max 5Vpp output amplitude

# Small size, powerful functions

Waveform generator output



Oscilloscope input



Plastic shell design of the BNC makes the test safer



Calibration signal:  
3.3V/1kHz square wave  
signal output

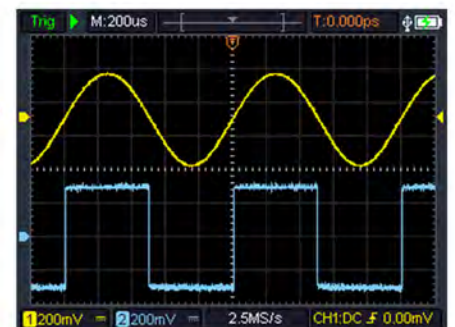
Charging and communication  
interface

198mm

38mm

96mm

Integrated encapsulation  
design, not easy to peel  
off after long-term use,  
and the hand feel is better.



3.5-inch (320×240) high-resolution  
TFT color LCD screen, clear and  
delicate display for observing  
waveform details.



Multimeter input connectors

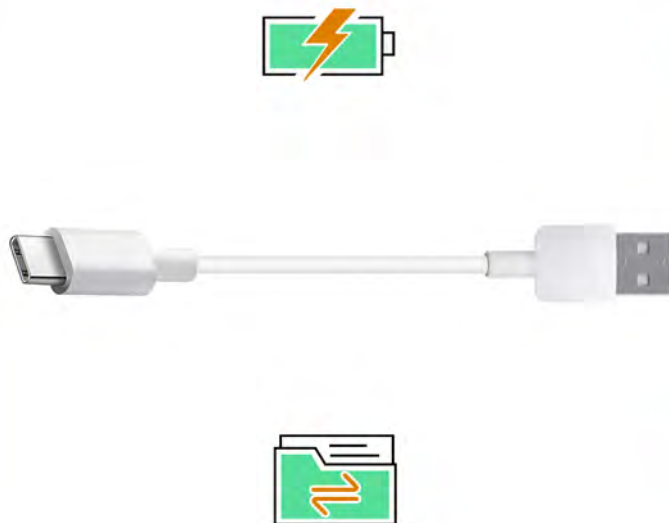
Approx. 0.6 kg (main device, without battery)

# Excellent Power Management

Ultra-low comprehensive power consumption less than 3W. Powered by 4400mAh lithium battery, work continuously for about 6 hours. A single battery can supply power normally. Easy battery replacement.



USB Type-C interface can be charged by an adapter or a power bank, and supports PC software connection.



# Hangable bracket, saving working space



## Excellent oscilloscope performance



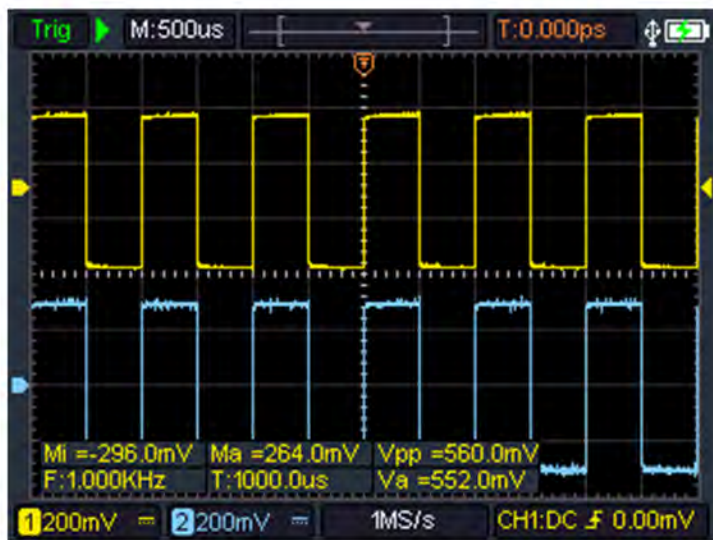
### Two acquisition modes

Peak detect is used for the detection of the jamming burr and the possibility of reducing the confusion.



### High refresh, deep storage

Max 10,000 wfms/s refresh rate, 8k record length, easy to capture exceptional and low probability events.



## 7 kinds of auto measurement

Frequency, Period, Amplitude, Max, Min, Mean, and PK-PK.

Max 6 auto measurements can be displayed on the screen at the same time.



## Cursor measurement function

supports measuring the voltage difference between cursors ( $\Delta V$ ) and the time difference between cursors ( $\Delta T$ ).



## Save function

Save 4 settings, 4 reference waveforms, 4 waveform images, 4 CSV waveform files.

The reference waveform can be displayed on the same screen as the measured waveform, convenient for waveform comparison.

Connect to the computer through the USB Type-C interface, the computer can recognize the oscilloscope as a USB flash drive, and you can access the images or CSV waveform files to view, analyze or share the waveform data.

# 20,000 Counts Multimeter with True RMS

Support measuring voltage, current, resistance, diode, capacitance, and continuity test

20,000 counts, high-precision professional multimeter, support relative value measurement.



# Waveform Generator Functions (Only for HDS242S & HDS272S)



Output sine, square, ramp, pulse, and built-in special waveforms



Sinc, Bessely, Besselj, StairUp, StairUpDown, StairDown, AttALT, AmpALT.  
Support 8 built-in special waveforms, including Sinc, Bessely, Besselj, StairUp, StairUpDown, StairDown, AttALT, AmpALT.

## PRODUCT SPECIFICATIONS

### [Oscilloscope] Specifications

| Model                     | HDS242                                                            | HDS272 | HDS242S                          | HDS272S |
|---------------------------|-------------------------------------------------------------------|--------|----------------------------------|---------|
| Bandwidth                 | 40MHz                                                             | 70MHz  | 40MHz                            | 70MHz   |
| Channels                  | 2-CH Oscilloscope                                                 |        | 2-CH Oscilloscope+1-CH Generator |         |
| Sample Rate               | 125MSa/s                                                          |        |                                  |         |
| Acquisition Model         | Normal, Peak detect                                               |        |                                  |         |
| Record Length             | 8K                                                                |        |                                  |         |
| Display                   | 3.5-inch LCD                                                      |        |                                  |         |
| Waveform Refresh Rate     | 10,000 wfms/s                                                     |        |                                  |         |
| Input Coupling            | DC, AC, and Ground                                                |        |                                  |         |
| Input Impedance           | 1 MΩ±2%, in parallel with 16pF±10pF                               |        |                                  |         |
| Probe Attenuation Factors | 1X,10X,100X,1000X                                                 |        |                                  |         |
| Max. input Voltage        | 400V (DC+AC, PK-PK, 1MΩ input impedance) (10:1 probe attenuation) |        |                                  |         |
| Bandwidth Limit (typical) | 20MHz                                                             |        |                                  |         |
| Horizontal Scale          | 5ns/div - 500s/div, step by 1 - 2 - 5                             |        |                                  |         |
| Vertical Sensitivity      | 10mV/div - 10V/div                                                |        |                                  |         |
| Vertical Resolution       | 8 bits                                                            |        |                                  |         |
| Trigger Type              | Edge                                                              |        |                                  |         |
| Trigger Modes             | Auto, Normal, single                                              |        |                                  |         |
| Automatic Measurement     | Frequency, Period, Amplitude, Max, Min, Mean, PK-PK               |        |                                  |         |
| Cursor Measurement        | ΔV, ΔT, ΔT&ΔV between cursors                                     |        |                                  |         |
| Communication Interface   | USB Type-C                                                        |        |                                  |         |

## 「Multimeter」 Specifications (Standard)

|                   |                                                                       |
|-------------------|-----------------------------------------------------------------------|
| Max. Resolution   | 20,000 counts                                                         |
| Testing Mode      | Voltage, Current, Resistance, Capacitance, Diode ,and Continuity test |
| Input Impedance   | 10M $\Omega$                                                          |
| Max Input Voltage | AC 750V, DC 1000V                                                     |
| Max Input Current | DC : 10A AC : 10A                                                     |
| Diode             | 0 - 2V                                                                |

## 「Waveform Generator」 Specifications (Only for HDS242S & HDS272S)

|                     |                 |               |
|---------------------|-----------------|---------------|
| Frequency Output    | Sine            | 0.1Hz - 25MHz |
|                     | Square          | 0.1Hz - 10MHz |
|                     | Ramp            | 0.1Hz - 1MHz  |
|                     | Pulse           | 0.1Hz - 5MHz  |
|                     | Arbitrary       | 0.1Hz - 5MHz  |
| Sampling Rate       | 125MSa/s        |               |
| Channel             | 1-CH            |               |
| Amplitude Range     | 20 mVpp - 5 Vpp |               |
| Waveform Length     | 8K              |               |
| Vertical Resolution | 14bits          |               |
| Output Impedance    | 50 $\Omega$     |               |

## PRODUCT ACCESSORIES



- |                           |                      |                                |                       |                    |
|---------------------------|----------------------|--------------------------------|-----------------------|--------------------|
| <b>1</b> Main device      | <b>2</b> Bag         | <b>3</b> Probe                 | <b>4</b> Probe Adjust | <b>5</b> USB Cable |
| <b>6</b> Multimeter Leads | <b>7</b> Quick Guide | <b>8</b> BNC to Alligator Clip |                       |                    |