

# Micsig<sup>®</sup>

## Tablet Oscilloscope Innovator

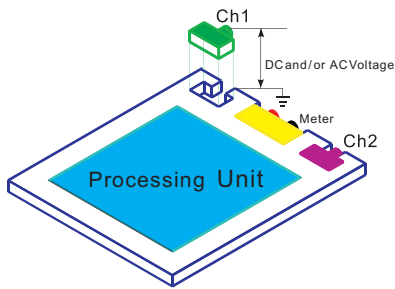
### Handheld Multifunctional Oscilloscope MS500 Series(Isolated)



- 5.7 inches TFT LCD touch screen, 640\*480 high resolution
- 100MHz/200MHz selectable bandwidth
- 1GSa/s real-time sampling rate, 240Kpts memory depth
- Two electrically isolated and floating oscilloscope inputs
- Up to 190,000wfms/s max capture rate
- Integrate the functions of oscilloscope, multi-meter and recorder
- Support serial bus trigger and decode for UART/RS232/RS422/RS485, LIN, CAN, SPI, I2C
- Support various video triggers for PAL,NTSC,SECAM and HD video trigger for 720P,1080I,1080P
- Full real-time remote control and data transfer via Micsig ScopeSuite Software
- Support I/O interface of USB Slave and USB Host
- Support indoor and outdoor view modes
- Up to 4~5H Li-ion battery persistence working time
- Quick Help support

**SETUP**  
E L E C T R Ó N I C A

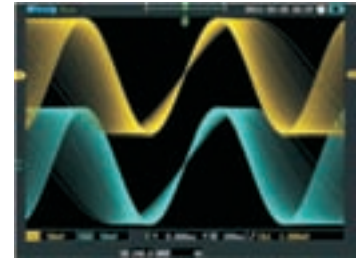
# ◆ Features



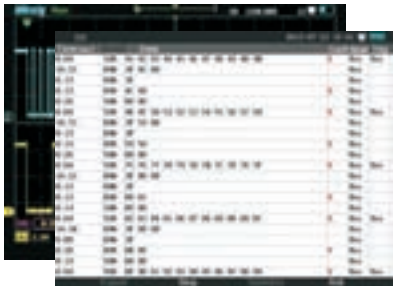
Three isolated inputs include two oscilloscope inputs and one multi-meter input, and all isolated inputs allows independent floating measurements with each input.



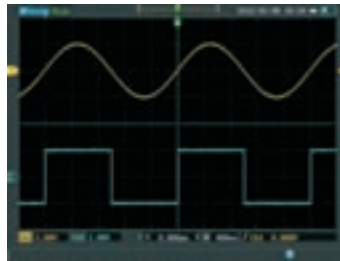
There operation ways : touch ,button and scroll wheel



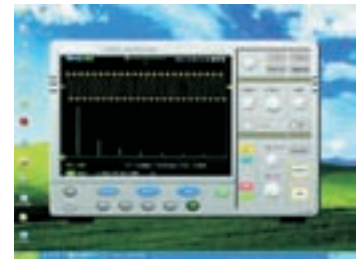
640\*480 high resolution



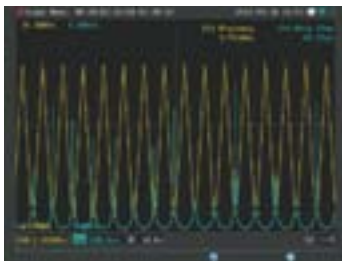
I2C serial bus decoding graphic mode and text mode



Connect to flask disk for dynamic recording



The functions of Micsig's ScopeSuite software include upgrading, real time control, measurement, storage, dynamic display, record, and data analysis.



3 types of record modes: multimeter record, oscilloscope measurement record and oscilloscope waveform record.



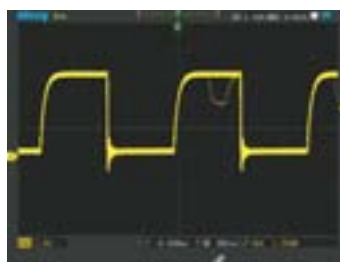
13 physical measurements such as AC/DC voltage, current, resistance etc.



Support various video triggers for PAL,NTSC,SECAM and HD vedio trigger for 720P,1080I,1080P



31 types auto measurements



High refresh rate oscilloscope



Horizontal cursor, vertical cursor, cross cursor

| General information              |  |        |         |         |
|----------------------------------|--|--------|---------|---------|
| Bandwidth                        | 100MHz   |        | 200MHz  |         |
| Model                            | MS510IT  | MS510S | MS520IT | MS520S  |
| Rise-time                        | ≤3.5ns   | ≤3.5ns | ≤1.75ns | ≤1.75ns |
| Isolated channel                 | Support  |        |         |         |
| Real-time sampling rate          | Single channel :1GSa/s,dual channels:500MSa/s  |        |         |         |
| Max waveform capture rate        | 190,000 wfms/s   |        |         |         |
| Serial bus trigger and decode    | Support  |        |         |         |
| Memory depth                     | 240Kpts  |        |         |         |
| Display                          |  |        |         |         |
| Screen                           | 5.7 inches TFT LCD Touch screen  |        |         |         |
| Display resolution               | 640*480  |        |         |         |
| Display range                    | 12*8   |        |         |         |
| Format                           | YT mode or XY mode   |        |         |         |
| Persistence                      | Auto ,100ms-10s ,or ∞  |        |         |         |
| Vertical system                  |  |        |         |         |
| Channels                         | 2 isolated oscilloscope channels,1 multimeter channel  |        |         |         |
| Limited bandwidth                | 20MHz  |        |         |         |
| Coupling modes                   | DC ,AC ,GND  |        |         |         |
| Input impedance                  | Parallel 1MΩ±1% with 15pF±3pF  |        |         |         |
| Vertical scale                   | 5mV/div~50V/div  |        |         |         |
| Vertical resolution              | 8bit   |        |         |         |
| Max voltage input                | 600V CAT II 300V CAT III   |        |         |         |
| Floating voltage from CHs to GND | 1000V CAT II 600V CAT III  |        |         |         |
| DC vertical gain accuracy        | 5mV/div~50V/div,±2%  |        |         |         |
| Horizontal system                |  |        |         |         |
| Timebase                         | 2ns/div~10s/div  |        |         |         |
| Timebase delay range             | -12divs~50s  |        |         |         |
| Timebase accuracy                | 20ppm  |        |         |         |
| Sample mode                      | Normal,average, pk-pk,envelope   |        |         |         |
| Dynamic record                   | Max 2 hours  |        |         |         |
| Store waveform                   | support internal waveform storage and flash disk storage   |        |         |         |
| Trigger system                   |  |        |         |         |
| Trigger types                    | Edge, pulse, logic, video (PAL,NTSC,SECAM,720P,1080I,1080P) Serial bus(UART,LIN,CAN,SPI,I2C,1553B,429) |        |         |         |
| Trigger coupling                 | DC,AC,High-frequency suppression,Low-frequency suppression, Noise suppression                          |        |         |         |
| Trigger modes                    | Auto, normal, single   |        |         |         |
| Inhibition range                 | 200ns-10s  |        |         |         |
| Math                             | +, -, *, /, FFT  |        |         |         |
| Multimeter                       |  |        |         |         |
| Measurement types                | 13 physical measurements ,such as voltage, current, resistance, capacitance, diode , etc.              |        |         |         |
| Measurement accuracy             | 4 bits   |        |         |         |
| Measurement display              | Max, average, min, values with time stamp,relative measurement   |        |         |         |
| Other information                |  |        |         |         |
| Interface                        | USB HOST , USB SLAVE (Connect to PC)   |        |         |         |
| Power adapter                    | Input:100-240V AC, 50-60Hz ,Output:12V DC,5A   |        |         |         |
| Battery                          | Capacity 7.4V/6000mAh, work time:4~5 hours   |        |         |         |
| Temperature/Humidity             | -20°C~+50°C,<85%RH   |        |         |         |
| Size                             | 254mmx160mmx60mm   |        |         |         |
| Weight                           | Main unit: 1380g accessories: 691g battery:276g  |        |         |         |

## Standard Accessories

| Items   | Description                  | Items   | Description   |
|---|------------------------------|---|---|
|  | 250MHz, 10X probe            |  | Power adapter:<br>Input:100-240V AC, 50-60Hz,<br>Output:12V DC,5A |
|  | Multimeter table pen line    |  | USB cable : Mini USB2.0   |
|  | 7.4V/6000mAh lithium battery |  | Basic ScopeSuite Software   |

## Optional Accessories

| Items  | Model No.  | Description  |
|--|------------|--|
|  ScopeSuite Software        | MS-UM-A002 | Full Function Scopesuite Software                        |
|  Handbag                    | MS-HB-S001 | Dimension : 300mmX410mmX130mm                            |
|  Suitcase                 | MS-SC-S001 | WR-16 ABS anti-pressure seal suitcase                    |
|  Li-ion battery           | MS-BA-S900 | 7.4V/9000mAh Li-ion battery                              |
|  Active probe             | MS-PR-2010 | 1GHz Active probe  |
|  HF current probe         | MS-G105    | DC: ~50MHz   |
|  | MS-G110    | DC: ~100MHz  |
|  AC/DC Current clamp      | MS-V502    | AC/DC 200A/20A   |
|  | MS-V601    | AC/DC 600A   |
|  | MS-V701    | AC/DC 400mA-4A-30A                                       |
|  Serial bus decode module | MS-UART    | Support UART/RS232/RS422/RS485, Graphic and Text display |
|  | MS-LIN     | Support LIN, Graphic and Text display                    |
|  | MS-CAN     | Support CAN, Graphic and Text display                    |
|  | MS-SPI     | Support SPI, Graphic and Text display                    |
|  | MS-I2C     | Support I2C, Graphic and Text display                    |