



Tablet Oscilloscope tBook Series



70M~1GHz
Bandwidth

1~5
GSa/s

9~450
Mpts

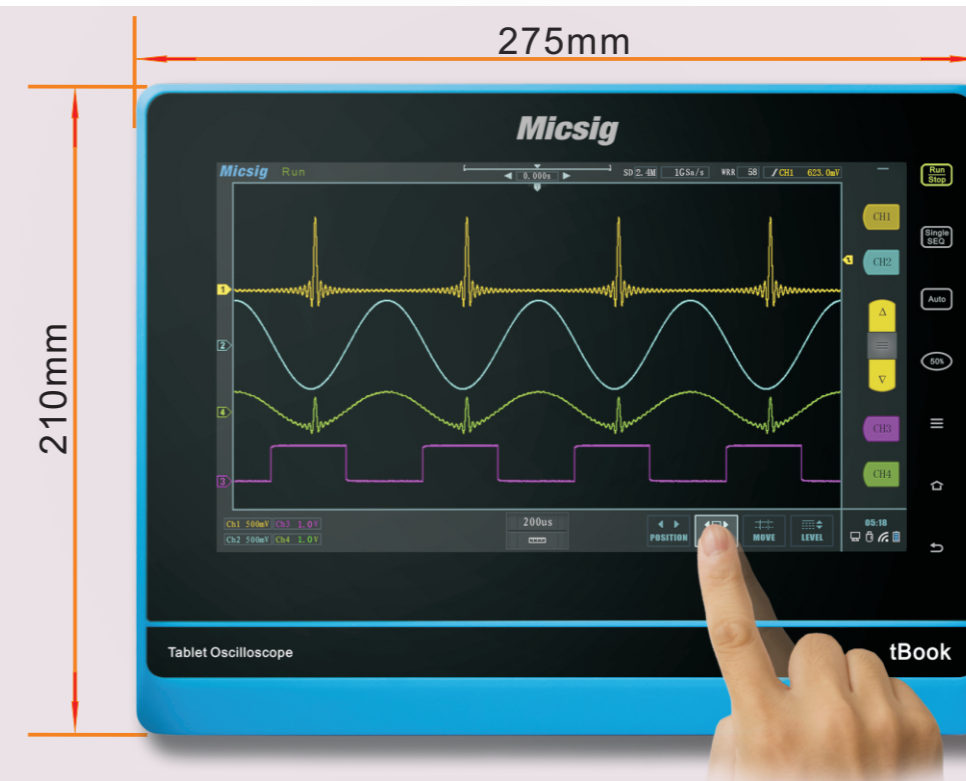
200,000
wfms/s

2/4
Channels

Micsig tablet oscilloscope tBook series is the world's first full touch digital oscilloscope. Up to 1 GHz Bandwidth and up to 5GSa / s sampling rate ensure you have the performance you need. It aims to meet all kinds of requirements of the largest digital oscilloscope market segment from the communications, semiconductor, computing, aerospace defense, instrumentation, research/education, industrial electronics, consumer electronics and automotive industries with excellent technology and industry leading specifications.

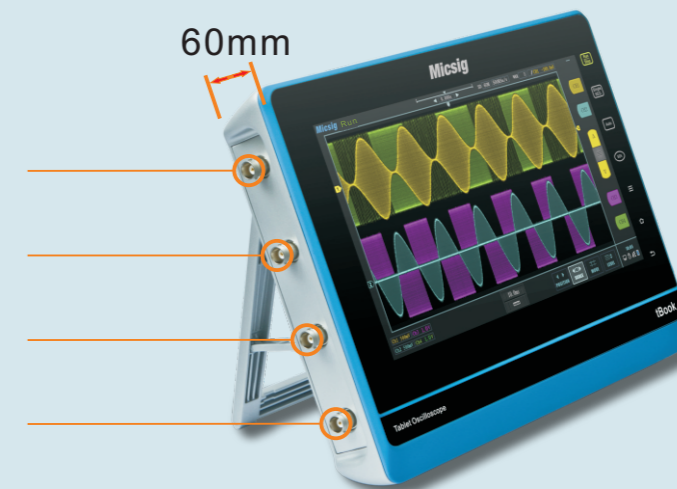
Features and Benefits

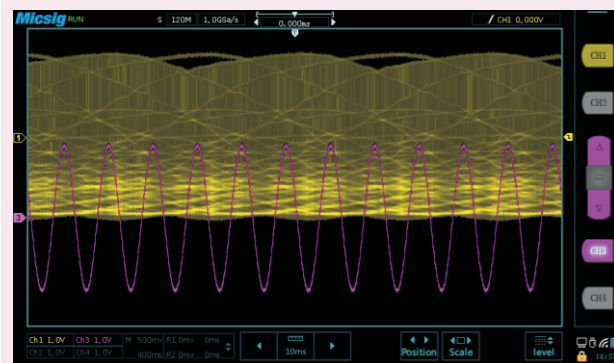
- ★ 10.1" LCD full touch screen, up to 1024 * 600 high resolution
- ★ Ultra-thin body with 1.77 KG only
- ★ Select from 70MHz, 100MHz, 150MHz, 200MHz, 300MHz, 350MHz, 500MHz, 600MHz, 1GHz bandwidth models
- ★ Two or four optional isolated channels
- ★ 1 to 5GSa / s real time sampling rate
- ★ Up to 200,000wfms/s max waveform capture rate
- ★ 8 hours continuous battery life
- ★ Up to 450 Mpts memory depth
- ★ Adjust the viewing mode with different brightness Automatically
- ★ Support UART, LIN, CAN, SPI, I2C, I2S, 1553B, and 429 serial bus triggering and decoding
- ★ Support WIFI, LAN, USB2.0 connectivity and HD video analysis
- ★ Integration of 5^{1/2} and 6^{1/2} high-precision multimeter, recorder and function waveform generator



60mm

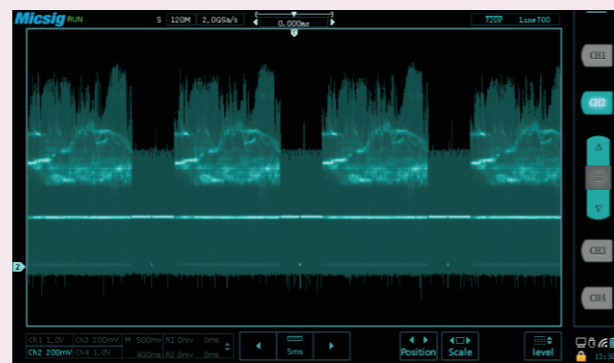
Four isolated inputs (optional), and all isolated input allows independent floating measurements with each input.





3-D waveform display

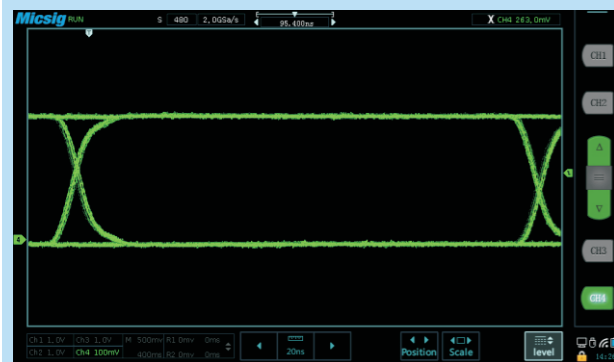
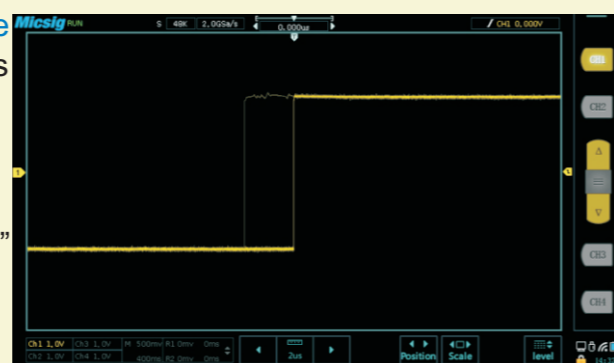
3-D display function redefines the waveform display, oscilloscope counts every data in order to display them with different colors or brightness, so that 2-D display (time and amplitude) turn into 3-D display (plus dimension of signal frequency), which becomes clear to distinguish the occasional signals, and provides an excellent visual effect. Support HD trigger for PAL, NTSC, SECAM, 720P, 1080I options 1080P (optional).



HD trigger

Up to 200K wfirms/s waveform capture rate

Waveform capture rate offers how many waveforms display in a minute, "Dead zone" of oscilloscope is the time of processing and displaying the waveform which have been captured, during the time oscilloscope sacrifices any waveforms. The time of "dead zone" is far more than "display zone" for common oscilloscope, which results to signals can not be displayed in most time, so abnormal signals escaped. High capture rate oscilloscope reduces the "dead zone" time, and abnormal signals can be caught fast and accurately

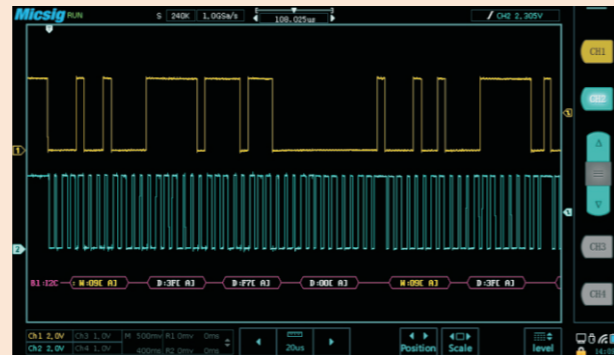


Eye pattern mode

A perfect eye pattern contains an immense amount of parametric information about a signal, it gives you a visual indication of overall signal quality, noise level and signal jitter without looking at the data content. It finds errors like improper cable connections, bad contacts, incorrect grounding and missing or superfluous terminators.

Serial bus trigger and decode

Waveform and data can be got in graphic mode: while in text mode, address, ID, data, examination which makes up the frame are classified, Also frame type and mistake can be satisfied, which helps users to debug and analyze the serial bus easier, and waveform data can be transferred to a PC by a flash disk.



Tablet Oscilloscope tBook series specification

| Item | Description |
|--------------------------------|---|
| Bandwidth | 70MHz, 100MHz, 150MHz, 200MHz, 300MHz, 350MHz, 500MHz, 600MHz, 1GHz |
| Real time sample rate | 1GSa/s~5GSa/s |
| Memory depth | 18~450M single channel, 9~225M dual channel |
| Channels | 2 or 4 |
| Rise time | ≤5ns~≤350ps |
| Vertical system | |
| Bandwidth limited | 200MHz, 20MHz |
| Input coupling | DC, AC, GND |
| Input impedance | 1MΩ±1%≈15pF±3 pF |
| Vertical scale | 2mV/div~5V/div |
| Vertical resolution | 8 bit |
| Probe | 1mX~1kX, 1~2~5 step by step |
| Maximum input voltage | 300V CAT III |
| Isolated channel voltage | 1000V CAT II 600V CAT III |
| DC vertical offset accuracy | 2mV/div~10V/div, ±2.0% |
| Trigger system | |
| Trigger types | Edge, Pulse, Short pulse, Logic, Serial data (UART, LIN, CAN, SPI, I2C, 1553B, 429) |
| Video trigger software options | PAL, NTSC, SECAM, 720P, 1080I, 1080P |
| Coupling modes | DC, AC, HF Rej, LF Rej, Noise Rej |
| Trigger modes | Auto, normal, single |
| Trigger source | CH1, CH2, CH3, CH4 |
| Inhibition time | 200ns~10s |
| Display | |
| Screen | 10.1 inches TFT LCD capacitive touch screen |
| Resolution | 1024*600 |
| Backlight | 500 (250) |
| Diagram | 18*10 |
| Grayscale | 128 |
| Persist | auto, 100ms~10s or ∞ |
| Language | Simple Chinese, English |
| I/O port | |
| Mini USB2.0 | connect to PC |
| USB2.0 | U disk, mouse, button, wireless mouse |
| WiFi | support 802.11b/g/n, up to 150Mbps |
| Record | |
| Display ways | Full Screen, Roll |
| Record time base | 10us/div~2min/div |
| File size | ≤4G |
| Size | |
| Dimension | 275*210*60mm |
| Weight | Main unit: 1770g, accessories: 420g, battery: 276g |

| Item | Description |
|----------------------------|--|
| Automatic measurements | 31. Measurements include: Period, Frequency, Delay, Rise Time, Fall Time, Positive Duty Cycle, Negative Duty Cycle, Positive Pulse Width, Negative Pulse Width, Burst Width, Phase, Positive Overshoot, Negative Overshoot, Peak to Peak, Amplitude, High, Low, Max, Min, Mean, Cycle Mean, RMS, Cycle RMS |
| Cursor | Vertical cursor, horizontal cursor, cross cursor |
| Horizontal system | |
| Time base range | 200ps/div~1000s/div |
| Time base delay time range | -12div~12ks |
| Acquisition Modes | Normal, average, peak, envelop |
| Time base accuracy | 20ppm |
| Display mode | XY, YT, Roll |
| XY format | 2 simultaneous |
| Math functions | |
| Operator | +, -, *, / |
| FFT | Rectangular, Hamming, Hanning, or Blackman-Harris |
| Storage | |
| Storage | Tablet oscilloscope, USB Device, PC |
| Storage format | CSV, waveform, jpg |
| Reference waveform | ≤4 |
| Waveform setting | 4 sets |
| Dynamic record time | ≤2H |
| Power | |
| Power adapter | Input: 100-240V, 50-60Hz, 2A; Output: 12VDC, 5A |
| Battery | 7.4V/9000mAh, Life time 4~8h |
| Charging time | <5h |
| Power consumption | ≤15W |
| Environment | |
| Operating temperature | -20°C~+50°C |
| Operating humidity | <95%RH |
| Operating altitude | <3000m |
| Storage altitude | <12000m |
| Probe | |
| Operating voltage | CAT III 300V, CAT II 600V |
| Attenuation factors | 10X |
| Input capacitance | 13pF |
| Matched oscilloscope scale | 10pF~30pF |
| Input impedance | 10MΩ±1% |
| Frequency scale | DC~250MHz |
| Rise time | 1ns |
| Cable length | 1200mm |

Micsig Tablet Oscilloscope-tBook Series Model Index

| Model | TO72 | TO74 | TO102 | TO104 | TO152 | TO154 | TO202 | TO204 | TO302 | TO304 | TO352 | TO354 | TO502 | TO504 | TO602 | TO604 | TO1002 | TO1004 |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|--------|--------|-----------|--------------------|-----------|-----------|-----------|-----------|
| Bandwidth | 70M | 70M | 100M | 100M | 150M | 150M | 200M | 200M | 300M | 300M | 350M | 350M | 500M | 500M | 600M | 600M | 1G | 1G |
| Channels | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 |
| Real time sample rate | 1G/500M | 1G/500M | 1G/500M | 1G/500M | 1G/500M | 1G/500M | 1G/500M | 1G/500M | 1.5G/750M | 1.5G/750M | 2G/1G | 2G/1G | 5G/2.5G | 5G/2.5G/ 1.25G | 5G/2.5G | 5G/2.5G | 5G/2.5G | 5G/2.5G |
| Optional sample rate | — | — | — | — | — | — | — | — | 2G/1G | 2G/1G | — | — | — | — | — | — | — | — |
| Memory depth | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 18M/9M | 45M/22.5M | 90M/45M/ /22.5M | 45M/22.5M | 45M/22.5M | 45M/22.5M | 45M/22.5M |

Software Package/Software Options

| | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Isolated Inputs | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | — | — | — | — | — | — |
| 3D Waveform Display | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| High Capture Rate | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Low Pulse Trigger | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Slope Trigger | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Video Trigger | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| Pass Comparasion Test | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| WiFi | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| Built-in Storage | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G | 4-32G |
| Light Sensor | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| Built-in Battery | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| Android System | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| Serial Data Trigger | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| Probe Calibration SignalOutput | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| 5½ 6½ multiMeter | optional | — | optional | — | optional | — | optional | — | optional | — | optional | — | optional | — | optional | — | optional | — | |
| Logger | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional | optional |
| Function Generator | optional | — | optional | — | optional | — | optional | — | optional | — | optional | — | optional | — | optional | — | optional | — | |
| Dimension | 275mm*210mm*60mm | | | | | | | | | | | | | | | | | | |
| Display | 10.1 inches TFT LCD Full touch | | | | | | | | | | | | | | | | | | |
| Resolution | 1024*600 | | | | | | | | | | | | | | | | | | |

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