

INTRODUCTION

Experience the next level of precision and versatility with the new Metravi DSO-6100 and DSO-6100AWG Digital Storage Oscilloscopes. Designed to meet the evolving needs of professionals and engineers, these dual-channel oscilloscopes combine cutting-edge technology with user-friendly features.

Equipped with an optional 25 MHz signal generator*, these models offer bandwidth of 100 MHz, ensuring exceptional signal fidelity and performance for a wide range of applications.

With a dual-channel, independent, real-time sampling rate of 1 GS/s and a memory depth of 20M, the DSO-6100 (2025 Model) series deliver unparalleled accuracy and data retention.

These instruments are enhanced by 30 automatic waveform measurements, a 6-digit high-precision frequency counter, and powerful FFT spectrum analysis capabilities.

Featuring a vibrant 7-inch TFT LCD display, the oscilloscopes ensure crystal-clear visualisation, making waveform analysis more intuitive and efficient.



USB



USB

USB Host and USB Device
Communication Interface.



SCPI



LabVIEW

Supports SCPI and LabVIEW.

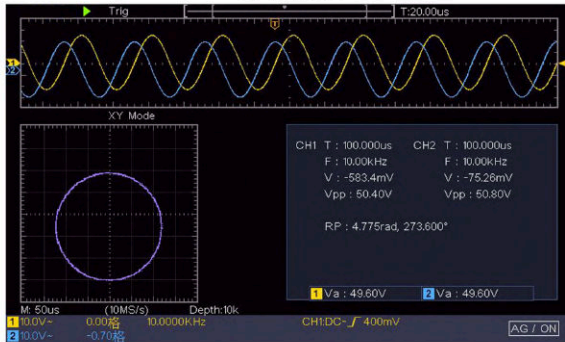
FEATURES

- Dual-channel Oscilloscope
- Built-in 25MHz Signal Generator (DSO-6100AWG)
- 100MHz bandwidth
- Dual-channel independent 1GS/s real-time sampling rate
- 20M memory depth
- Support 30 Automatic Waveform Measurements
- 6-digit High-precision Frequency Counter
- FFT Spectrum Analysis
- Communicate with PC via USB Device interface
- Supports SCPI and LabVIEW functions
- Free computer software & some programming development demos
- Remotely control instrument & conduct secondary development
- 7-inch TFT LCD display

*Technical Specifications & Appearance are subject to change without prior notice

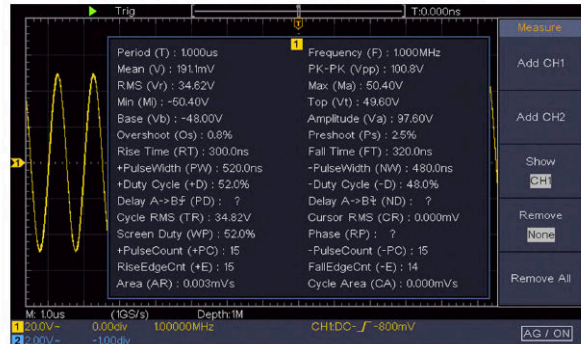
FUNCTIONS

X-Y Mode



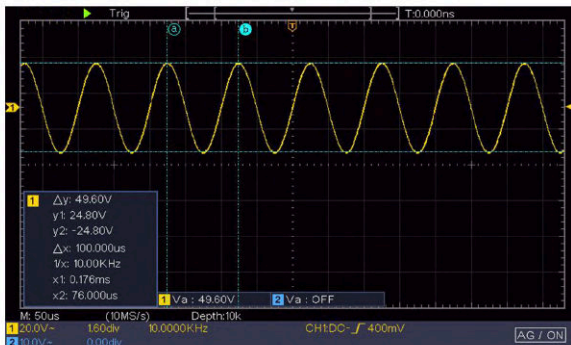
Three-screen display for easy phase and component characteristic testing.

30 Automatic Waveform Measurements



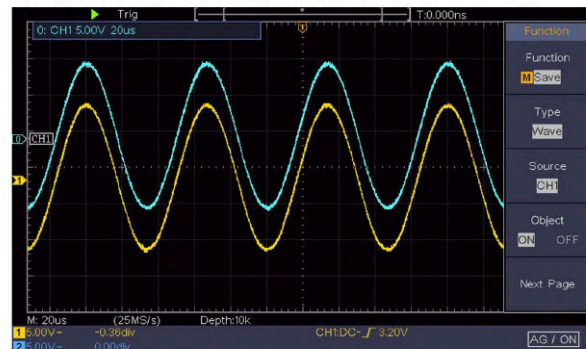
Covering time values, counts, delay and phase values, amplitude values, and more.

Cursor Measurement



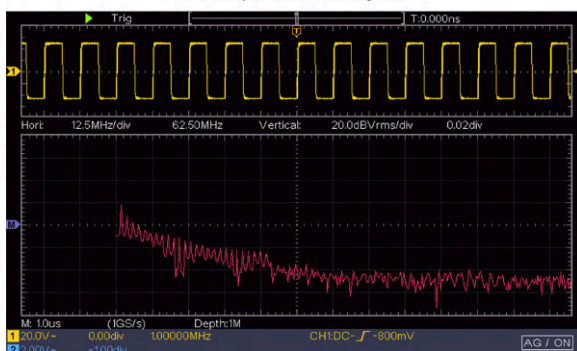
The cursor enables measurement of both X-axis(time) and Y-axis(voltage) values of the waveform, and supports all "auto-measurement" parameters.

Save / Recall



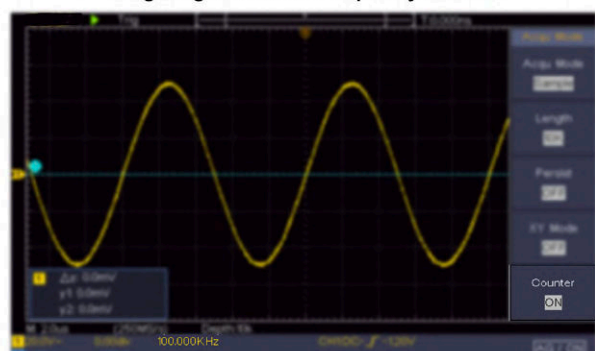
Save and recall various data formats including waveforms, reference waveforms, CSV files, and images for comparative analysis.

FFT Spectrum Analysis



FFT converts time-domain signals into frequency-domain components, helping you measure harmonics, distortion, noise, and vibration in your system.

6 Digit High Precision Frequency Counter



The oscilloscope's built-in frequency counter accurately measures input signals using CH1 or CH2 as the measurement source with a 6-digit display.

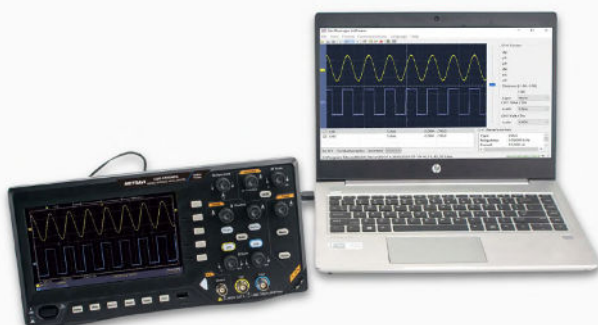
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TECHNICAL SPECIFICATIONS

Bandwidth	100MHz
Channels	Dual Channel (2)
Acquisition	
Mode	Normal, Peak detect, Averaging
Sample Rate (real time)	1 GS/s
Input	
Input coupling	DC, AC , Ground
Input impedance	1 MΩ±2%, in parallel with 12 pF±5 pF
Probe Attenuation Factor	1X, 10X, 100X, 1000X
Max. input voltage	400V (DC+AC, PK - PK)
Channel –channel Isolation	50Hz: 100 : 1
	10MHz: 40 : 1
Time delay between channel (typical)	150ps
Bandwidth limit	20 MHz, full bandwidth
Measurement	
Cursor	ΔV, ΔT, ΔT&ΔV between cursors, auto cursor
Automatic	Period, Frequency, Mean, PK-PK, RMS, Max, Min, Top, Base, Amplitude, Overshoot, Preshoot, Rise Time, Fall Time, +PulseWidth, -PulseWidth, +Duty Cycle, -Duty Cycle, Delay A→B , Delay A→B , Cycle RMS, Cursor RMS, Screen Duty, Phase, +PulseCount, -PulseCount, RiseEdgeCnt, FallEdgeCnt, Area, and Cycle Area.
Waveform Math	+, -, *, / ,FFT
Waveform Storage	16 waveforms
Communication	
Port	USB 2.0

Supports Remote Control & Secondary Development

Communicate with PC via USB Device interface, support SCPI and LabVIEW functions, provide free computer software and some programming development demos, so you can remotely control the instrument and conduct secondary development.



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TECHNICAL SPECIFICATIONS

Waveform Generator (only for DSO-6100AWG)	
Standard Waveforms	Sine wave, square wave, ramp wave, pulse wave, arbitrary wave
Arbitrary Waveforms	Sinc, exponential rise, exponential decline, Gaussian more than 160 kinds
Sine Wave	0.1Hz~25MHz
Square Wave	0.1Hz~5MHz
Ramp Wave	0.1Hz~1MHz
Pulse Wave	0.1Hz~5MHz
Arbitrary Wave	0.1Hz~5MHz
Bandwidth	25MHz
Real-time Sampling Rate	125MSa/s
Amplitude (50Ω)	0.005Vpp ~ 3Vpp
Dc Offset Range (High Z)	±(3V – amplitude Vpp/2)
Frequency Resolution	0.01%
Channel	1
Length	8k
Vertical Resolution	14 bit
Output Impedance	50Ω (typical)



**Built-in
Arbitrary Waveform
Generator**

25MHz; 125MSa/s; 8k
5 mVpp to 3Vpp (50Ω)

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GENERAL SPECIFICATIONS

Display	
Type	7" Colour LCD
Resolution	800 (Horizontal) × 480 (Vertical) pixels
Colours	65536 colors, TFT screen
Output of the Probe Compensator	
Output Voltage (typical)	About 5 V, with the Peak-to-Peak voltage $\geq 1 \text{ M}\Omega$
Frequency (typical)	Square wave of 1 KHz
Power	
Mains Voltage	100 - 240 VACRMS, 50/60 Hz, CAT II
Power Consumption	< 16W
Fuse	2A, T class, 250V
Environment	
Temperature	Operating temperature 0° to 40°C Storage Temperature -20° to 60°C
Humidity	$\leq 90\%RH$
Altitude	Operating 3000m Non-operating 15000m
Cooling Method	Natural cooling
Mechanical	
Dimensions	301 mm× 152 mm×70 mm (LxHxW)
Weight	About 1.1 kg
Calibration	
Interval Period of Adjustment	One year is recommended for the calibration interval period

ACCESSORIES



Power Cord



Manual



USB Cable



Probe



Probe Adjust



BNC Cable**

**only with DSO-6100AWG

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