



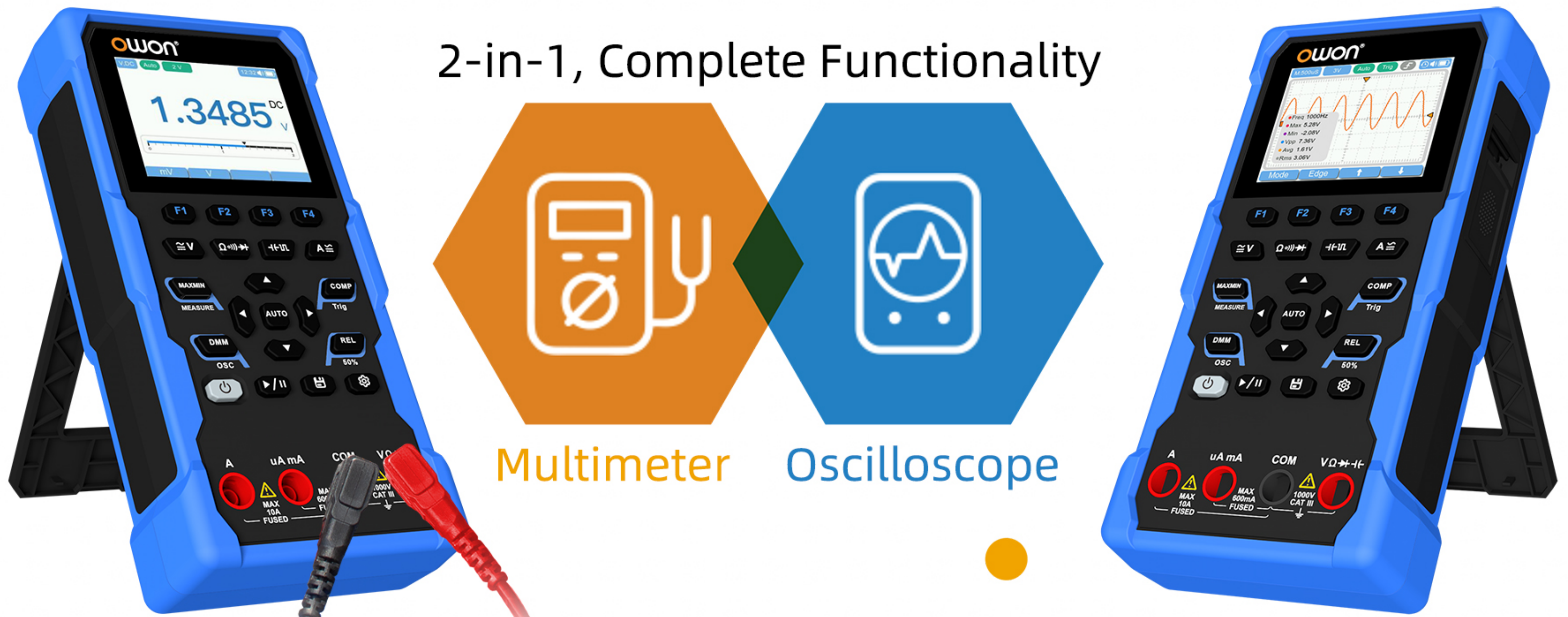
Multi Functional Oscilloscope Multimeter



HDS120 // 4½ Digit Multimeter + Oscilloscope

- ◆ **Waveform Automatic Measurement:** including Vmax (maximum voltage), Vmin (minimum voltage), Vp-p (peak-to-peak voltage), Vavg (average voltage), Vrms (RMS voltage), and Hz (frequency).
- ◆ **Friendly user experience:** full button design, easy operation, and extended equipment life.
- ◆ **Smart Probe Detection:** automatically switches gears according to the insertion position of the test pen, effectively preventing damage to the instrument due to misoperation.
- ◆ **Efficient energy management:** powered by 18650 lithium battery, it provides longer use time and makes your measurement work more durable.
- ◆ **Safe high-voltage measurement:** compliant with CAT $\square$ 1000V standard, it can safely measure high-voltage waveforms up to 1000V, expanding the usage scenarios.
- ◆ **High-definition display experience:** The 2.8-inch IPS screen provides a wide viewing angle and excellent display effects, ensuring clear reading of data at any angle.
- ◆ **Environmentally adaptable display:** The high-brightness and high-contrast display in dual-theme mode provides a clear view whether in strong light or dark light environments, optimizing the user experience.

Master with Precision: Your Handheld Laboratory



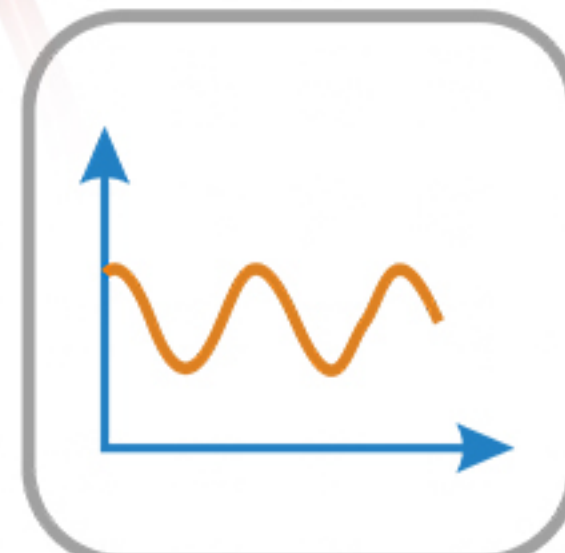
2-in-1, Complete Functionality

Multimeter

Oscilloscope



2-in-1



1MHz DSO



4 1/2 Digit



True RMS



2.8-inch IPS



Full Keypad
Operation



18650
lithium Battery



CATIII 1000V



AC/DC
Voltage



AC/DC
Current



Resistance



Capacitance



Diode Test



On-off
Warning



Duty Ratio
Test



Frequency
Test



Digital Hold



Automatic



Automatic
Shutdown



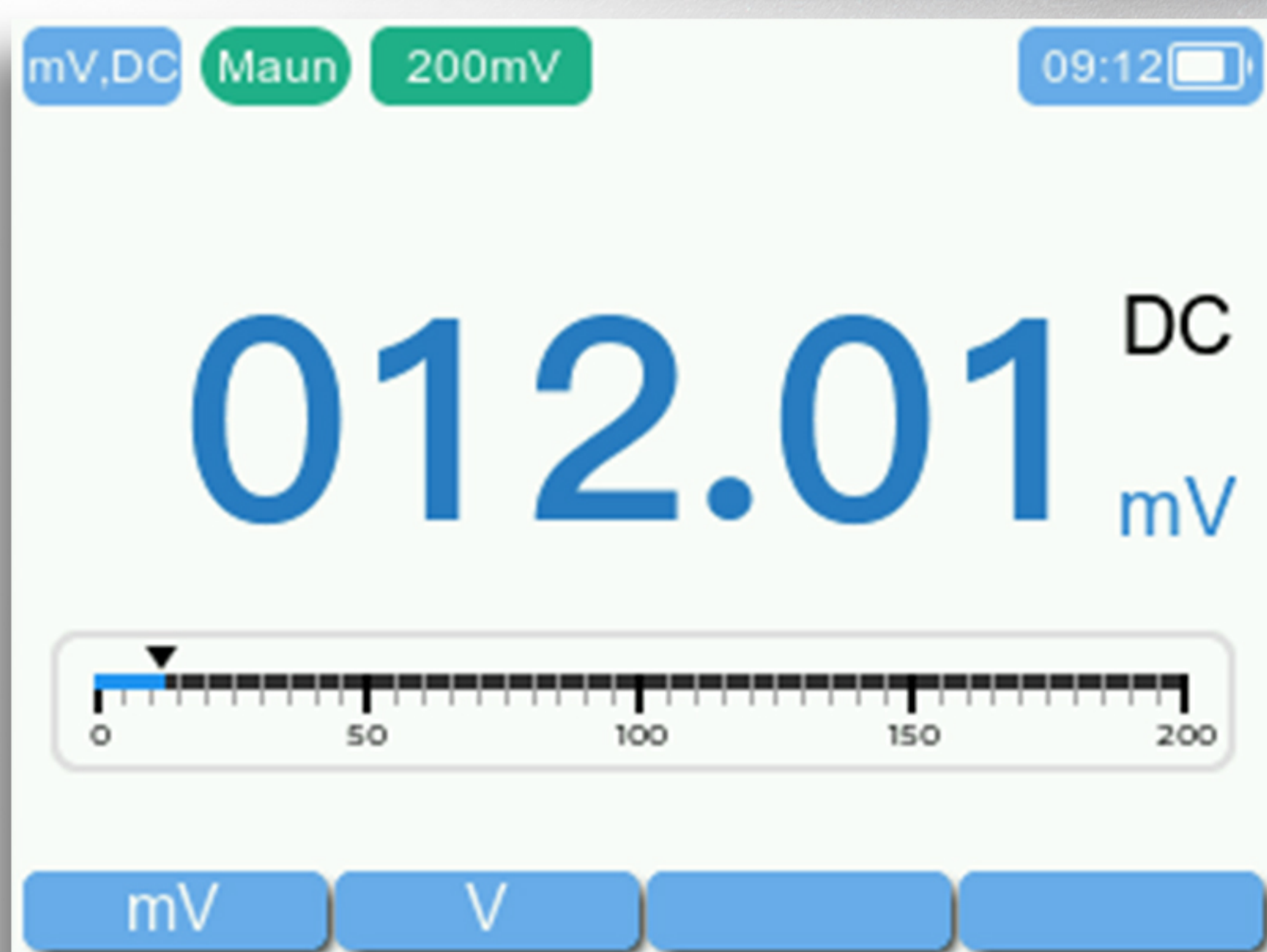
Non-contact
test



Reverse Display
Backlight

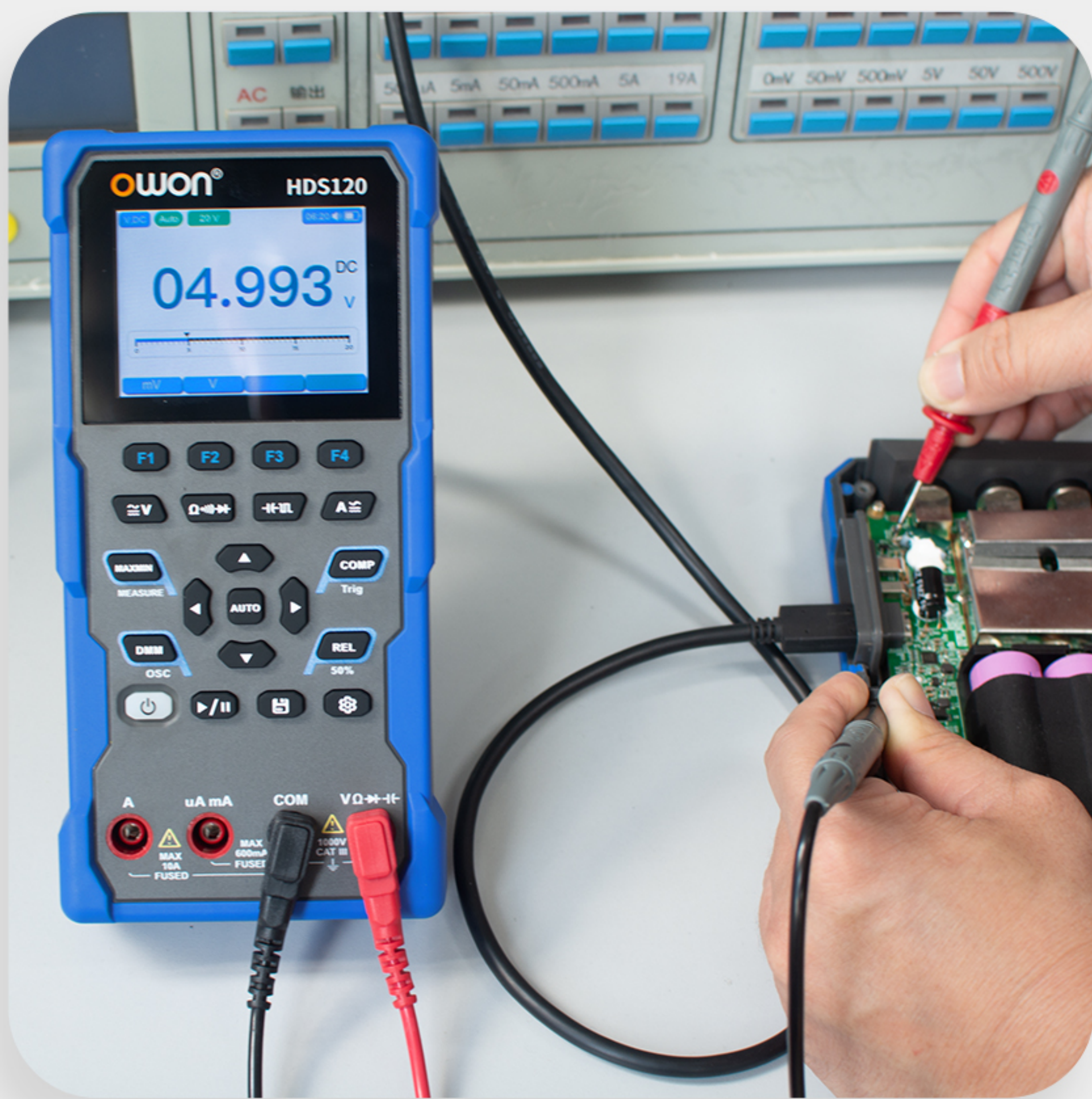
Broad Vision, Brightness at Your Command

2.8-inch IPS screen with good viewing angle, suitable for outdoor use.



Dual theme display, Adapts to Different Lighting Conditions for Clear Visualization.

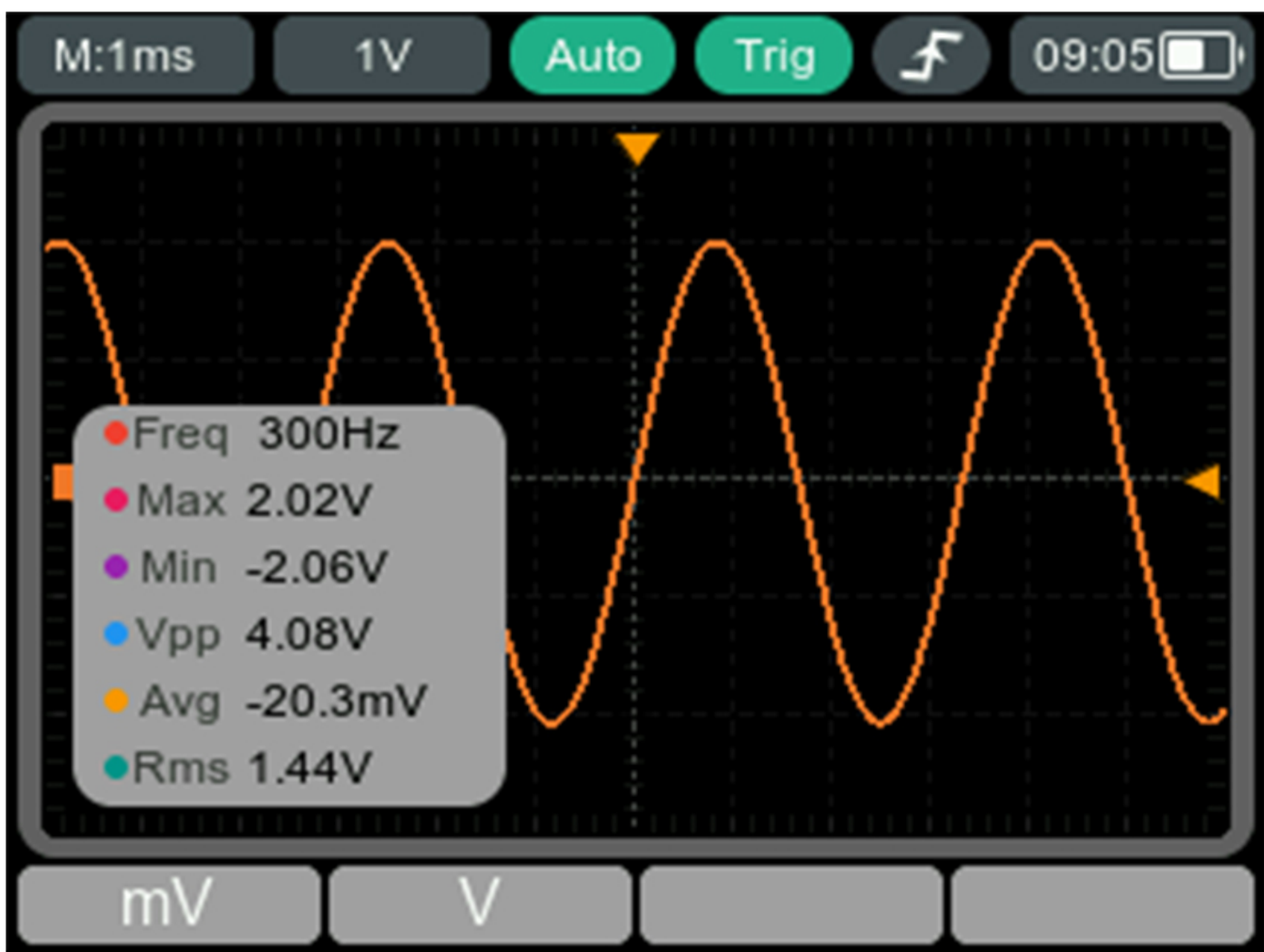
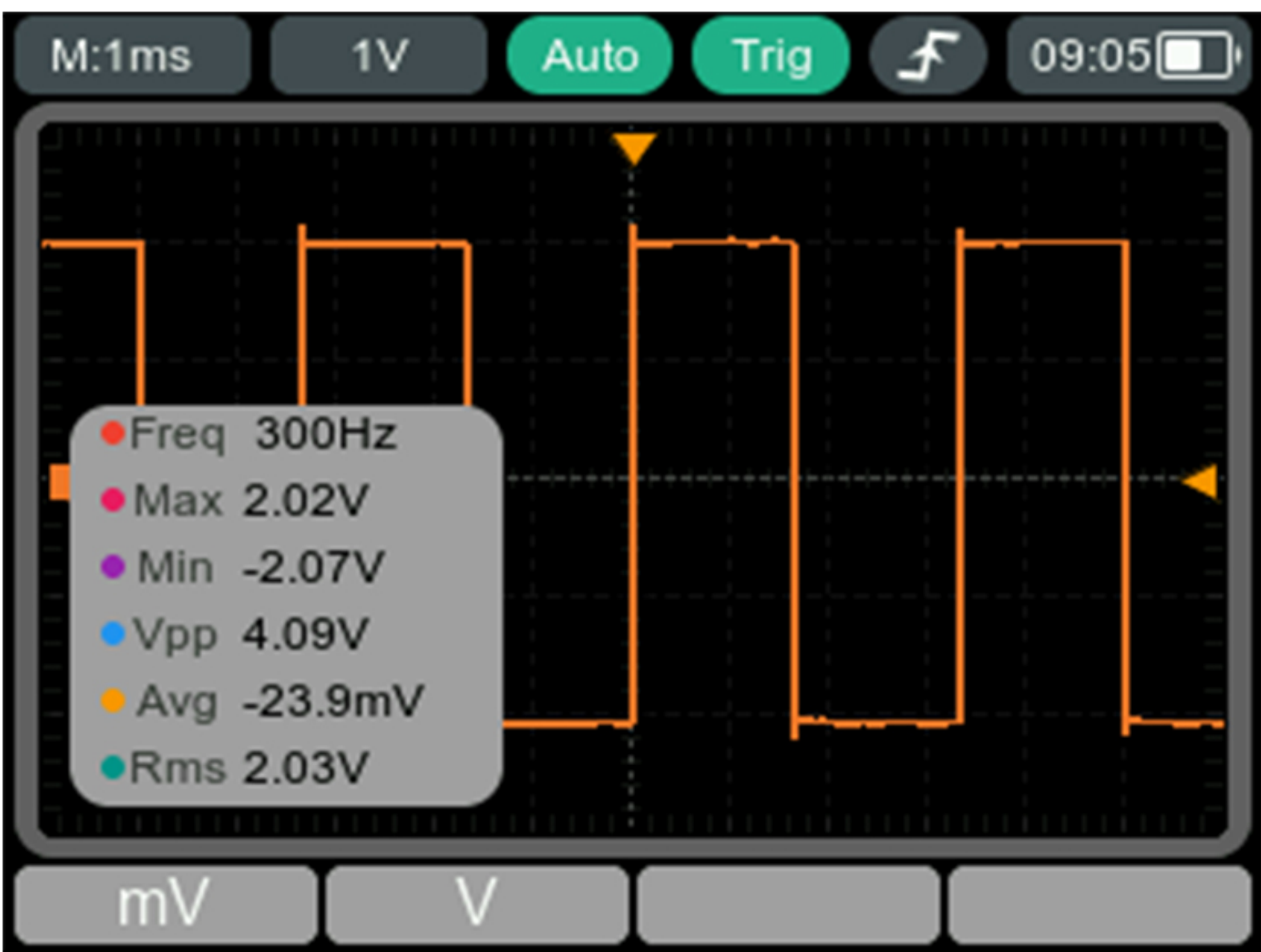
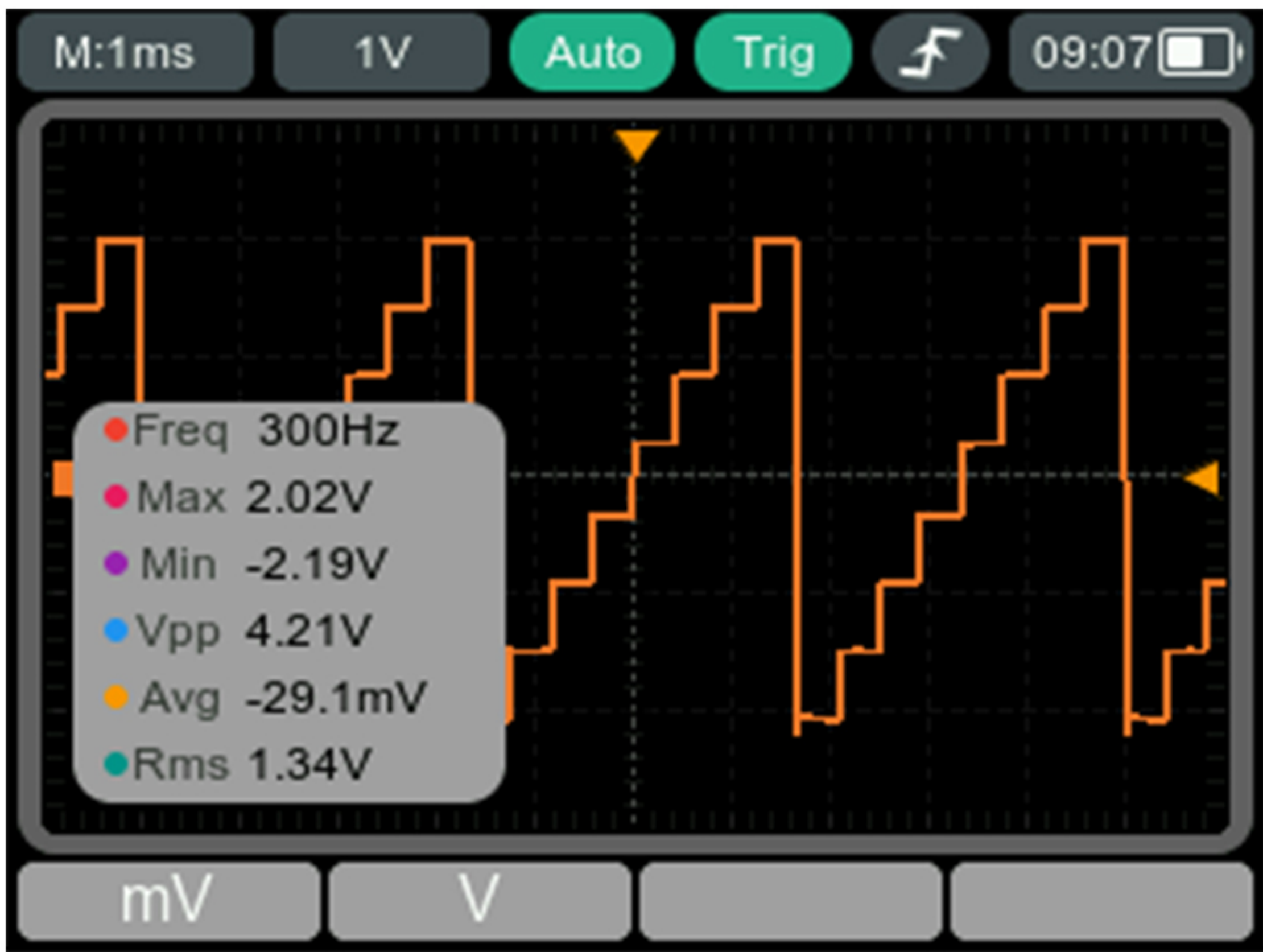
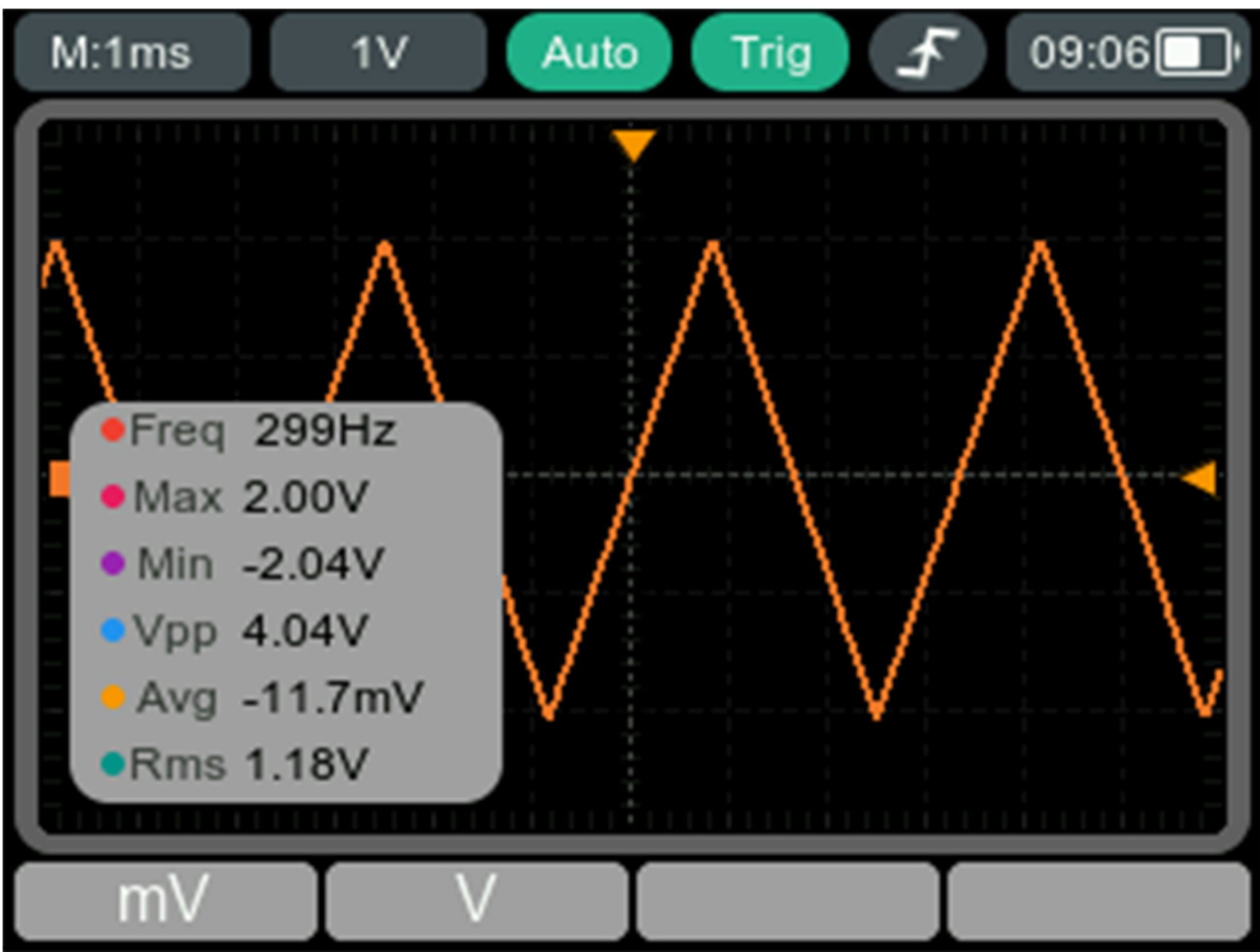
Full button setting, easy and quick to use.



- Button design, one-handed direct switching improves work efficiency.
- 100,000 times durability test, durable and not easily affected by the environment.

1MHz analog bandwidth

Automatically calculate and test Vmax, Vmin, Vp-p, Vavg, Vrms, Hz



Rapid Measurement of Strong Electrical Waveforms (e.g. Three-Phase Electricity)



The current waveform can be directly measured using a probe

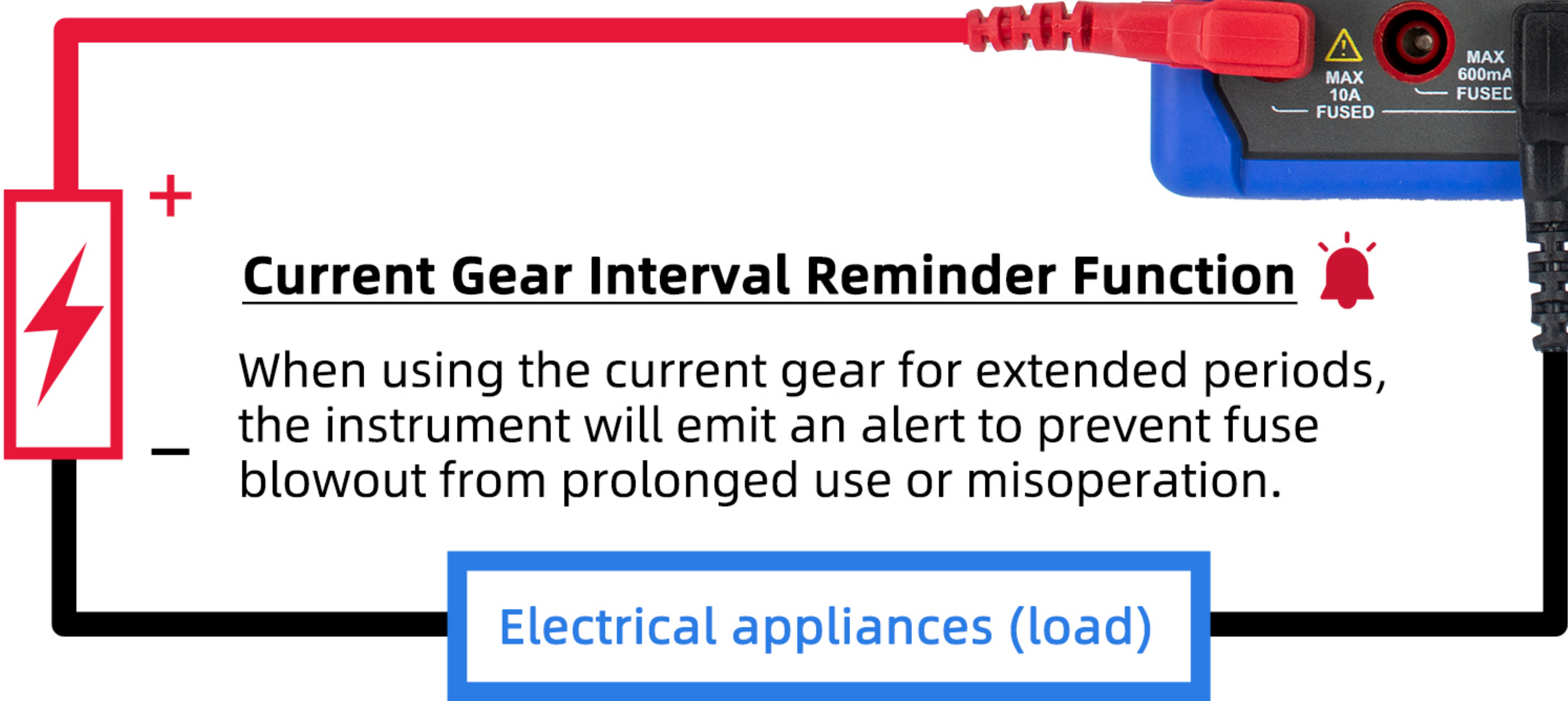


No Safety Compromises

Our Commitment to Professionalism in Every Operation.

Automatic detection function of test pens

Automatically switches gears according to the insertion position of the test pen, effectively preventing damage to the instrument due to misoperation.



Current Gear Interval Reminder Function

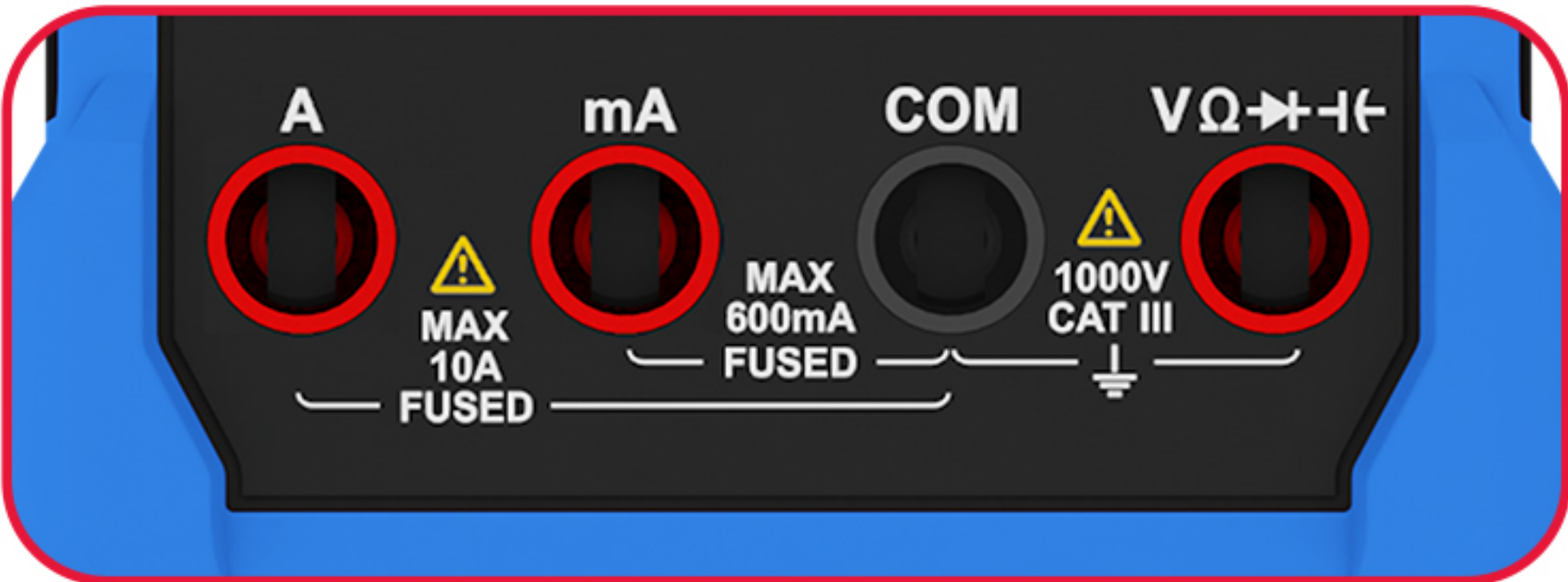
When using the current gear for extended periods, the instrument will emit an alert to prevent fuse blowout from prolonged use or misoperation.

Charging protection function

To ensure measurement safety, the instrument cannot be charged via USB when it is plugged in.



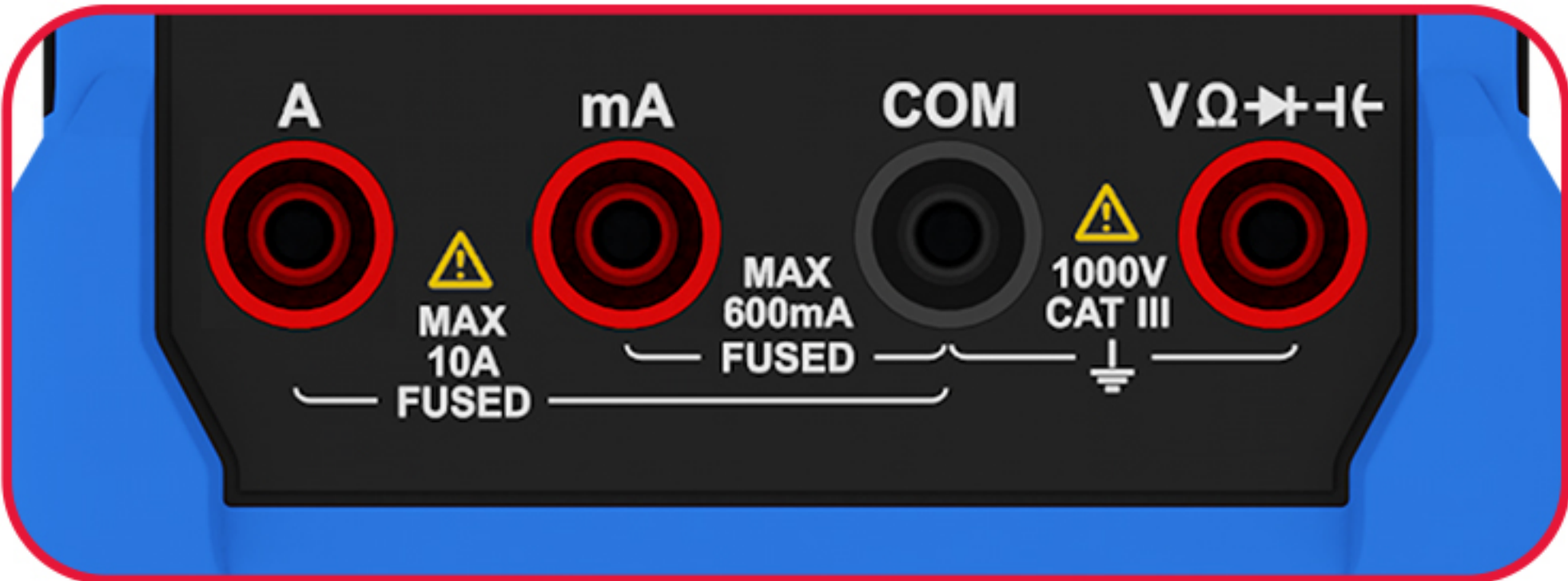
Charging



Cannot insert test leads



Not rechargeable



Test leads can be inserted

Accurate Measurement, Right at Your Fingertips



● 1 kHz Frequency
Oscilloscope Measurement



● 1 kΩ Resistance Measurement



● 10 mV Voltage Measurement



● 20 mA Current Measurement

Product performance parameters

MODEL: HDS120

Multimeter Specification

	Measurement Range	Accuracy
DC Voltage(V)	20.000mV	±(0.1%+20 dig)
	200.00mV	±(0.1%+6 dig)
	2.0000V/20.000V/200.00V	±(0.1%+5 dig)
	1000.0V	±(0.15%+5 dig)
AC Voltage (V)	20.000mV/200.00Mv/2.0000V/20.000V/200.00V	±(0.6%+10dig)
	750.00V	±(0.8%+10dig)
DC Current (A)	200.00uA	±(0.6%+10dig)
	2000.0uA	±(0.5%+10dig)
	20.000mA	±(0.6%+10dig)
	200.00mA	±(0.5%+10dig)
	2.0000A	±(1.0%+10dig)
	20.000A	±(2.0%+10dig)
AC Current (A)	200.00uA/2.0000mA	±(0.8%+10dig)
	20.000mA/200.00mA	
	2.0000A	±(1.5%+10dig)
	10.000A	±(2.5%+10dig)
Resistance(Ω)	200.00Ω	±(0.8%+10dig)
	2.0000kΩ/	±(0.3%+5dig)
	20.000kΩ/200.00kΩ/2.0000MΩ	±(0.3%+5dig)
	20.000MΩ	±(0.5%+10dig)
	100.00MΩ	±(5.0%+10dig)
Capacitance(F)	2.0000nF	±(5.0%+10dig)
	20.000nF/200.00nF/2.0000μF/20.000μF 200.00μF/2.0000mF/20.000mF	±(3.0%+10dig)
Frequency (Hz)	200.00Hz/2.0000kHz	±(0.1%+5dig)
	20.000kHz/200.00kHz/2.0000MHz/20.000MHz	
Duty Cycle	0.1%~99.9%(typical value: Vrms=1V,f=1kHz)	±(1.2%+3dig)
	0.1%~99.9%(≥1kHz)	±(2.5%+3dig)
Diode	3.0000V	±(1.0%+10dig)
On-Off	1000.0Ω	
Display	20000	

Oscilloscope Specification

Analog bandwidth	1MHz (only ACV scale)	Maximum sample	5.0Msps
Channel	1	Input impedance	≈10MΩ
Time base range	2.5uS~10S/div	Time base accuracy	± (0.01% + 0.1div)
Voltage vertical sensitivity range	30mV~500V/grid	Current vertical sensitivity range	100μA~5A/grid
Vertical amplitude accuracy	± (5% + 0.2div)	Measurement function	Vmax,Vmin,Vp-p,Vavg,Vrms,Hz
Maximum voltage limit	1000V DC+AC Peak value	Maximum current limit	15A DC+AC Peak value
Trigger mode	Auto/Normal/Single	Trigger edge	Rise edge/Fall edge
Autoset	Time base/Vertical amplitude/Trigger value		

Other Specification

Low battery indication	√	Sleep Mode	√	Relaive Measurement	√
Backlight	√	Input Protection	√	Input Impedance	≥10MΩ
Safety Compliance	CATⅢ1000V	LCD Size	2.8" LCD	Weight(without package)	0.35kg
Battery	18650	Dimension (L*W*H)	93mm x 41.5mm x 188mm		