

8" 12-bit
high resolution ADC

20M Record Length

55,000 wfms/s
refresh rate

2-CH
bandwidth: 100 MHz
Sample Rate: 1Gsa/s

high resolution ADC **DS 2102A**

High Resolution increases the value of an oscilloscope

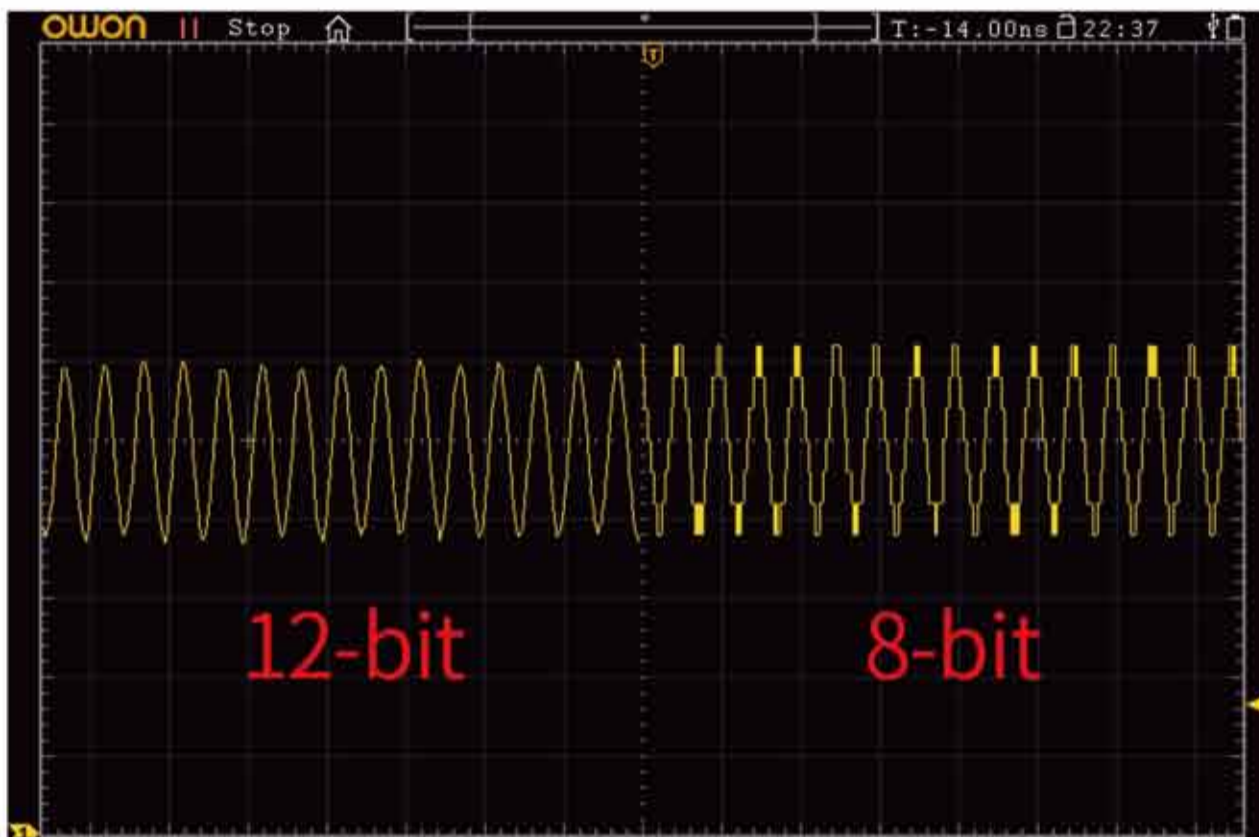
The first digital oscilloscope used a 5 - inch display. The 8 - bit ADC used with its 256 points just matched the screen resolution.

These days, even though the screen size and resolution has greatly increased, many manufacturers still only use 8 - bit ADC's with interpolation to give a smooth display. The OWON XDS2102A uses an 8 - inch display and a 12 - bit hardware ADC providing 16 times the precision and detail over an 8 - bit device.

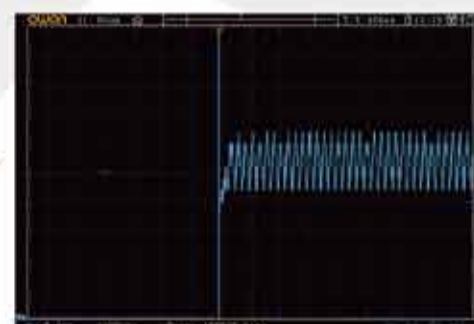
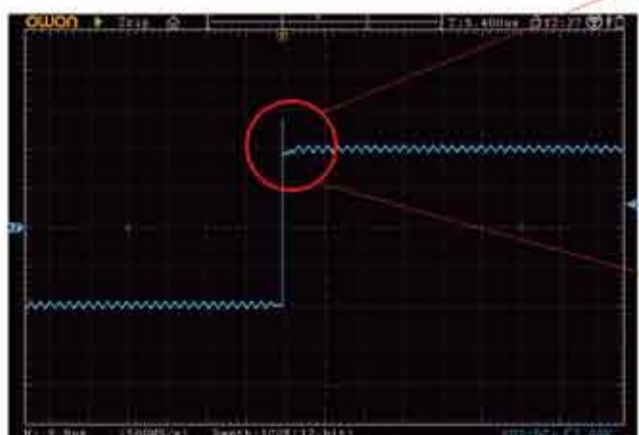
Six Reasons to Choose the OWON XDS2102A Oscilloscope

A highly Cost - Effective product with a 12 - bit ADC!

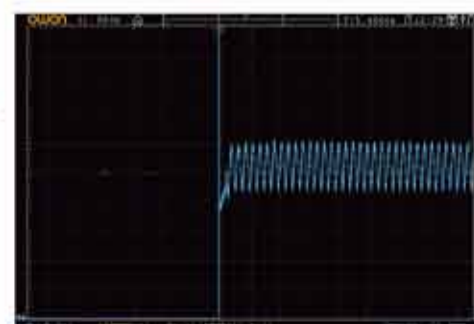
The 12 - bit ADC is standard in the XDS2102A providing 16 times greater precision and detail!



XDS2101A Measures the signal more accurately.



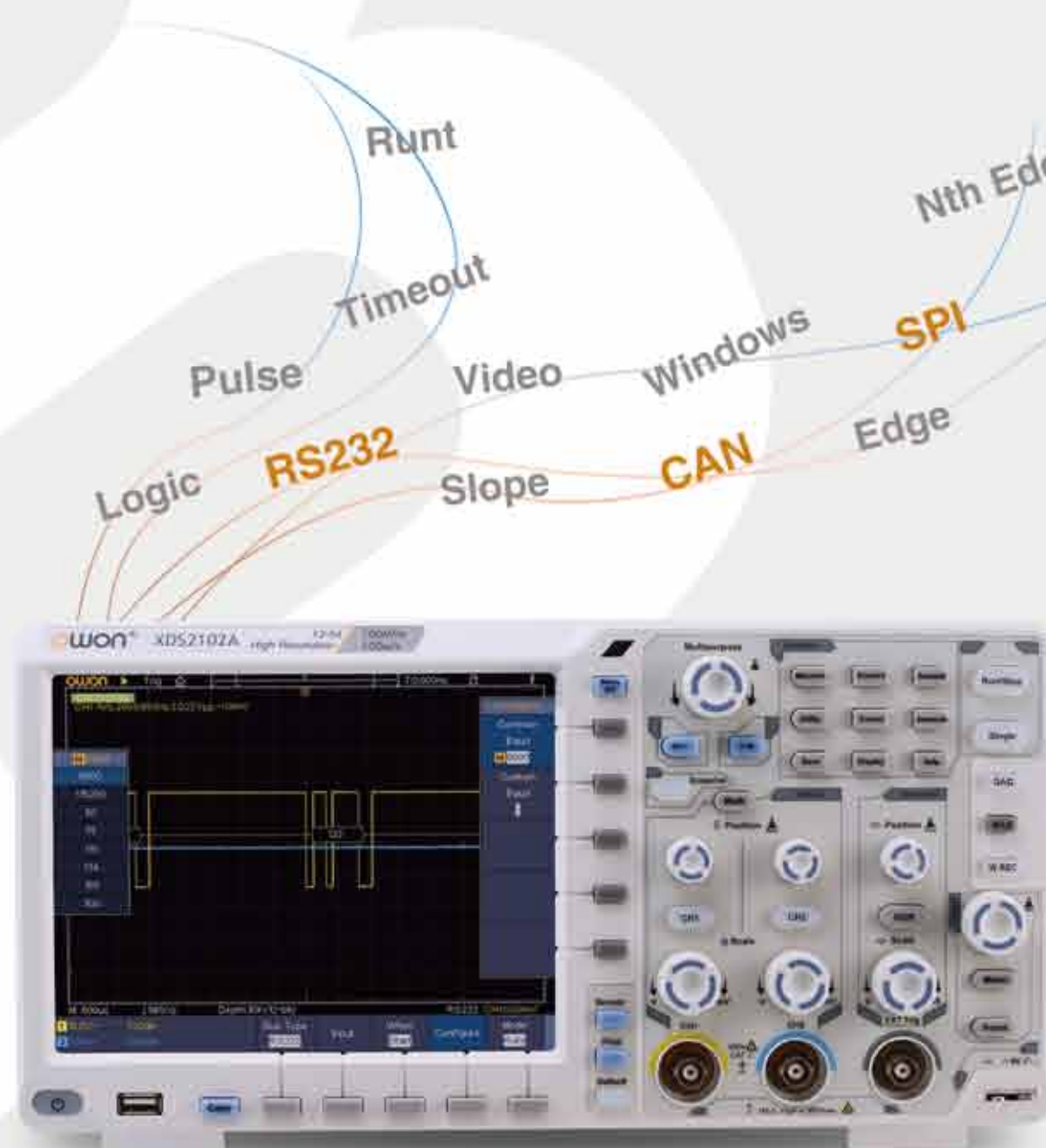
8-bit



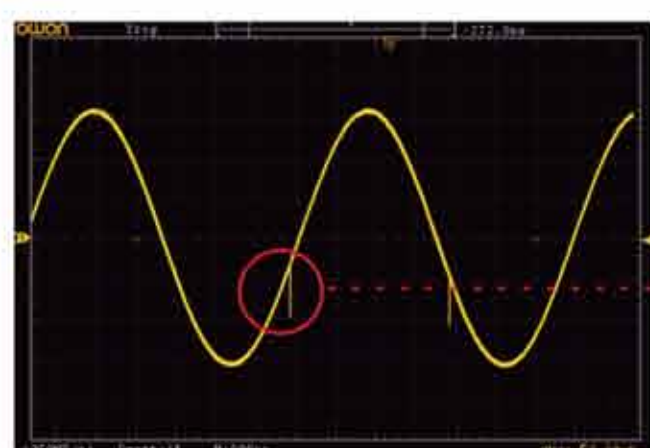
12-bit

XDS2101A Allows full bandwidth signal display.

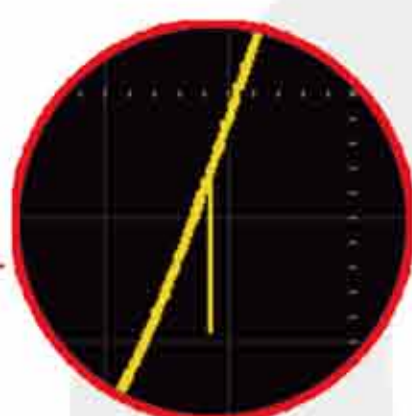
Comes as Standard with Advance Trigger and Communications Protocol Decoding Functions!



Our Latest Process Technology provides the Best Performance Possible!



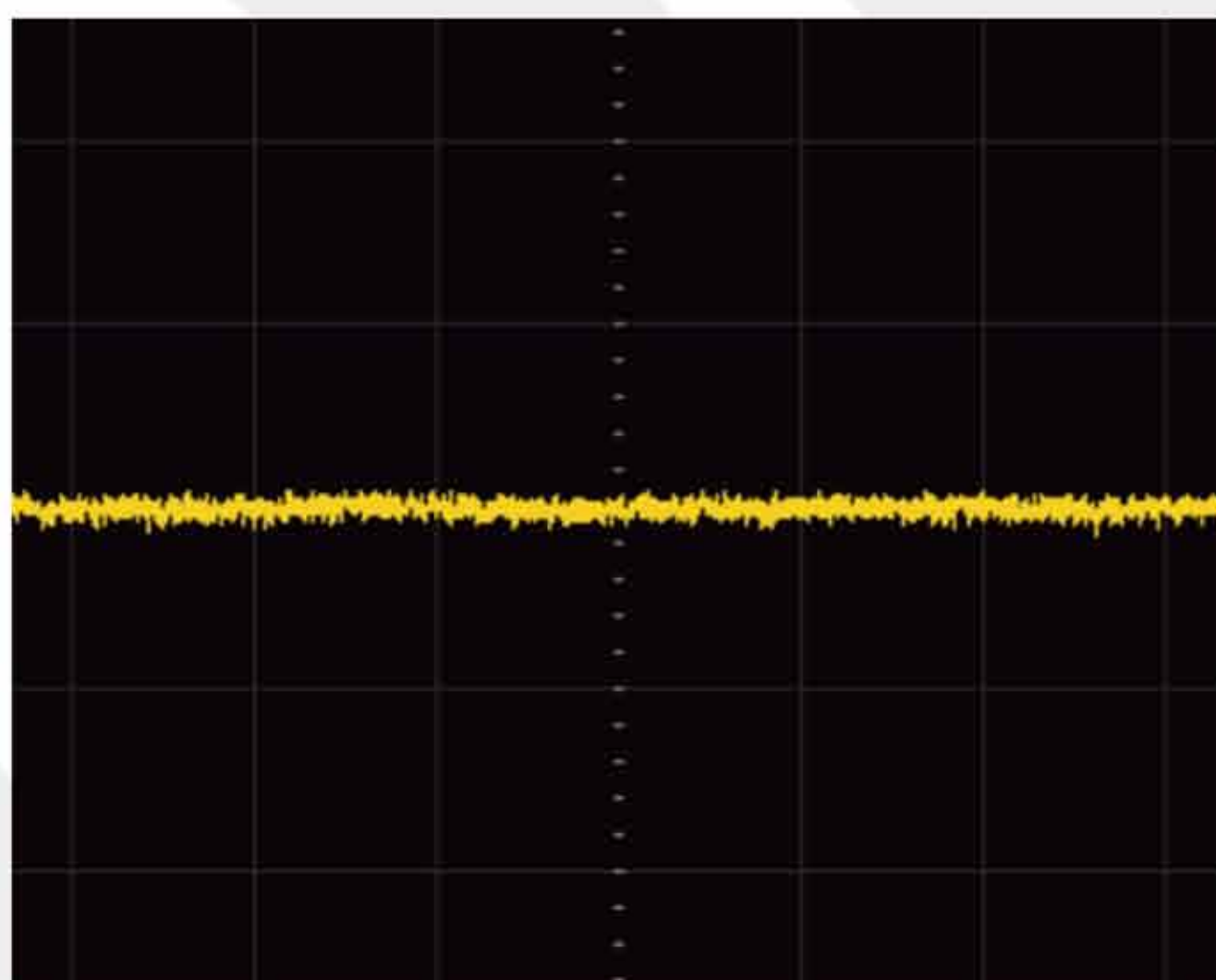
55,000 wfms/s high refresh rate



M Length
1000
10K
100K
1M
10M
20M

20M record length

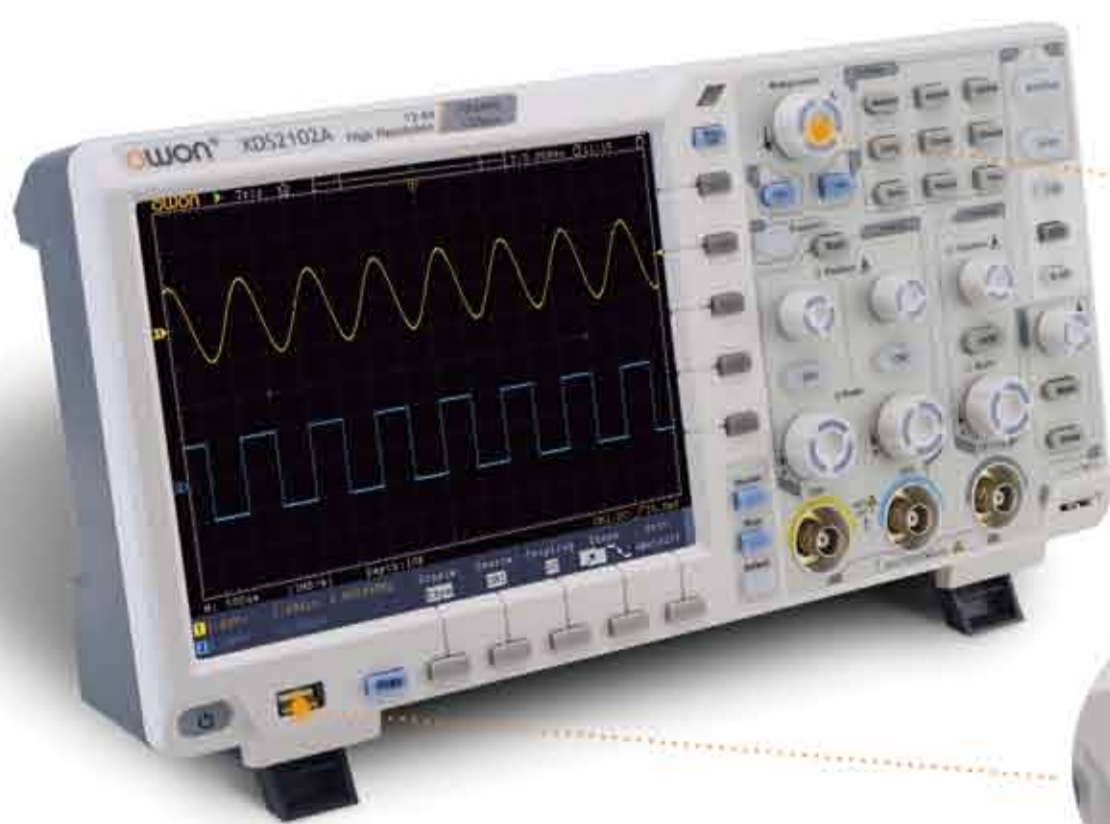
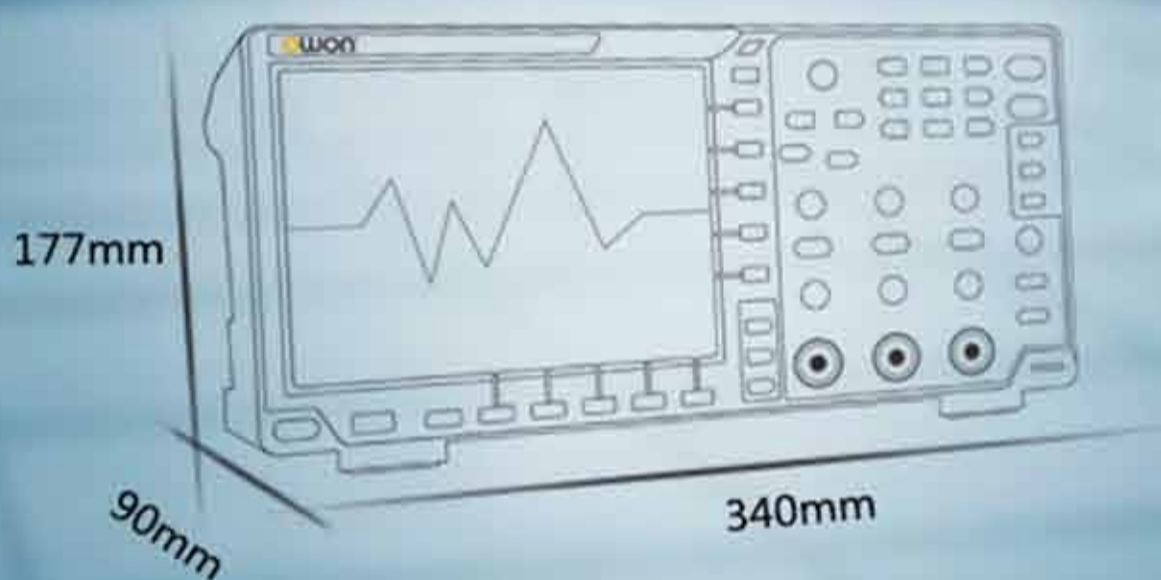
12-bit resolution allows you to see small signals you could otherwise miss



Supplied as standard with high quality 100Mhz passive probes



Its Ultra - thin body (90mm Depth) saves space on your desk



Rotary and Push Button



USB Port – Store Data & Firmware Updates.

Extra Features of the XDS2102A:

- + SCPI commands (Supports Labview, VB 6 and Visual C++ 6)
- + Supports Advanced functions like calculus and FFT RMS.
- + Up to 50 groups of waveform storage.

Bandwidth	100MHz	
Sample Rate	1GS/s (8 bits) 500MS/s (12 bits)	
Vertical Resolution (A/D)	12 bits	
Record length	20M	
Waveform Refresh Rate	55,000 wfms/s	
Horizontal Scale (s/div)	2ns/div - 1000s/div, step by 1~2~5	
Rise Time (at input, typical)	≤3.5ns	
Channel	2 + 1 (external)	
Display	8" color LCD, 800 x 600 pixels	
Input Impedance	1MΩ ± 2%, in parallel with 15pF ± 5pF	
Channel Isolation	50Hz : 100 : 1, 10MHz : 40 : 1	
Max Input Voltage	1MΩ ≤ 300Vrms	
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)	≥10Hz (at input, AC coupling, -3dB)	
Sample Rate / Relay Time Accuracy	±1 ppm (TYP, Ta=+25°C)	
Interpolation	sin(x) / x	
Interval (ΔT) Accuracy (full bandwidth)	Single: ±(1 interval time + 1ppm x reading + 0.6ns); Average > 16: ±(1 interval time + 1ppm x reading + 0.4ns)	
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 ² C, SPI, RS232, and CAN	
Bus Decoding	I ² C, SPI, RS232, and CAN	
Trigger Mode	Auto, Normal, and Single	
Vertical Range	±2V (1mv/div - 50mv/div), ±20V (100mv/div - 1V/div), ±200V (2V/div - 10V/div)	
Line / Field Frequency (video)	NTSC, PAL and SECAM standard	
Cursor Measurement	ΔV, and ΔT between cursors, ΔV and ΔT 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, FFTrms, Intg, Diff, Sqrt, User Defined Function, digital filter (low pass, high pass, band pass, band reject)	
Waveform Storage	50 waveforms	
Lissajou's Figure	Bandwidth	full bandwidth
	Phase Difference	±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	
Power Consumption	< 15W	
Fuse	2A, T class, 250V	
Dimension (W x H x D)	340 x 177 x 90 mm	
Weight	2.40 kg	

Accessories and Packaging



Optional:

