

# Handheld instruments



AT-H is a series of handheld oscilloscopes and testers designed to meet the ever-developing needs of field service. AT-H series are compact, portable, stable, precision-oriented and easy to use, integrating many functions (like DSO, DMM, function generator) in just one instrument. By jointly utilizing different functions, AT-H series can create agile testing systems, making the service and repair more efficient.

This series can also be widely-used in home appliance repairing, education, industrial control testing, electronic assembly line, etc.

## AT-H501

25MHz digital storage oscilloscope.

6 ½ Auto-range digital multimeter.

DDS function generator: 10Hz ~ 156 kHz

60MΩ resistance test

(LCR) Frequency counter

## AT-H201

10MHz bandwidth digital storage oscilloscope , 50MSa/s

sample rate 4000 counts Digital multimeter with auto range

## AT-H150

50MHz digital storage oscilloscope

# Handheld Oscilloscope

## AT-H501 Five-in-One Handheld Tester

Oscilloscope/Signal generator/LCR electric bridge/Frequency counter/Multimeter



25MHz digital storage oscilloscope.

6 ½ Auto-range digital multimeter.

DDS function generator: 10Hz ~ 156 kHz

Frequency/duty ratio test : 60MHz

156kHz auto-range inductance test

Capacitance measurement range up to 66000μF

60MΩ resistance test (LCR)

Remote control / crystal oscillator test

## SUMMARY

AT-H510 is unique all-in-one multifunction test instrument comprise of 25MHz Single Channel Oscilloscope, 6000 count high precision Digital Multimeter, Function Generator, 60MΩ LCR Meter and Frequency counter. It has a large 3.8", 320 × 240 pixels LCD High Density Back-Lit Graphical display. Convenient and agile auto measure functions, with all measurement parameters adjustable.

In multimeter mode, both alternative current and voltage can be tested with one single probe input. No need to change probes. One single key-press can directly show the waveform of the signal. Capacitance measurement range up to 66000μF, and the measurement takes only a few seconds. Function signal output available, ranging from 10Hz to 156kHz. Real-time waveform is displayed simultaneously. Interturn short-circuit test available. High frequency test designed for small inductance.

It 's a compact and hand held size with re-chargeable battery makes it your ideal companion for the ideal for on-field operation. Measuring and testing just became easier and more affordable than ever!

## FEATURES

- Panel calibration technology. Calibrated data were stored in the memory, providing more accurate outcome.
- Alternative voltage bandwidth up to 20kHz.
- Max voltage range: 2000V. Waveform can be viewed simultaneously using a single key press.
- Peak-detect (P-D) and peak hold (P-H) function in voltage measurement. The max value, min value and current value are showed in the same screen.
- Oscilloscope mode can measure parameters include Vp-p, +Vp, -Vp, Hz, T, DV, Dt.
- DSO Features: Auto measurement, auto display and auto zero calibration, Save/recall, can store upto 40 waveforms.
- Multimeter: 200 DMM data; up to 200 groups of data can be automatically recorded. Convenient for IC in-circuit test.
- Function generator can generate Sine, Triangle, Sawtooth and Square wave.
- 200μs/400μS square wave can be utilized to test the ringing signal of interturn short-circuit.
- Display: 3.8", 320 × 240, LED back-lit, contrast adjustable.
- Built-in 1600mAh Ni-MH rechargeable battery and AC charger.
- USB interface and upper-computer software provided.
- Battery life: 5-6 hours
- External 10/1A switching power supply

# Handheld Oscilloscope

## AT-H501 Five-in-One Handheld Tester

### Specification

Digital Storage Oscilloscope	
Sampling Rate	100M Sample/Sec (Single Ch)
Bandwidth	DC~25MHz (X10 Probe) DC~6MHz (X1 Probe)
Mode	Normal, TV, Single Trig, Norm--Amplitude/Time Base, TV--TV-H, TV-V, Sync
Input	DC, AC
Input Impedance	1MOhm/20pF
	X, X10
Probe Select	X1, X10, X100
	300V p-p
A/D Converter	8-bit
	Positive Peak, Negative Peak, Peak-Peak, Frequency, Duty Cycle, TrueRMS
	20mV/div to 500V/div in 1, 2, 5 Steps
Sweep Rate	10ns/div to 1s/div
	(sinx) /x
Waveform storage	40sets

Graphical Digital Multimeter & LCR	
Maximum Counts	6600 counts
Auto Range AC/DCV	6V/60V/600V
Manual Range AC/DCV	600mV/6V/60V/600V
Frequency Response	40Hz to 50kHz (6V to 100V)
Auto Range AC/DCA	60mA/600mA and 10A(with Adaptor)
Frequency Response	40Hz to 5kHz

Graphical DMM Mode	
ACV	40Hz to 50kHz (Auto Range)
	40Hz to 20kHz
Resistance	600/6k/60k/600k/6M/60MOhm
	6n/60n/600n/6u/60u/600u/6m/60mF
Capacitance Test Time	<1.2 Sec (@6000uF)
	10u/100u/1m/10m/100m/2H
Resolution	0.1uH
	10Hz to 60MHz (500V rms)
Duty Cycle	10% to 94.9%

Signal Generator	
Signal Output Amplitude	4.6V p-p
Sine Wave	10Hz to 156kHz
Square Wave	10Hz to 156kHz (Duty cycle 1:1)
Triangle Wave	10Hz to 156kHz
	1kHz to 100kHz, Step 100Hz
Positive Saw Wave	10Hz to 156kHz
	10Hz to 156kHz
T Square Wave	(1)15625Hz (TV)
	(2) 1000Hz (Calibrate Signal)
	(3)200uS
	(4) 400uS (TV Transformer Test)
	10Hz to 100Hz, Step 1Hz
	100Hz to 1000Hz, Step 10Hz

Data Storage	
Storage Memory	200sets
Auto Storage Memory	200sets (Voltage)
Relative Mode	Ohm, Cap, A mode

Others	
Remote Control Test	38kHz Infrared Receiver
Crystal Oscillator Test	32kHz to 10MHz
Transistor hFE Test	30 to 1000
Backlight	White LED with Brightness Control
LCD Resolution	320x240 pixels
	75x58mm
LCD Contrast:	Manual Control

### Accessories Included

AT-H501	1
Multimeter probes	2
Oscilloscope probes	1
Signal Generator cable	1
LC test cable	1
Current Adapter	1
Charger	1
Triode/Crystal oscillator	1
USB cable	1
PC Software CD	1
User manual	1
Package bag	1

### Optional Accessories

Cell phone service accessories (including 2.4G frequency counter, power supply, etc. Signal field intensity test and other tests can be performed.)

Household appliances service accessories (color TV signal generator, and color display signal generator)

High voltage/big current test accessories (High voltage probe, clamp)

# Handheld Oscilloscope

## AT-H201 Scope Meter



- 10MHz bandwidth digital storage oscilloscope
- 50MSa/s sample rate,
- 4000 counts Digital multimeter with auto range
- One keypress leads to easy switch between DMM and DSO, allowing you to view voltage/current waveform directly.

### SUMMARY

AT-H201 is a handheld oscilloscope designed to meet the needs of on- site testing and diagnosis. It combines all functions of a digital multimeter and a 10MHz oscilloscope. The small size makes it very suitable for household appliances servicing and industrial control testing.

### FEATURES

- Software calibration. Calibrated data were stored in the memory.
- Soft silicon gel keypad. Easy operation.
- DMM functions: DC/AC true RMS value, resistance, capacitance, frequency, duty cycle, dBm, Continuity and Diode test
- Alternative voltage bandwidth up to 20kHz. The max value, min value and current value are showed in the same screen
- DSO : V/div and t/div can be set automatically and manually.
- DSO trigger mode: auto, normal, single.
- DSO auto measure function, with Vp-p, Vavg, Vrms, dBm readings.
- Data hold function. Save/recall up to 100 waveforms and DMM data.
- Contrast adjustable, LED back-lit display.
- Auto power off function. Standby time adjustable, from 5 mins to 60 mins.
- lithium polymer rechargeable battery and external AC charger.
- USB interface and upper-computer software provided
- Battery life : 8 hours



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