## **SmartDS Series**

#### Main Features:

- 1. 60MHz~300MHz with dual Channels;
- 2. 500MS/s~3GS/s sample rate;
- 3. 10M record length for each channel;
- 4. Large 8-inch 800x600 pixels display;
- 5. Autoscale function;
- 6. Pass/Fail function:
- 7. Smart design with easy workplace;
- 8. Battery (Optional);
- 9. Multiple interface: USB; VGA; LAN







## **MSO** Series

#### Main Features:

- 1. 2 in 1 (DSO + Logic analyzer)
- 2. 8 inch LCD color display
- 3. 16 channels logic analyzer
- 4. 20 automatic measurements
- 5. 2M record length
- 6. Autoscale
- 7. FFT
- 8. Battery (Optional)



Xiamen Lilliput Technology Co.,Ltd.

**CATALOGUE** 

Oscilloscope

#### LILLIPUT®

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Mar 2011

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# ABOUT OWON

Lilliput devoted in electronics industry since 1990.

"Owon" born in 2006 with the mission of "Meet your best needs" .

We are keep seeking all ways to improve quality and expect to meet various needs for different users.

Innovation is the soul of engineering design. Till today we have launched 5 series of products for matching users expectations which are handheld digital storage oscilloscope (2 series), bench digital storage oscilloscope, LA-mixed digital storage oscilloscope and creative SDS bench digital storage oscilloscope. The stable advanced function of handheld series keep us outstanding in all China manufacturers. SDS amazing design will bring a new experiences for users.

Multiple communication always the engine to power our growth. We are never stop devoting more to your Test and Measurement world.

TULA - Lilliput đã cống hiến trong ngành công nghiệp điện tử từ năm 1990.

"Owon" ra đời năm 2006 với mong muốn "Đáp ứng tốt nhất nhu cầu của bạn".

Chúng tôi đang luôn tìm tất cả các cách thức để cải thiện chất lượng và hy vọng đáp ứng nhu cầu đa dạng của những người dùng khác nhau.

Sự sáng tạo là linh hồn của thiết kế kỹ thuật. Tới nay, chúng tôi đã cho ra 05 dòng sản phẩm phù hợp với mong đợi của người dùng là Máy hiện sóng công nghệ lưu trữ số kiểu cầm tay (02 dòng/ series), Máy hiện sóng công nghệ lưu trữ số kiểu để bàn, Máy hiện sóng công nghệ lưu trữ số tích hợp LA (phân tích logic) và dòng Máy hiện sóng công nghệ lưu trữ số kiểu để bàn tân tiến SDS. Chức năng cao cấp ổn định của dòng máy cầm tay đã duy trì vị thế dẫn đầu của chúng tôi với tất cả các nhà sản xuất Trung Quốc. Thiết kế tuyệt vời của SDS sẽ mang tới những trải nghiệm mới cho người dùng.

Đa truyền thông luôn là động lực để tăng cường sự phát triển của chúng tôi. Chúng tôi sẽ không ngừng cống hiến thêm cho thế giới Đo lường và Kiểm tra.

# Milestone In Development:

Mar 2006	HDS1022M—the first high quality 2 in 1 handheld DSO made in China with high resolution color LCD display
Sep 2006	PDS5022S—Big 7.8 inch color LCD display bench DSO, the ideal for education
Nov 2006	HDS2062M—60M handheld DSO follow up the success of HDS1022M
Jun 2007	HDS-N series—the upgrade version to original HDS series
Nov 2007	MSO5022S—Mixed LA-supported DSO
Apr 2008	PDS7102T—100M bench DSO
Dec 2008	OWON are named as "the most competitive price with high quality products" by "WIRELESS" magazine in China
Jan 2009	MSO7102T—Mixed LA support DSO with 100M and 1G real time sample rate
Apr 2009	Innovate independent for Auto measurement and Max. 20 measurements to apply for all items
Oct 2009	HDS3102M-N—first 100M handheld DSO made in China
Oct 2009	HDS1021M—1 channel 20M low cost handheld DSO for niche market
Jan 2010	MSO8102T—Mixed LA support DSO with 2GS/s real time sampling rate
Feb 2010	MSO8202T—200M Mixed LA support DSO
May 2010	PDS8102T—100MHz DSO with 1GS/s sample rate, 2M record length
May 2010	PDS8202T—200MHz DSO with 2GS/s sample rate, 2M record length
Oct 2010	SDS series in Ultrathin design with 10M record length



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# **SmartDS Series**

## Deep Memory Digital Storage Oscilloscope







#### Main Features:

- 1. 60MHz~300MHz with dual channels;
- 2. 500MS/s~3GS/s sample rate;
- 3. 10M record length for each channel;
- 4. Large 8-inch 800x600 pixels display;
- 5. Autoscale function;
- 6. Pass/Fail function;
- 7. Smart design with easy workplace;
- 8. Battery (Optional);
- 9. Multiple interface: USB; VGA; LAN

Dimension: 340mm(L)×155mm(H)×70mm(W)

Weight: 1.8kg (without battery)





#### Performance characteristics

Model	SDS6062	SDS7102	SDS8102	SDS8202	SDS8302	SDS9302
Bandwidth	60MHz	100MHz	100MHz	200MHz	lHz 300MHz	
Sample rate(Real time)	500MS/s	1GS/s 2GS/s			2.5GS/s	3GS/s
Horizontal Scale(S/div)	5ns/div~100s/div, step by 1-2-5	2ns/div~100s/di	v, step by 1-2-5	1ns/div~100	os/div, step by	1-2-5
Rise time (at input, typical)	≤5.8ns	≤3.5ns		≤1.7ns	≤1.17ns	
Channels	2 + 1 (External)					
Display	8" color LCD, TFT display , 800×6	8" color LCD, TFT display , 800×600 pixels, 65535 colors				
Input impedance	1MΩ±2%, in parallel with 10pF±5pF					
channels Isolation	50Hz: 100 : 1, 10MHz: 40 : 1	50Hz: 100 : 1, 10MHz: 40 : 1				
Max. input voltage	400V (PK-PK) (DC + AC PK-PK)	)				
DC gain accuracy	±3%					
DC accuracy(Average)	Average≥16:±(3% reading+0.05	div) for ∆V				
Probe attenuation factor	1X,10X,100X,1000X					
LF respond(AC, -3dB)	≥5Hz(at input, AC coupling, -3dB)					
Record length	Max.10M points for each channel					
Sampling rate/relay time accuracy	±100ppm					
Interpolation	(sin x)/x					

## Performance characteristics

Model		SDS6062	SDS7102	SDS8102	SDS8202	SDS8302	SDS9302	
Bandwidth		60MHz	100MHz		200MHz	300MHz	l	
Interval( T) accur	acy(full bandwidth)	Single: ±(1 interval time+100ppmxreading+0.6ns) Average>16:±(1 interval time+100ppmxreading+0.4ns)						
Input coupling		DC, AC , Ground						
Vertical resolution	on (A/D)	8 bits resolution (2 Channels simultaneously	')					
Vertical sensitivit	у	2mV/div ~ 10V/div(at input)						
Trigger type		Edge, Pulse, Video, Slope, Alternate						
Trigger mode		Auto, Normal, Single						
Trigger level		±6 divisions from screen center						
Acquisition mode	es .	Sample, Peak Detect and Average						
Line/field frequency(Video)		Support standard NTSC, PAL and SECAM broadcast systems						
Cursor measure	ment	ΔV and ΔT between cursors						
Automatic meas	urement	Vpp,Vavg,RMS,Frequency,Period,Vmax,Vmin,Vtop,Vbase,Width,Overshoot,Pre-shoot,Rise time, Fall time,+Width,+Duty,-Duty,Delay A→B € Delay A→B €						
Waveform Math		+, -, ×, ÷, FFT						
Waveform storag	је	15 waveforms						
Lissajou's figure	Bandwidth	Full bandwidth						
	Phase difference	±3 degrees						
Communication	interface	USB, Support USB Flash Disk Storage, Pass/Fail	USB2.0,V0	A ,USB flas	h disk stora	ge,LAN,Pas	s/Fail	
Cymometer		Available						
Power supply		100V-240V AC, 50/60Hz, CATII						
Power consumpt	ion	<18W						
Fuse		1A, T class, 250V						

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### **Application**

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

#### Accessories

















# **HDS-N** Series

## New Handheld Series Digital Storage Oscilloscope



Creative design of Silica gel key offer easy touching and friendly operation Creative design of separate shortcut key to simplify operation steps

#### Main Features:

- 1. 2 in 1(DSO+Multimeter)
- 2. Autoscale
- 3. FFT
- 4. 20 automatic measurements
- 5. Bandwidth: 20MHz-100MHz
- 6. Support USB for data transmission to PC
- 7. Replaceable li-ion battery back up (6 hours)
- 8. USB flash disk storage
- 9. Waveform record & replay(HDS2062M-N, HDS3102M-N)

Dimension: 180mm(L)×115mm(H)×40mm(W)

Weight: 645g

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#### Performance characteristics

Model	HDS1022M-N	HDS2062M-N	HDS3102M-N 🐠			
Bandwidth	20MHz	60MHz	100MHz			
Sample rate(Real time)	100MS/s	250MS/s	500MS/s			
Horizontal Scale(S/div)	5ns/div~100s/div,step by 1~2.5~5	5ns/div~100s/div,step b	by 1~2~5			
Rise time (at input, typical)	≤17.5ns	≤5.8ns	≤3.5ns			
Display	3.7 inch color display with TFT panel(6	40×480 pixels, 65535 co	lors)			
Channels	Dual					
Input impedance	1MΩ±2%, in parallel with 20pF±5pF	1MΩ±2%, in parallel w	ith 15pF±5pF			
Probe attenuation factor	1X, 10X, 100X, 1000X	1X, 10X, 100X, 1000X				
Max. input voltage	400V (PK-PK) (DC + AC PK-PK, 1MΩ in	put impedance, Probe att	enuation 10:1)			
Record length	Max.6000 points on each channel					
Interpolation	(sin x)/x					
Input coupling	DC, AC, GND					
Acquisition modes	Sample, Peak Detect and Average	Sample, Peak Detect and Average				
Vertical resolution (A/D)	8 bit (2 channels simultaneously )					
Vertical sensitivity	5mV/div~5V/div(at input)					
DC gain accuracy	±3%					
(4/4/4	I .					

## Performance characteristics

Model		HDS1022M-N	HDS2062M-N	HDS3102M-N (101)		
DC accuracy(Avera	qe)	Average>16:±(5% reading+0.05div) for ΔV				
Trigger type		Edge, Video, Alternate				
Trigger mode		Auto, Normal, Single				
Trigger level		±6 divisions from screen center				
Automatic measurement		$\label{lem:power_power} $$ Vpp,Vavg,RMS,Frequency,Period,Vmax,Vmin,Vtop,Vbase,Width,Overshoot,Pre-shoot,Rise time, Fall time,+Width,-Width,+Duty,-Duty,Delay A-3B$, Delay A-3B$, $$ Delay A-$				
Waveform math		+, -, ×, ÷, FFT				
Waveform storage		4 waveforms				
Lissajou's figure	Bandwidth	20MHz	60MHz	100MHz		
	Phase difference	±3 degrees				
Communication int	erface	USB				
Cymometer		Unavailable	Available			
Power supply		100V-240V AC, 50/60Hz				
Li-ion battery		7.4V, 6 hours operation				

## **Multimeter Specifications**

Full scale reading	$3\frac{3}{4}$ digits (Max.4000-count)	Diode	0V-1.5V	
Input Impedance	10ΜΩ	On/Off measurement	<50(±30) beeping	
Capacitance	51.2nF-100uF:±(3%±3 digit)			
Voltage	VDC:400mV,4V, 400V: ±(1±1digit) Max.input:DC 1000V, VAC:4V,40V,400V:±(1±3digit) Frequency:40Hz-400Hz, Max.input:AC 750V(virtual value)			
Current	DCA:40mA, 400mA:±(1.5%±1 digit) DAA:40mA±(1.5%±3digit) 400mA:±(2±	10A:±(3%±3digit) ±1digit) 10A:±(3%±3digit)		
Impedance	400Ω:±(1%±3digit), 40Ω			

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## **Application**

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

#### Accessories





















# **HDS Series**

## Handheld Series Digital Storage Oscilloscope



#### Main Features:

- 1. 2 in 1(DSO+Multimeter)
- 2. Autoscale
- 3. 20 automatic measurements
- 4. Bandwidth: 20MHz-60MHz
- 5. Support USB for data transmission to PC
- 6. Replaceable li-ion battery back up (6 hours)

Dimension: 180mm(L)×115mm(H)×40mm(W)

Weight: 645g

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### Performance characteristics

Model	HDS1021M (1)	HDS1022M	HDS2062M	
Bandwidth	20MHz	20MHz	60MHz	
Sample rate(Real time)	100MS/s	100MS/s	250MS/s	
Horizontal Scale(S/div)	5ns/div~100s/div,step by 1~2.5~5	5ns/div~100s/div,step by 1~2		
Rise time (at input, typical)	≤17.5ns		≤5.8ns	
Channels	Single	Dual		
Display	3.5"color display (320×240 pixels)	3.7"color display (640×480 pixels)	3.78"color display (320×240 pixels)	
Input impedance	1MΩ±2%, in parallel with 18pF±5pF	1MΩ±2%, in parallel with 20pF±5pF		
Probe attenuation factor	1X,10X,100X,1000X			
Max. input voltage	400V (PK-PK) (DC + AC PK-PK, 1MΩ in	nput impedance, Probe attenuat	ion 10:1)	
Record length	Max.6000 points on each channel			
Interpolation	(sin x)/x			
Input coupling	DC, AC, GND	DC, AC		
Acquisition modes	Sample, Peak Detect and Average			
Vertical resolution (A/D)	8 bit			
Vertical sensitivity	5mV/div~5V/div(at input)			
DC gain accuracy	±3%	±5%		

## Performance characteristics

	HDS1021M (11)	HDS1022M	HDS2062M		
e)	Average>16:±(3% reading+0.05div) for $\Delta V$ Average>16:±(5% reading+0.05div) for $\Delta V$				
	Edge, Video				
	Auto, Normal, Single				
	±6 divisions from screen center				
ent	$Vpp, Vavg, RMS, Frequency, Period, Vmax, Vmin, Vtop, Vbase, Width, Overshoot, Pre-shoot, Rise\ time\ Fall\ time, +Width, -Width, +Duty, -Duty, Delay\ A \rightarrow B \ \ Delay\ A \rightarrow B \ \ \ \ $				
	Unavailable	+, -, ×, ÷,			
	4 waveforms				
Bandwidth	Unavailable	20MHz	60MHz		
Phase difference	Unavailable	±3 degrees			
face	USB				
	Available Unavailable				
	100V-240V AC, 50/60Hz				
	7.4V, 6 hours operation				
e	Bandwidth Phase difference	Average>16:±(3% reading+0.05div) for ΔV  Edge, Video Auto, Normal, Single ±6 divisions from screen center  Vpp,Vavg,RMS,Frequency,Period,Vmax,Vmin,Vtc Fall time,+Width,-Width,+Duty,-Duty,Delay A→ Unavailable 4 waveforms  Bandwidth Unavailable Unavailable Unavailable Unavailable Unavailable 1008-Available 1009-240V AC, 50/60Hz	Average>16:±(3% reading+0.05div) for ΔV  Edge, Video  Auto, Normal, Single  ±6 divisions from screen center  Vpp,Vavg,RMS,Frequency,Period,Vmax,Vmin,Vtop,Vbase,Width,Overs Fall time,+Width,-Width,+Duty,-Duty,Delay A→8 ,Delay A→8  Unavailable  Unavailable  +, -, ×, ÷,  4 waveforms  Bandwidth  Unavailable  20MHz  Phase difference  USB  Available  100V-240V AC, 50/60Hz		

## Multimeter Specifications

Full scale reading	$3\frac{3}{4}$ digits (Max.4000-count)	Diode	0V-1.5V		
Input Impedance	10ΜΩ	On/Off measurement	<50(±30) beeping		
Capacitance	51.2nF-100uF:±(3%±3 digit)				
Voltage	VDC:400mV,4V, 400V: ±(1±1digit) Max.input:DC 1000V, VAC:4V,40V,400V:±(1±3digit) Frequency:40Hz-400Hz, Max:input:AC 750V(virtual value)				
Current	DCA:40mA, 400mA:±(1.5%±1 digit) DAA:40mA±(1.5%±3digit) 400mA:±(2:	20A:±(3%±3digit) ±1digit) 20A:±(3%±3digit)			
Impedance	400Ω:±(1%±3digit), 40Ω				

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## **Application**

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

#### Accessories























#### Main Features:

- 1. 2 in 1 (DSO+ LA)
- 2. 8 inch LCD color display
- 3. Support USB for data transmission to PC
- 4. USB flash disk storage
- 5. 20 automatic measurements

#### Digital Storage Oscilloscope:

- 1. 25MHz--200MHz bandwidth
- 2. Max up to 2GS/s sample rate
- 3. Autoscale
- 4. FFT

#### Logic Analyer:

- 1. 33MHz--200MHz bandwidth
- 2. Max up to 1GS/s sample rate
- 3. 16 input channels

Dimension: 370mm(L)x180mm(H)x120mm(W) Weight: 2.2kg



### Performance characteristics

Model	MSO5022S	MSO7102TD	MSO8102T	MSO8202T	
Bandwidth	25MHz	100MHz 100MHz		200MHz	
Sample rate(Real time)	100MS/s	1GS/s (500MS/s for dual channels) 2GS/s(1GS/s for dual channels)			
Horizontal Scale(S/div)	5ns/div~100s/div,step by 1~2.5~5	2ns/div~100s/div,step by 1~2~5 1ns/div-100s/div,step by			
Rise time (at input, typical)	≤14ns	≤3.5ns		≤1.7ns	
Display	7.8" color LCD, STN display	8.0" color LCD, TFT screen, 640×480 pixels, 65535 colors			
Channels	Dual channels + external trigger				
Input impedance	1MΩ±2%, in parallel with 20pF±5pF	1MΩ±2%, in parallel with 15pF±5pF			
Max. input voltage	300V (DC + AC PK-PK)	400V (DC + AC PK-PK)			
Record length	Max.6000 points on each channel	Max.2M points			
Probe attenuation factor	1X, 10X, 100X, 1000X				
Interpolation	(sin x)/x				
Vertical resolution (A/D)	8 bit (2 channels simultaneously )				
Vertical sensitivity	5mV/div~5V/div(at input)	2mV/div~10V/div(at input)			
DC gain accuracy	±3%				
DC accuracy(Average)	Average>16:±(3% reading+0.05div) for	or ΔV			
Acquisition modes	Sample, Peak Detect and Average				

#### Performance characteristics

Model		MSO5022S	MSO7102TD	MSO8102T	MSO8202T	
Trigger type		Edge, Video, Alternate	Edge, Video, Altern	ate, Pulse, Slope		
Cursor measurement ΔV and ΔT between cursors						
$\label{lem:power_power} Automatic \ measurement \\ Vpp,Vavg,RMS,Frequency,Period,Vmax,Vmin,Vtop,Vbase,Width,Overshoot,Pre-shoot,Requested and Sequence and Seque$			ot,Pre-shoot,Rise time,			
Waveform Math		+, -, ×, ÷, FFT		<del>-</del>		
Waveform storage		4 waveforms				
Trigger mode		Auto, Normal, Single				
Lissajou's figure	Bandwidth	25MHz	100MHz	100MHz	200MHz	
	Phase difference	±3 degrees				
Communication is	nterface	USB, Support USB Flash Disk Storage				
Cymometer		Unavailable	Available			
Power supply		100V-240V ACRMS, 50/60Hz, CATII				
Battery		7.4V 8000mA				
Fuse		1A, T grade , 250V				

## Logic analyzer characteristics

Model	MSO5022S	MSO7102TD	MSO8102T	MSO8202T	Data search	Available
Sample rate (real time)	20S/s-100MS/s	20S/s-1GS/s	20S/s-1GS/s			0,1,2 optiona
Bandwidth	33MHz	200MHz	200MHz			10 settings
Threshold voltage	±10V(4 settings)	±6V(4 settings)	±6V(4 settings)			Available
Input signal range	±15V	±30V				
Channels	16					
Record length	4M/channel					
Input impedance	1MΩ±2%	660kΩ±5%//15±	БрF			
Trigger position setting	Pre-trigger, mid-tri	gger, re-trigger				
Trigger mode	Edge trigger, Bus t	rigger, Pattern trigge	er,Sequential qu	ieue trigger, Data	width trigger, Distributed	queue trigger
Data System	Binary system, Decin	nal system, Hex				

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## **Application**

Design and Debug Circuit function test

Identified signals logic information Education & Train

Education & Training Mixed signal circuit test

#### Accessories

The receipt of accessories should be taken as final.

















Manual

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# PDS8102T/PDS8202T

With Logic analyzer interface stand by in your unit! Support your DSO with LA function to become a MSO is never magic!



#### Main Features:

- 1. Autoscale
- 2. FFT
- 3. Bandwidth: 100MHz-200MHz
- 4. Sample rate: Max up to 2GS/s
- 5. 8 inch LCD color display
- 6. Support USB for data transmission to PC
- 7. 20 automatic measurements

Dimension: 370mm(L)×180mm(H)×120mm(W)

Weight: 2.2kg



### Performance characteristics

Model	PDS8102T PDS8202T			
Bandwidth	100MHz	200MHz		
Sample rate(Real time)	1GS/s(500MS/s for dual channels) 2GS/s(1GS/s for dual channels)			
Horizontal Scale(S/div)	2ns/div100s/div step by 1-2-5	1ns/div100s/div step by 1-2-5		
Rise time (at input, typical)	≤3.5ns	≤1.7ns		
Channels	Dual channels+external trigger			
Display	8" color LCD, TFT display , 640*480 pixels, 65535 colors			
Input impedance	$1M\Omega\pm2\%$ , in parallel with $15pF\pm5pF$			
Isolation between channels	50Hz (100:1), 10MHz (40:1)			
Max. input voltage	400V(DC + AC PK-PK)			
DC gain accuracy	±3%			
DC accuracy(Average)	Average≥16:±(3% reading+0.05div) for ΔV			
Probe attenuation factor	1X, 10X, 100X, 1000X			
LF respond(AC, -3dB)	≥5Hz(at input)			
Record length	Max. 2M points on each channel			
Sampling rate/relay time accuracy	±100ppm			
Interpolation	(sin x)/x			
	•			

## Performance characteristics

Torronna	noo onara	0.01101100			
Model		PDS8102T	PDS8202T		
Bandwidth		100MHz 200MHz			
Interval( T) accur	acy(full bandwidth)	Single: ±(1 interval time+100ppmxreading+0.6ns) Average>16:±(1 interval time+100ppmxreading+0.4n			
Input coupling		DC, AC, GND			
Displacement		±50V(500mV-5V); ±2V(5mV-200mV)			
Vertical resolution	on (A/D)	8 bit (2 channels simultaneously )			
Vertical sensitivit	у	2mV/div~10V/div(at input)			
Trigger type		Edge, Video, Alternate, Pulse, Slope			
Trigger mode		Auto, Normal, Single			
Trigger level		±6 divisions from screen center			
Acquisition modes Sample, Peak Detect and Average					
Line/field frequency(Video) Support NTSC, PAL and S		Support NTSC, PAL and SECAM	PAL and SECAM		
Cursor measurement $\Delta V$ and $\Delta T$ between cursors					
Automatic measurement		Vpp,Vavg,RMS,Frequency,Period,Vmax,Vmin,Vtop,Vbase,Width,Overshoot,Pre-shoot,Rise time, Fall time,+Width,-Width,+Duty,-Duty,Delay A→B∫,Delay A→B∫			
Waveform Math		+, -, ×, ÷, FFT			
Waveform storage		4 waveforms			
Lissajou's figure	Bandwidth	100MHz	200MHz		
	Phase difference	±3 degrees			
Communication interface		USB, Support USB Flash Disk Storage			
Cymometer		Available			
Power supply		100V-240V AC, 50/60Hz, CATII			
Power consumption		≤15W			
Fuse		1A, T class, 250V			
		I			

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## **Application**

Electronic circuit debugging Education and training

Circuit testing Design and manufacture Automobile maintenance and testing

#### Accessories





















(Optional, only for upgrade)



# **PDS Series**

## Portable Digital Storage Oscilloscope



#### Main Features:

1. Autoscale

2. FFT

3. Bandwidth: 25MHz-100MHz

4. Sample rate: Max up to 500MS/s

5. 8 inch LCD color display

6. Support USB for data transmission to PC

7. 20 automatic measurements

Dimension:  $350 \text{mm}(L) \times 157 \text{mm}(H) \times 103 \text{mm}(W)$ 

Weight: 1.7kg



## Performance characteristics

Model	PDS5022S	PDS6062S	PDS6062T	PDS7102T		
Bandwidth	25MHz	60MHz	60MHz	100MHz		
Sample rate(Real time)	100MS/s	250MS/s	250MS/s	500MS/s		
Horizontal Scale(S/div)	5ns/div~100s/div,step by 1~2.5~5 5ns/div~100s/div,step by 1~2~5					
Rise time (at input, typical)	≤14ns	≤5.8ns		≤3.5ns		
Channels	Dual channels+external trigger					
Display	7.5 inch color LCD, STN screen, 640×480 pixels 8.0 inch colo		r LCD, TFT screen, 640×480 pixels			
Input impedance	1MΩ±2%, in parallel with 20pF±5pF		1MΩ±2%, in parallel with 15pF±5pF			
Isolation between channels	50Hz(100:1), 10MHz(25:1)		50Hz(100:1), 10MHz(40:1)			
Max. input voltage	300V(DC + AC PK-PK, 1MΩ input impedance, Probe attenuation 10:1)		400V(DC + AC PK-PK)			
DC gain accuracy	±5%		±3%			
DC accuracy(Average)	Average≥16:±(5% reading+0.05div) for ΔV		Average≥16:±(3% reading+0.05div) for ∆V			
Probe attenuation factor	1X, 10X, 100X, 1000X					
LF respond(AC, -3dB)	≥5Hz(at input)					
Record length	5K points on each channel	6K points on each channel				
Sampling rate/relay time accuracy	±100ppm					
Interpolation	(sin x)/x					

## Performance characteristics

Model		PDS5022S	PDS6062S	PDS6062T	PDS7102T
Bandwidth		25MHz	60MHz	60MHz	100MHz
Sample rate(Real time)		100MS/s	250MS/s	250MS/s	500MS/s
Interval( T) accura	Cy(full bandwidth)	Single: ±(1 interval time+100ppm×reading+0.6ns) Average>16:±(1 interval time+100ppm×reading+0			time+100ppm×reading+0.4ns)
Input coupling DC, AC			DC, AC, GND		
Displacement		±50V(500mV-5V), ±2V(5mV-200mV)			
Vertical resolution	n (A/D)	8 bit (2 channels simultaneously )			
Vertical sensitivity	/	5mV/div~5V/div(at input)			
Trigger type		Edge, Video Edge, Video, Alternate			Edge, Video, Alternate
Trigger mode		Auto, Normal, Single			
Trigger level		±6 divisions from screen center			
Acquisition modes Sample, Peak Detect and Average					
Line/field frequency(Video) Support NTSC, PAL and SECAM					
Cursor measurement					
Automatic measurement		Vpp,Vavg,RMS,Frequency,Period,Vmax,Vmin,Vtop,Vbase,Width,Overshoot,Pre-shoot,Rise time, Fall time,+Width,-Width,+Duty,-Duty,Delay A→8∫,Delay A→8∫			
Waveform Math	Vaveform Math +, -, FFT				
Waveform storage		4 waveforms			
Lissajou's figure	Bandwidth	25MHz	60MHz	60MHz	100MHz
	Phase difference	±3 degrees			
Communication interface		USB			
Cymometer		Unavailable Available			
Power supply		100V-240V AC, 50/60Hz, CATII			
Power consumption		≤15W			
Fuse		1A, T class, 250V			

OWON continues to improve products and reserves the rights to change specifications without advance notice. For latest ones, please refer to our website.

## **Application**

Electronic circuit debugging
Education and training

Circuit testing Design and manufacture Automobile maintenance and testing

#### Accessories

The receipt of accessories should be taken as final.















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