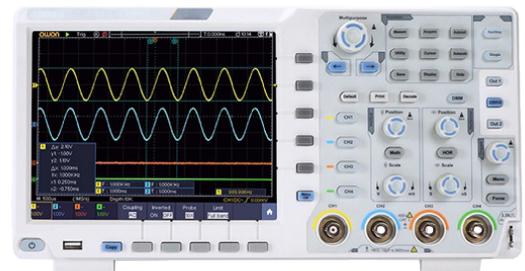


## Features

- 200MHz Bandwidth, 1GS/s sample rate
- 14-bit high resolution ADC
- 40M record length 70,000 wfms/s waveform refresh rate
- Low back ground noise

## Applications

- Electronic circuit debugging
- Education and training
- Circuit testing
- Design and manufacture
- Automobile maintenance and testing



**Model P4025T Datasheet v1.0**  
200 MHz Touch Screen Oscilloscope

# Model P4025T Touchscreen Oscilloscope

# Model P4025T

## Description

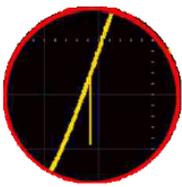
The Model P4025T is a 200 MHz digital oscilloscope packed with measurement modes and features. The display doubles as a touchscreen allowing hand gestures like zooming in on a waveform. The Model P4025T offers 4 independent channels.

## Key Features of the P4025T

The P4025T introduces 14 bits hardware ADC, the precision is 64 times against other oscilloscope on market. It can observe the signal low down to 31.25µV/div.



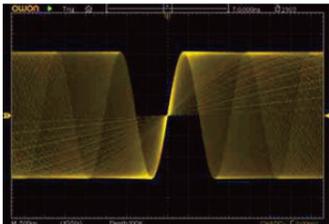
- Platform - restore the waveform detail fully



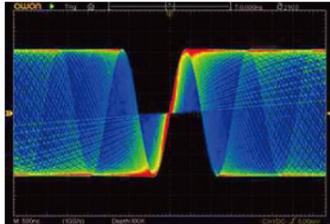
M Bus Type
RS232
I2C
SPI
CAN
UART

M TrigMode
Edge
Video
Pulse
Slope
Runt
Nth Edge
Windows
Logic

- Multi-level grayscale, and color temperature display



within certain unit time, more frequent one waveform pixel appears, more vivid it is



the frequency of waveform reflecting in color temperature value, larger the value is, more frequent the waveform appears

## Model P4025T Touchscreen Oscilloscope

### Key Features of the P4025T Cont.

- Multi-trigger supported - Logic, Time-out, I2C, SPI, RS232, Runt, Windows, Nth Edge, and CAN
- Serial bus coding available in I2C, SPI, RS232, and CAN.
- Built-in multimeter module, with auto-scale, and data logging function
- Built-in dual-channel 25MHz / 50MHz arbitrary waveform generator module, with sample rate of 125MS/s / 250MS/s
- Its built-in WiFi module facilitates mobile device connecting with XDS series product, to get access to remote control, together with simultaneous measurement result display
- Its multi-point touch function improves operation efficiency considerably
- Optional battery makes floating measurement possible, advancing the operation convenience

### Performance Specifications

Bandwidth	200 MHz
Sample Rate	1GS/s
Vertical Resolution (A/D)	14 bits
Record Length	40 M
Waveform Refresh Rate	75,000 wfms/s
Horizontal Scale (s/div)	2ns/div, 1000 step by 1 - 2 - 5
Rise Time (at input typical)	≤1.7ns
Channel	4
Display	8" color LCD, 800 x 600 pixels display
Input Impedance	1MΩ ± 2%, in parallel with 15pF ± 5pF
Channel Isolation	50Hz : 100 : 1, 10MHz : 40 : 1
Max Input Voltage	1MΩ ≤ 300Vrms;
DC Gain Accuracy	±3%
DC Accuracy	average ≥ 16: ±(3% reading + 0.05 div) for ΔV
Probe Attenuation Factor	0.001X - 1000X, step by 1 - 2 - 5
LF Respond (AC, -3dB)	≥5Hz
Sample Rate / Relay Time Accuracy	±2.5ppm
Interpolation	(sinx) / x, x



# Model P4025T

## Model P4025T Touchscreen Oscilloscope

### Performance Specifications Cont.

Interval ( $\Delta T$ ) Accuracy (full bandwidth)	Single: $\pm(1 \text{ interval time} + 1 \text{ ppm} \times \text{reading} + 0.6 \text{ ns})$ ; Average > 16: $\pm(1 \text{ interval time} + 1 \text{ ppm} \times \text{reading} + 0.4 \text{ ns})$	
Input Coupling	DC, AC, and GND	
Vertical Sensitivity	1mV/div - 10V/div (at input)	
Trigger Type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I <sup>2</sup> C, SPI, RS232, and CAN (optional)	
Bus Decoding	I <sup>2</sup> C, SPI, RS232, and CAN (optional)	
Trigger Mode	Auto, Normal, and Single	
Vertical Range	$\pm 2 \text{ V}$ ( 1mV/div - 50mV/div), $\pm 20 \text{ V}$ ( 100mV/div - 1V/div), $\pm 200 \text{ V}$ (2V/div - 10V/div)	
Line / Field Frequency (video)	NTSC, PAL and SECAM standard	
Cursor Measurement	$\Delta V$ , and $\Delta T$ between cursors, $\Delta V$ and $\Delta T$ between cursors, and auto-cursors	
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Peak RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, Duty Cycle, Delay A→B ↑, Delay A→B ↓, +Pulse Count, -Pulse Count, Rise Edge Count, Fall Edge Count	
Waveform Math	+, -, ×, ÷, FFT	
Waveform Storage	100 waveforms	
Lissajou's Figure	Bandwidth	full bandwidth
	Phase Difference	$\pm 3$ degrees
Communication Interface	USB host, USB device, USB port for PictBridge, Trig Out (P/F), LAN, and VGA (optional)	
Frequency Counter	available	
Power Supply	100V - 240V AC, 50/60Hz, CAT II	
Fuse	2A, T class, 250V	
Battery (optional)	3.7V, 13200mAh	
Dimensions (W × H × D)	340 x 177 x 90 mm	
Device Weight	2.60 kg	