OWON®
+ Meet your best need

Product Catalogue

- **+ Digital Storage Oscilloscope**
- **+ Arbitrary Waveform Generator**
- **+ Programmable DC Power Supply**
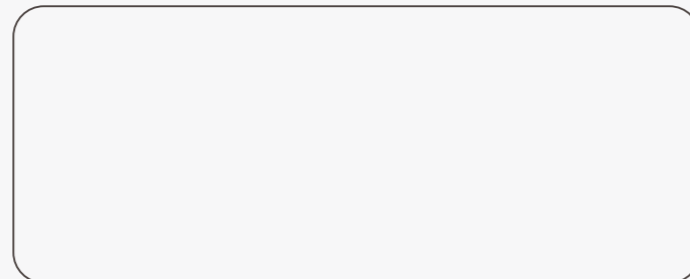- **+ PC Oscilloscope**
- **+ Digital Multimeter**

OWON® product line - Created by LILLIPUT®

Logicbus distribuidor autorizado

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Please contact local distributor for further information.

Contents

About OWON®

Since 1990, Lilliput steps into electronics product industry, its 1st product series is mini color LCD.

Owned by Lilliput, OWON product line was created to "Meet your best need" in test and measurement equipment field.

Through 2 decades' efforts, Lilliput gradually grows to be a group corporation, covering 3 product line - mini color LCD, test and measurement equipment, and home energy management system.

OWON product could be found in Asia, North America, Europe, South America, Oceania, and Africa, with global partners established in more than 80 countries/ regions.

Lilliput (OWON) spares no efforts to be one of top test and measurement equipment original equipment manufacturers in the worldwide range.

Development Milestone

2016
Sep   XDM series product - brand-new bench-type digital multimeter

2015
Jun   12-bit high resolution n-in-1 smart DSO - XDS series product created
Mar   smart bluetooth digital multimeter launched

2014
Jun   creative pen-type PC oscilloscope "Wave Rambler" released
Apr   single-channel waveform generator AG-S series comes into being
Mar   4-channel PC oscilloscope VDS3104 added into VDS series

2013
Oct   SDS-E Series - 2G economical digital storage oscilloscope
Jul   new product TDS series touch screen digital storage oscilloscope
Apr   new product VDS series PC oscilloscope

2012
Aug   SDS5032E - 2G of PDS5022

2011
Nov   AG4151 - DDS arbitrary waveform generator first debut in Shanghai Electronics Exhibition
Oct   ISO9001 quality system certified
       ODP3032 - programmable DC power supply unveiled in Hong Kong Electronics Exhibition

2010
Oct   Smart DS series DSO with ultra-thin body, and 10M record length
Feb   MSO8202T - 200MHz bandwidth mixed LA-supported DSO
Jan   MSO8102T - 100MHz bandwidth mixed LA-supported DSO

2009
Oct   HDS3102M-N - first 100MHz bandwidth handheld DSO made by China born
Apr   innovative application of auto-measurement, and max 20 group measurement options equipped
       with full OWON product
Jan   MSO7102T - mixed LA-supported DSO with 100MHz bandwidth, and 1GS/s real time sample rate,
       becomes new member of OWON product family

2008
Dec   OWON receives the honor - "the highest cost performance product" from Wireless magazine
Apr   PDS7102T - 100MHz bandwidth bench type DSO entering into product line

2007
Nov   MSO5022S - mixed LA-supported DSO launched
Jun   HDS-N series DSO - the upgraded version of HDS series

2006
Nov   HDS2062M - 60MHz handheld DSO introduced
       PDS5022 - large 7.8" color LCD bench type DSO
       HDS1022M - first fine quality 2 in 1 handheld DSO created by China with high def color LCD

Market Coverage

With its headquarter located in Zhangzhou, Lilliput (OWON) establishes 4 offices in China, and 3 overseas offices, 2 of them in North America, 1 in Western Europe.

Lilliput (OWON) already successfully markets OWON product line into 80+ territories through its sales network.

Zhangzhou (Fujian Province), China
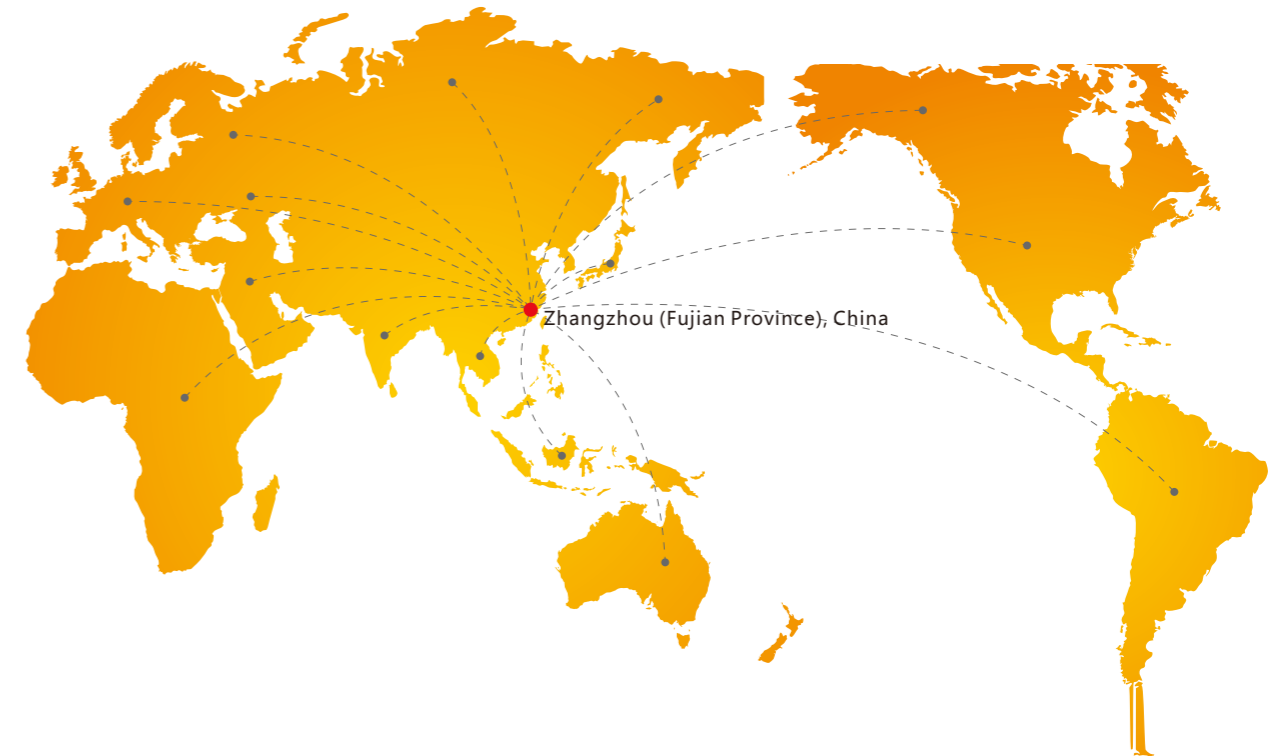
Part of OWON product users - education field
Harvard University
The University of Iowa
The University of Western Ontario

Chiba University

Technische University Hamburg-Harburg
University degli Studi di Milano

University of Mosul

Sultan Qaboos University

Rabat Academy
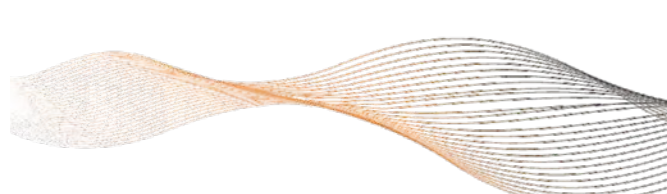
PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

XDS Series

your powerful n-in-1 on-site measurement station

14 / 12 bits
high resolution ADC

C€

Super Performance

+ 8-bit, 12-bit or 14-bit high resolution ADC, restoring the waveform detail fully
+ 40M record length, and 75,000 wfms/s waveform refresh rate
+ low background noise, vertical sensitivity in 1 mV/div - 10 V/div
+ multi- trigger, and bus decoding function
+ SCPI, and LabVIEW supported

Creative New Look

+ ultra-thin body-design, less space accommodation
+ multi-interface integration - USB host, USB device, USB port for PictBridge, LAN, AUX, and more
+ VGA port - better solution for video expansion, and teaching demonstration
+ 8 inch 800 x 600 high resolution LCD
+ optional multi-point touch screen, more user-friendly operation experience

n-in-1

functions as data logger, and multimeter with data logging function,
and dual-channel 25MHz / 50MHz arbitrary waveform generator,
furthermore, battery pack, and WiFi module supported

1. 12-bit high vertical resolution model - XDS-A series product achieves 16 times resolution, and definition more than its general 8-bit counterpart, which makes it the better solution provider for small signal measurement, and signal detail restoration from large signal
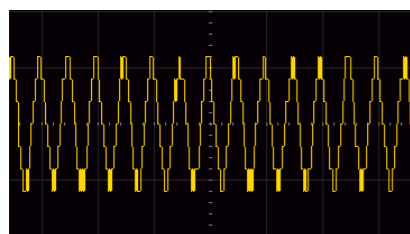
20mVpp signal measured by common 8-bit DSO, 10 times zoomed
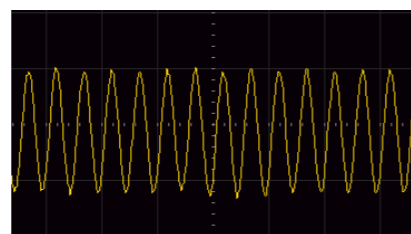
20mVpp signal measured by 12-bit XDS series DSO, 10 times zoomed

PLCs Adquisición Instrumentos Registradores Potencia HMIs Switches Movimiento Sensores Convertidores Teclados SCADA Telemetría

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2.x visual platform - restore the waveform detail fully
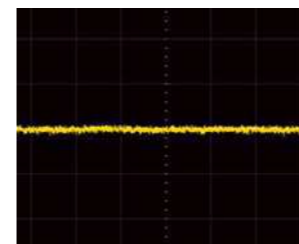
M Length
1000
10K
100K
1M
10M
20M
40M

low background noise

40M record length

and 75,000 wfms/s refresh rate, easily capturing exceptional, and low probability events
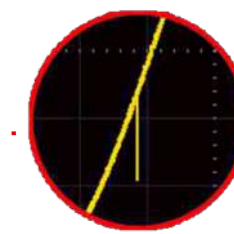
3. multi-level grayscale, and color temperature display
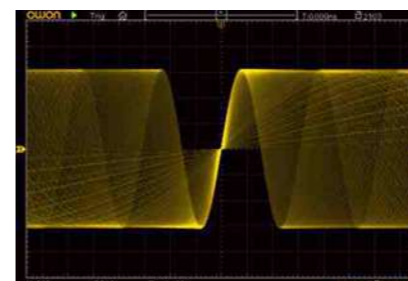
within certain unit time,
more frequent one waveform pixel appears, more vivid it is
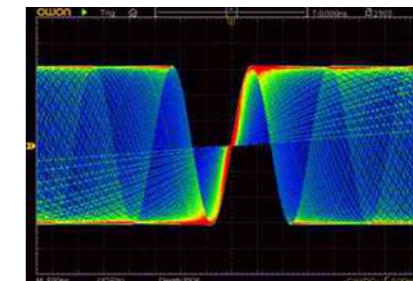
the frequency of waveform reflecting in color temperature value, larger the value is, more frequent the waveform appears

4. multi-trigger supported - Logic, Time-out, I²C, SPI, RS232, Runt, Windows, Nth Edge, and CAN

5. serial bus coding available in I2C, SPI, RS232, and CAN

M Bus Type
RS232
I2C
SPI
CAN

M Single
Edge
Video
Pulse
Slope
Runt
Windows
Timeout
Nth Edge

6. built-in multimeter module, with auto-scale, and data logging function

7. built-in dual-channel 25MHz / 50MHz arbitrary waveform generator module, with sample rate of 125MS/s / 250MS/s

Xvisual

8. its built-in WiFi module facilitates mobile device connecting with XDS seris product, to get access to remote control, together with simultaneous measurement result display

WiFi

via app s/w, waveform data-saving, checking, co-sharing is possible, co-analyzing hence realizes
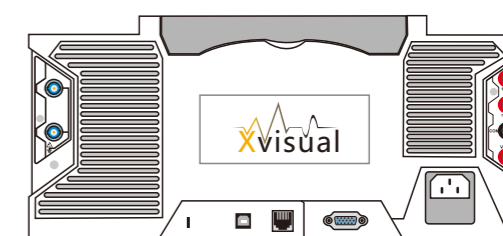
9. its multi-point touchscreen improves operation efficiency considerably

10. optional battery makes floating measurements possible, advancing the operation convenience

XDS Series   your powerful n-in-1 on-site measurement station

+ Performance Specifications

Model	XDS3062A	XDS3102A	XDS3202A*	XDS3102	XDS3202E*	XDS3202*	XDS3302*
Bandwidth	60MHz	100MHz	200MHz	100MHz	200MHz		300MHz
Sample Rate	1GS/s			1GS/s		2GS/s	2.5GS/s
Vertical Resolution (A/D)	12 bits		14 bits	8 bits			
Record Length	40M						
Waveform Refresh Rate	75,000 wfms/s						
Horizontal Scale	2ns/div - 1000s/div		1ns/div - 1000s/div	2ns/div - 1000s/div	1ns/div - 1000s/div		
	step by 1 - 2 - 5						
Rise Time (at input, typical)	≤5.8ns	≤3.5ns	≤1.7ns	≤3.5ns	≤1.7ns		≤1.17ns
Channel	2+1 (external)						
Display	8" color LCD, 800 x 600 pixels						
Input Impedance	1MΩ ± 2 %, in parallel with 15pF ± 5pF; (*50Ω ± 2%)						
Channel Isolation	50Hz : 100 : 1, 10MHz : 40 : 1						
Max Input Voltage	1MΩ ≤ 300Vrms; 50Ω ≤ 5Vrms						
DC Gain Accuracy	±1%			±3%			
DC Accuracy	average ≥ 16: ±(3% reading + 0.05 div) for △V						
Probe Attenuation Factor	0.001X - 1000X, step by 1 - 2 - 5						
LF Respond (AC,-3dB)	≥5Hz (at input, AC coupling, -3dB)						
Sample Rate / Relay Time Accuracy	±1ppm						
Interpolation	sin(x)/x, x						
Interval (△T) Accuracy (fullbandwidth)	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, I²C, SPI, RS232, and CAN (optional)						
Bus Decoding (optional)	I²C, 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	△V, and △T between cursors, △V and △T between cursors, and auto- cursors						
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Week 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	±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	100 - 240 V AC, 50/60Hz, CAT II						
Power Consumption	< 15W						
Fuse	2A, T class, 250V						
Battery (optional)	3.7V, 13200mAh						
Dimension (W x H x D)	340 x 177 x 90 (mm)						
Device Weight	2.60 kg						

+ Multimeter (optional) Specifications

Full Scale Reading	3¾ digits (max 4000 count)	Diode	0V - 1.5V
Input Impedance	10MΩ	Continuity Test	<50 (±30) beeping
Capacitance	51.2nF - 100uF: ±(3% ± 3 digits)		
Voltage	VDC: 400mV, 4V, 400V: ±(1 ± 1 digit); max input: DC 1000V VAC: 4V, 40V, 400V: ±(1 ± 3 digits); frequency: 40Hz - 400Hz; max input: AC 400V (virtual value)		
Current	DC: 40mA, 400mA: ±(1.5% ± 1 digit); 10A: ±(3% ± 3 digits) AC: 40mA: ±(1.5% ± 3 digits), 400mA: ±(2% ± 1 digit), 10A: ±(3% ± 3 digits)		
Impedance	400Ω: ±(1% ± 3 digits), 4KΩ - 40MΩ: ±(1% ± 1 digit)		

+ Arb Waveform Generator (optional) Specifications

Max Frequency Output	25MHz	50MHz
Sample Rate	125MS/s	250MS/s
Channel	available in 1-ch, or 2-ch	
Vertical Resolution	14 bits	
Amplitude Range	10mVpp - 6Vpp	
Waveform Length	8K	
Standard Waveform	Sine, Square, Pulse, and Ramp	

+ Optional Module / Function

VGA	VGA + AV port
WIF	WiFi
AWG	arbitrary waveform generator
DMM	digital multimeter
TOU*	touch screen (capacitor-type)

+ Optional Decoding Kit

RS232	RS232
SPI	SPI
I2C	I²C
CAN	CAN decoding

∗ TOU option could be equipped as standard option as per request.

Specifications subject to change without prior notice.

+ Application

electronic circuit debugging   circuit testing   design and manufacture
education and training   automobile maintenance and testing

+ Accessories
The accessories subject to final delivery.

| Power Cord | CD Rom | Manual | USB Cable | Probe | Probe Adjust |

optional accessories:

Multimeter Lead   Q9   Capacitance Ext Module   Battery   Soft Bag

mobile app accessible via scanning QR code

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

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TDS Series Touch Screen Digital Storage Oscilloscope

- + Max 200MHz bandwidth, up to 2GS/s realtime sample rate
- + 7.6M record length
- + 50,000 wfms/s waveform capture rate
- + waveform zooming (horizontal / vertical), and saving
- + FFT points (length, and resolution variable)
- + multi-window extension
- + 8 inch 800 x 600 pixels high resolution LCD
- + multi- communication interface : USB, VGA, and LAN
- + LabVIEW supported

CE

+ Performance Specifications

Model	TDS7074	TDS7104	TDS8104	TDS8204
Bandwidth	70MHz	100MHz		200MHz
Channel	4			
Sample Rate	1GS/s		2GS/s	
Waveform Capture Rate	50,000 wfms/s			
Display	8" color LCD			
Input Coupling	DC, AC, and GND			
Input Impedance	1MΩ ± 2%, in parallel with 10pF ± 5pF ; 50Ω ± 1%			
Probe Attenuation Factor	1X, 10X, 100X, 1000X			
Max Input Voltage	1MΩ input impedance : 400V (DC + AC peak) ; 50Ω input impedance : 5V (DC + AC peak)			
Channel Isolation	50Hz : 100 : 1 ; 10MHz : 40 : 1			
Interpolation	sin(x)/x			
Record Length	7.6M			
Horizontal Scale (s/div)	2ns/div - 100s/div, step by 1 - 2 - 5			
Interval (△T) Accuracy (full bandwidth)	Single : ±(1 interval time + 100ppm × reading + 0.6ns), Average>16 : ±(1 interval time + 100ppm × reading + 0.4ns)			
Vertical Resolution (A/D)	8 bits (4 channels simultaneously)			
Vertical Sensitivity	2mV/div - 10V/div (at input)			
Analog Bandwidth	70MHz	100MHz		200MHz
LF Respond (AC, -3dB)	≥10Hz (at input, AC coupling, -3dB)			
Rise Time	≤5ns	≤3.5ns		≤1.7ns

Model	TDS7074	TDS7104	TDS8104	TDS8204
DC Accuracy	±3%			
Trigger Type	Edge, Pulse, Video, and Slope			
Trigger Mode	Auto, Normal, and Single			
Trigger Level Range	±6 division from the screen center			
Trigger Level Accuracy (typical)	±0.3 division			
Line / Field Frequency (video)	NTSC, PAL, and SECAM standard			
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B∫, Delay A→B⌐, +Width, -Width, +Duty, -Duty			
Waveform Math	+, -, *, /, FFT			
Waveform Storage	4 reference waveforms			
Lissajous Figure	Bandwidth	full Bandwidth		
	Phase Difference	±3 degrees		
Cursor Measurement	△V, and △T between cursors			
Communication Port	USB host, USB device, VGA (optional), and LAN			
Power Supply	100 - 240 V AC, 50/60Hz, CAT II			
Dimension (W x H x D)	380 x 180 x 115 (mm)			
Device Weight	1.50 kg			

Specifications subject to change without prior notice.

+ Application

electronic circuit debugging   circuit testing   design and manufacture
education and training   automobile maintenance and testing

+ Accessories
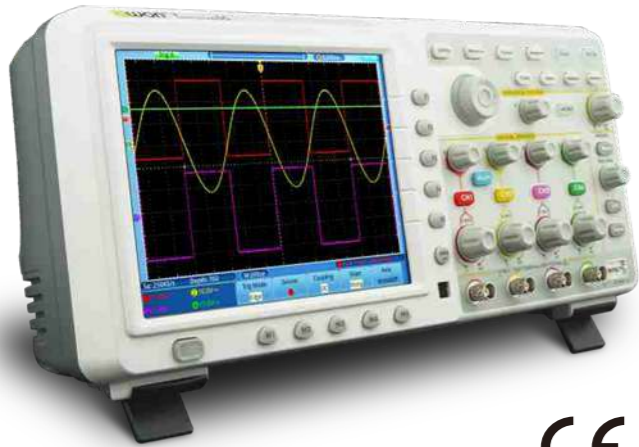The accessories subject to final delivery.

Power Cord   CD Rom   Manual   USB Cable   Probe   Probe Adjust   Soft Bag (optional)

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!
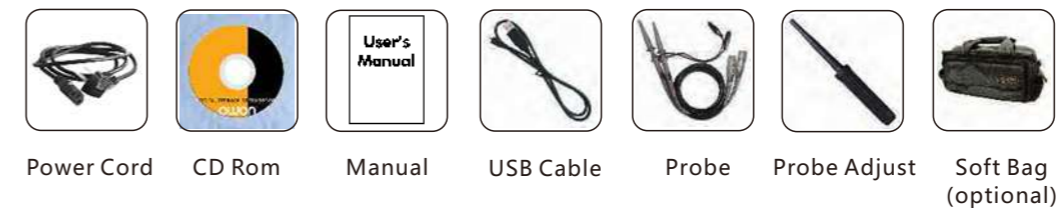
Smart DS Series Deep Memory Digital Storage Oscilloscope

10M Deep Memory
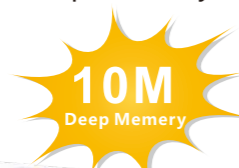
+ Bandwidth : 60MHz - 300MHz with dual-channel
+ Sample rate : 500MS/s - 3.2GS/s
+ 10M record length for each channel
+ Smart design with easy portability
+ Large 8 inch 800 x 600 pixels LCD
+ LAN remote control
+ Multi-function : auto-scale, Pass / Fail,
  current measurement, and **digital filtering**
+ SCPI, and LabVIEW supported

+ Optional ***BATTERY*** available

CE

VGA | LAN | USB | WAVE RECORD | FFT

+ Performance Specifications

Model	SDS6062	SDS7072	SDS7102	SDS7202	SDS8102	SDS8202	SDS8302	SDS9302
Bandwidth	60MHz	70MHz	100MHz	200MHz	100MHz	200MHz	300MHz	
Sample Rate	500MS/s	1GS/s			2GS/s		2.5GS/s	3.2GS/s
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5	2ns/div - 100s/div, step by 1 - 2 - 5			1ns/div - 100s/div, step by 1 - 2 - 5			
Rise Time	≤5.8ns	≤5ns	≤3.5ns	≤1.7ns	≤3.5ns	≤1.7ns	≤1.17ns	
Display	8" color LCD, 800 x 600 pixels							
Channel	2 + 1 (external)							
Record Length	10M							
Input Coupling	DC, AC, and GND							
Input Impedance	1MΩ ± 2%, in parallel with 10pF ± 5pF							
Channel Isolation	50MHz : 100 : 1, 10MHz : 40 : 1							
Max Input Voltage	400V (DC + AC Peak)							
DC Gain Accuracy	±3%							
DC Accuracy	average≥16 : ±(3% reading + 0.05 div) for △V							
Probe Attenuation Factor	1X, 10X, 100X, 1000X							
LF Respond (AC, -3dB)	≥10Hz (at input, AC coupling, -3dB)							
Sample Rate / Relay Time Accuracy	±100ppm							
Interpolation	sin(x)/x							
Interval (△T) Accuracy (full bandwidth)	Single : ±(1 interval time + 100ppm × reading + 0.6ns); Average>16 : ±(1 interval time + 100ppm × reading + 0.4ns)							
Vertical Resolution (A/D)	8 bits (2 channels simultaneously)							
Vertical Sensitivity	2mV/div - 10V/div							
Digital Filtering	low-pass, high-pass, band-pass, and band-reject							

Model	SDS6062	SDS7072	SDS7102	SDS7202	SDS8102	SDS8202	SDS8302	SDS9302
Trigger Type	Edge, Pulse, Video, Slope, and Alternate							
Trigger Mode	Auto, Normal, and Single							
Trigger Level	±6 divisions from screen center							
Acquisition Mode	Sample, Peak Detect, and Average							
Line / Field Frequency (video)	NTSC, PAL and SECAM standard							
Cursor Measurement	△V, and △T between cursors							
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Week RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase, Preshoot, Rise Time, Fall Time, Delay A→B⌐, Delay A→B⌐, +Width, -Width, +Duty, -Duty, Duty cycle							
Waveform Math	+, -, *, /, invert, FFT							
Waveform Storage	15 waveforms							
Lissajous Figure — Bandwidth	full bandwidth							
Lissajous Figure — Phase Difference	±3 degrees							
Communication Interface	USB host, USB device, Pass / Fail, LAN, VGA (optional), and RS232 (optional)							
Frequency Counter	available							
Power Supply	100V - 240V AC, 50/60Hz, CAT II							
Power Consumption	< 18W	< 24W						
Fuse	2A, T class, 250V							
Battery (optional)	7.4V, 8000mA							
Dimension (W x H x D)	340 x 155 x 70 (mm)							
Device Weight	1.80 kg							

Specifications subject to change without prior notice.

+ Application

electronic circuit debugging   circuit testing   design and manufacture
education and training   automobile maintenance and testing

+ Accessories
The accessories subject to final delivery.

Power Cord | CD Rom | Manual | USB Cable | Probe | Probe Adjust | Battery (optional) | Soft Bag (optional)

PLCs | Adquisición | Instrumentos | Registradores | Potencia | HMIs | Switches | Movimiento | Sensores | Convertidores | Teclados | SCADA | Telemetría

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SDS-E Series 2G economical type digital storage oscilloscope
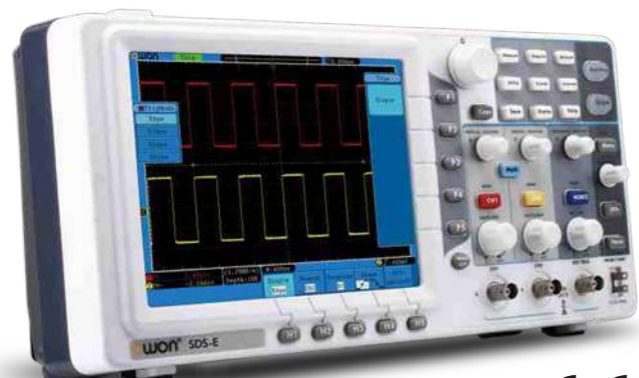
+ Bandwidth : 30MHz - 125MHz

+ Sample rate : 500MS/s - 1GS/s

+ Ultra-thin body

+ 8 inch high resolution LCD

+ Pass / Fail function

+ SCPI, and LabVIEW supported

+ newly added function - **digital filtering**, and current measurement (excl. SDS5032E and SDS5052E)

CE

VGA   LAN   USB   WAVE RECORD   FFT

+ Performance Specifications

Model	SDS5032E	SDS5052E	SDS6062E	SDS7072E	SDS7102E	SDS7122E
Bandwidth	30MHz	50MHz	60MHz	70MHz	100MHz	125MHz
Sample Rate	500MS/s			1GS/s		
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5			2ns/div - 100s/div, step by 1 - 2 - 5		
Rise Time (at input, typical)	≤11ns	≤7ns	≤5.8ns	≤5ns	≤3.5ns	≤2.8ns
Channel	2 + 1 (external)					
Display	8" color LCD, 800 x 600 pixels					
Input Impedance	1MΩ ± 2%, in parallel with 10pF ± 5pF		1MΩ ± 2%, in parallel with 15pF ± 3pF			
Channel Isolation	50Hz : 100 : 1, 10MHz : 40 : 1					
Max Input Voltage	400V (DC + AC peak)					
DC Gain Accuracy	±3%					
Record Length	10K		1M	1M (optional 10M)		
DC Accuracy (average)	average≥16 : ±(3% reading + 0.05 div) for △V					
Probe Attenuation Factor	1X, 10X, 100X, 1000X					
LF Respond (AC, -3dB)	≥10Hz (at input, AC coupling, -3dB)					
Sample Rate / Relay Time Accuracy	±100ppm					
Interpolation	sin(x)/x					
Interval (△T) Accuracy (full bandwidth)	Single : ±(1 interval time + 100ppm × reading + 0.6ns), Average>16 : ±(1 interval time + 100ppm × reading + 0.4ns)					
Input Coupling	DC, AC , and GND					
Vertical Resolution (A/D)	8 bits (2 channels simultaneously)					
Vertical Sensitivity	5mV/div - 10V/div (at input)		2mV/div - 10V/div (at input)			
Digital Filtering	low-pass, high-pass, band-pass, and band-reject					

Model	SDS5032E	SDS052E	SDS6062E	SDS7072E	SDS7102E	SDS7122E
Trigger Type	Edge, Pulse, Video, Slope, and Alternate					
Trigger Mode	Auto, Normal, and Single					
Trigger Level	±6 divisions from screen center					
Line / Field Frequency (video)	NTSC, PAL, and SECAM standard					
Cursor Measurement	△V, and △T between cursors					
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Week RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase, Preshoot, Rise Time, Fall Time, Delay A→B↲, Delay A→B↳, +Width, -Width, +Duty, -Duty,					
Waveform Math	+, -, *, /, invert, FFT					
Waveform Storage	15 waveforms					
Lissajous Figure — Bandwidth	full bandwidth					
Lissajous Figure — Phase Difference	±3 degrees					
Communication Interface	USB host, USB device, Pass / Fail, LAN, and VGA (optional)					
Frequency Counter	available					
Power Supply	100V - 240V AC, 50/60Hz, CAT II					
Power Consumption	<18W					
Fuse	2A, T class, 250V					
Battery	not supported					
Dimension (W x H x D)	348 x 170 x 78 (mm)					
Device Weight	1.50 kg					

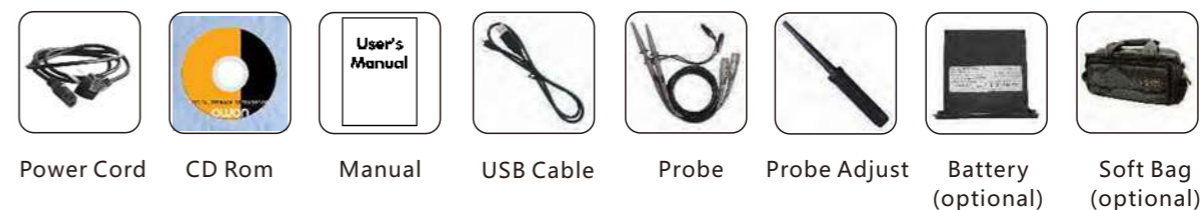Specifications subject to change without prior notice.

+ Application

electronic circuit debugging   circuit testing   design and manufacture
education and training   automobile maintenance and testing

+ Accessories

The accessories subject to final delivery.

| Power Cord | CD Rom | Manual | USB Cable | Probe | Probe Adjust | Soft Bag (optional) |

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

//MSO Series Mixed LA - Oscilloscope

- + 2 in 1 (DSO + LA)
- + 8 inch color LCD
- + USB data transmission supported
- + 20 automated measurements

Digital Storage Oscilloscope
- + Bandwidth : 60MHz - 200MHz
- + Sample rate : up to 2GS/s
- + Auto-scale function
- + FFT

Logic Analyzer
- + Bandwidth : 100MHz - 200MHz
- + Sample rate : max 1GS/s
- + 16 input channels

Model		MSO7062TD	MSO7102TD	MSO8102T	MSO8202T
Lissajous Figure	Bandwidth	60MHz	100MHz		200MHz
	Phase Difference	±3 degrees			
Communication Interface		USB host, VGA (optional), and USB device			
Fuse		1A, T class, 250V			
Battery		7.4V 8000mAh (optional)			
Dimensions (W x H x D)		370 x 180 x 120 (mm)			
Device Weight		2.20 kg			

「Logic Analyzer」 Performance Specifications

Model	MSO7062TD	MSO7102TD	MSO8102T	MSO8202T
Sample Rate	20S/s - 1GS/s			
Bandwidth	100MHz			200MHz
Channel	16			
Record Length	4M points			
Input Impedance	660KΩ ± 5%, in parallel with 15 ± 5pF			
Trigger Mode	Edge, Bus, State, Data Alignment, Data Width, and Distributed Queue			
Trigger Position Setting	Pre-trigger, Mid-trigger, and Re-trigger			
Threshold Voltage	±6V (4 settings)			
Input Signal Range	±30V			
Data Search	available			
Data System	binary, decimal, and hex			
Digital Filter	0, 1, 2 optional			
Setting Storage	10 settings			
USB Flash Disk Storage	available			

Specifications subject to change without prior notice.

「Digital Storage Oscilloscope」 Performance Specifications

Model	MSO7062TD	MSO7102TD	MSO8102T	MSO8202T
Bandwidth	60MHz	100MHz		200MHz
Sample Rate	1GS/s		2GS/s	
Rise Time	≤5.8ns	≤3.5ns		≤1.7ns
Display	8'' color LCD , 640 x 480 pixels			
Channel	dual + external trigger			
Horizontal Scale (s/div)	2ns/div - 100s/div, step by 1 - 2 - 5		1ns/div - 100s/div, step by 1 - 2 - 5	
DC Accuracy (average)	average>16 : ±(3% reading + 0.05div) for △V			
Vertical Sensitivity	2mV/div - 10V/div			
DC Gain Accuracy	±3%			
Vertical Resolution (A/D)	8 bits (2 channels simultaneously)			
Interpolation	sin(x)/x			
Max Input Voltage	400V (DC + AC peak)			
Probe Attenuation Factor	1X , 10X , 100X , 1000X			
Trigger Mode	Edge, Video, Alternate, Pulse, and Slope			
Acquisition Mode	Normal, Peak Detect, and Average			
Record Length	2M points			
Waveform Storage	4 waveforms			
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B�↑, Delay A→B↓, +Width, -Width, +Duty, -Duty			
Waveform Math	+, -, *, /, invert, FFT			
Power Supply	100 - 240V AC, 50Hz / 60Hz, CAT II			

+ Application

design and debug   circuit function test   education and training   mixed signal circuit test

+ Accessories
The accessories subject to final delivery.

Power Cord   CD Rom   Manual   USB Cable   Probe   Probe Adjust   Logic Analyzer Module   Battery (optional)   Soft Bag (optional)

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

HDS-N Series
Handheld Digital Storage Oscilloscope

+ 2 in 1 (DSO + Multimeter)

+ Auto-scale function

+ FFT function

+ 20 group automatic measurement options

+ Bandwidth : 20MHz - 200MHz

+ USB data transmission supported

+ Rechargeable Li-ion battery (6 hours' backup)

+ Waveform record and replay

+ Multimeter newly supported SCPI

CE

Model	HDS1022M-N	HDS2062M-N	HDS3102M-N	HDS4202M-N
Waveform Math	+, -, *, /, invert, FFT			
Waveform Storage	4 waveforms			
Lissajous Figure — Bandwidth	full bandwidth			
Lissajous Figure — Phase Difference	± 3degrees			
Communication Interface	USB			
Power Supply	100V-240V AC, 50/60Hz			
Li-ion Battery	7.4V, 6 hours' operation			
Dimensions (W x H x D)	115 x 180 x 40 (mm)			
Device Weight	645.00 g			

+ Multimeter Specifications

Full Scale Reading	$3\frac{3}{4}$ digits (max 4000 count)	Diode	0V - 1.5V
Input Impedance	10 MΩ	On / Off Test	<50 (± 30) beeping
Voltage	VDC : 400mV, 4V, 40V, 400V, 1000V : ±(1% ± 1 digit); max input : DC 1000V VAC : 4V, 40V, 400V : ±(1% ± 3 digits), 750V : ±(2% ± 3 digits); Frequency : 40Hz - 400Hz; max input : AC 750V (virtual value)		
Current	DC : 40mA, 400mA : ±(1.5% ± 1 digit), 10A : ±(3% ± 3 digits) AC : 40mA : ±(1.5% ± 3 digits), 400mA : ±(2% ± 1 digit), 10A : ±(5% ± 3 digits)		
Impedance	400Ω : ±(1% ± 3 digits), 40KΩ - 4MΩ : ±(1% ± 1 digit), 40MΩ : ±(1.5% ± 3 digits)		
Capacitance	51.2nF - 100uF : ±(3% ± 3 digits)		

Specifications subject to change without prior notice.

+ Performance Specifications

Model	HDS1022M-N	HDS2062M-N	HDS3102M-N	HDS4202M-N
Bandwidth	20MHz	60MHz	100MHz	200MHz
Sample Rate	100MS/s	1GS/s		
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2.5 - 5	5ns/div - 100s/div, step by 1 - 2 - 5		2ns/div - 100s/div, step by 1 - 2 - 5
Rise Time (at input, typical)	≤ 17.5ns	≤ 5.8ns	≤ 3.5ns	≤ 1.7ns
Display	3.7" color TFT display (640 x 480 pixels)			
Channel	dual			
Input Impedance	1MΩ ± 2%, in parallel with 20pF ± 5pF	1MΩ ± 2%, in parallel with 15pF ± 5pF		
Record Length	6K points			
Interpolation	sin(x)/x			
Probe Attenuation Factor	1X , 10X , 100X , 1000X			
Input Coupling	DC, AC, and GND			
DC Accuracy (average)	average >16 : ±(5% reading + 0.05 div) for △V			
Vertical Sensitivity	5mV/div - 5V/div (at input)			
Vertical Resolution (A/D)	8 bits			
Max Input Voltage	400V (DC + AC peak, 1MΩ input impedance, probe attenuation 10 : 1), CAT II			
Trigger Type	Edge, Video, and Alternate			
Trigger Mode	Auto, Normal, and Single			
Trigger Level	±6 divisions from screen center			
Acquisition Mode	Sample, Peak Detect, and Average			
DC Gain Accuracy	±3%			
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B↱, Delay A→B↳, +Width, -Width, +Duty, -Duty			

+ Application

electronic circuit debugging	circuit testing	design and manufacture
education and training	automobile maintenance and testing	

+ Accessories
The accessories subject to final delivery.

Power Cord   CD Rom   Manual   USB Cable   Probe   Probe Adjust   Multimeter Lead   Adapter   5V, 1KHz Output

Capacitance Ext Module   Soft Bag (optional)   Metal Case

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

HDS Series
1-channel Handheld Digital Storage Oscilloscope

- 2 in 1 (DSO + Multimeter)
- Auto-scale function
- FFT function
- 20 group automatic measurement options
- Bandwidth : 20MHz - 100MHz
- USB data transmission supported
- Rechargeable Li-ion battery (6 hours' backup)
- Waveform record and replay
- Multimeter newly supported SCPI

CE

Multimeter Specifications

Full Scale Reading	$3\frac{3}{4}$ digits (max 4000 count)	Diode	0V - 1.5V
Input Impedance	10 MΩ	On / Off Test	<50 (± 30) beeping
Voltage	VDC : 400mV, 4V, 40V, 400V, 1000V : ±(1% ± 1 digit); max input : DC 1000V VAC : 4V, 40V, 400V : ±(1% ± 3 digits), 750V : ±(2% ± 3 digits); Frequency : 40Hz - 400Hz; max input : AC 750V (virtual value)		
Current	DC : 40mA, 400mA : ±(1.5% ± 1 digit), 10A : ±(3% ± 3 digits) AC : 40mA : ±(1.5% ± 3 digits), 400mA : ±(2% ± 1 digit), 10A : ±(5% ± 3 digits)		
Impedance	400Ω : ±(1% ± 3 digits), 40KΩ - 4MΩ : ±(1% ± 1 digit), 40MΩ : ±(1.5% ± 3 digits)		
Capacitance	51.2nF - 100uF : ±(3% ± 3 digits)		

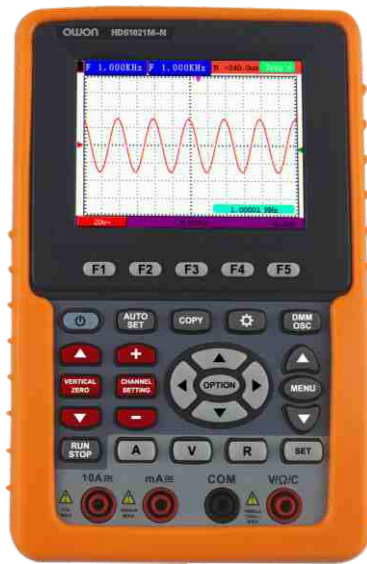Specifications subject to change without prior notice.

Application

electronic circuit debugging	circuit testing	design and manufacture
education and training	automobile maintenance and testing	

Accessories
The accessories subject to final delivery.

Power Cord	CD Rom	Manual	USB Cable	Probe	Probe Adjust	Multimeter Lead	Adapter	5V, 1KHz Output

Capacitance Ext Module	Soft Bag	Metal Case (optional)

Performance Specifications

Model	HDS1021M-N	HDS2061M-N	HDS3101M-N
Bandwidth	20MHz	60MHz	100MHz
Sample Rate	500MS/s	500MS/s	1GS/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)	≤ 17.5ns	≤ 5.8ns	≤ 3.5ns
Display	3.7" color TFT display (640 x 480 pixels)		
Channel	single		
Input Impedance	1MΩ ± 2%, in parallel with 18pF ± 5pF	1MΩ ± 2%, in parallel with 15pF ± 5pF	
Record Length	6K points		
Interpolation	sin(x)/x		
Probe Attenuation Factor	1X , 10X , 100X , 1000X		
Input Coupling	DC, AC, and GND		
DC Accuracy (average)	average >16 : ±(5% reading + 0.05 div) for △V		
Vertical Sensitivity	5mV/div - 5V/div (at input)		
Vertical Resolution (A/D)	8 bits		
Max Input Voltage	400V (DC + AC peak, 1MΩ input impedance, probe attenuation 10 : 1), CAT II		
Trigger Type	Edge, and Video	Edge, Video, and Alternate	
Trigger Mode	Auto, Normal, and Single		
Trigger Level	±6 divisions from screen center		
Acquisition Mode	Sample, Peak Detect, and Average		
DC Gain Accuracy	±3%		
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B↗, Delay A→B↘, +Width, -Width, +Duty, -Duty		
Waveform Storage	4 waveforms		
Communication Interface	USB		
Power Supply	100V-240V AC, 50/60Hz		
Li-ion Battery	7.4V, 6 hours' operation		
Dimensions (W x H x D)	115 x 180 x 40 (mm)		
Device Weight	645.00 g		

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

HDS-I Series Handheld DSO w/ Channel Isolation

+ 2 in 1 (DSO + Multimeter)

+ with good ISOLATION between channels

+ Auto-scale function

+ FFT function

+ 20 group automatic measurement options

+ Bandwidth : 20MHz

+ USB data transmission supported

+ Rechargeable Li-ion battery

+ Multimeter newly supported SCPI

CE

Model	HDS1022M-I
Cursor Measurement	△V, and △T between cursors
Communication Interface	USB host, and USB device
Battery	built-in Li-ion battery, 7.4V / 3500mAh
Dimensions (W x H x D)	113 x 180 x 40 (mm)
Device Weight	645.00 g

+ Multimeter Specifications

Full Scale Reading	$3\frac{3}{4}$ digits (max 4000 count)	Diode	0V - 1.5V
Input Impedance	10 MΩ	On / Off Test	<50 (± 30) beeping
Voltage	VDC : 400mV, 4V, 400V, 1000V : ±(1% ± 1 digit); max input : DC 1000V VAC : 4V, 40V, 400V : ±(1% ± 3 digits), Frequency : 40Hz - 400Hz;max input : AC 750V (virtual value)		
Current	DCA: 40mA, 400mA: ±(1.5% ±1 digit), 10A: ±(3% ± 3 digits) ACA: 40mA: ±(1.5% ± 3 digit); 400mA: ±(2 ± 1 digit); 10A: ±(3% ± 3 digits)		
Impedance	400Ω: ±(1% ± 3 digits); 4KΩ / 40KΩ / 400 KΩ / 4MΩ: ±(1% ± 1 digit); 40MΩ: ±(1.50% ± 3 digits)		
Capacitance	51.2nF - 100uF : ±(3% ± 3 digits)		

Specifications subject to change without prior notice.

+ Application

electronic circuit debugging
education and training

circuit testing
automobile maintenance and testing

design and manufacture

+ Accessories
The accessories subject to final delivery.

Power Cord   CD Rom   Manual   USB Cable   Probe   Probe Adjust   Multimeter Lead   Adapter   5V, 1KHz Output

Capacitance Ext Module   Soft Bag (optional)   Metal Case

+ Performance Specifications

Model	HDS1022M-I
Bandwidth	20MHz
Sample Rate	100MS/s
Rise Time (at input, typical)	≤ 17.5ns
Record Length	6K points
Channel	dual, insulated ground of 1000 : 1
Display	3.7'' color TFT LCD, 640 x 480 pixels
Floating Meas. Channel	insulated input ground between multimeter / oscilloscope mode
Input Coupling	DC, AC, and GND
Input Impedance	1MΩ ± 2%, in parallel with 15pF ± 5pF
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5
Interval (△T) Accuracy	single: ±(1 interval time + 100ppm x reading + 0.6ns), average>16: ±(1 interval time + 100ppm x reading + 0.4ns)
Vertical Sensitivity	5mV/div - 5V/div (at input)
Vertical Resolution (A/D)	8 bits
Max Input Voltage	400V (DC + AC peak, 1MΩ input impedance, probe attenuation 10 : 1), CAT II
Trigger Type — Edge	rising edge, falling edge
Trigger Type — Video	line, field, randomline, odd / even fields
Trigger Type — Alternate	
Trigger Mode	Auto, Normal, and Single
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B↯, Delay A→B↯, +Width, -Width, +Duty, -Duty
DC Accuracy (average)	average >16 : ±(5% reading + 0.05 div) for △V
Waveform Math	+, -, *, /, invert, FFT
Waveform Storage	4 waveforms
Lissajous Figure — Bandwidth	full bandwidth
Lissajous Figure — Phase Difference	±3 degrees

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

Wave Rambler Pen-type PC Oscilloscope

+ 25MHz bandwidth
+ 100MS/s sample rate
+ 5K record length
+ FFT function
+ human engineering design
+ multi- action mode via creative trackball
+ multi- trigger option : edge, slope, and pulse
+ 5mV micro signal supported
+ USB bus powering, and optional USB isolated function
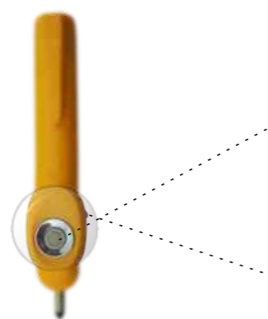+ easy portability, pocket accommodated

CE

The full DSO in your pocket
Pen-type design with easy portability,
the ideal solution for on-site measurement.
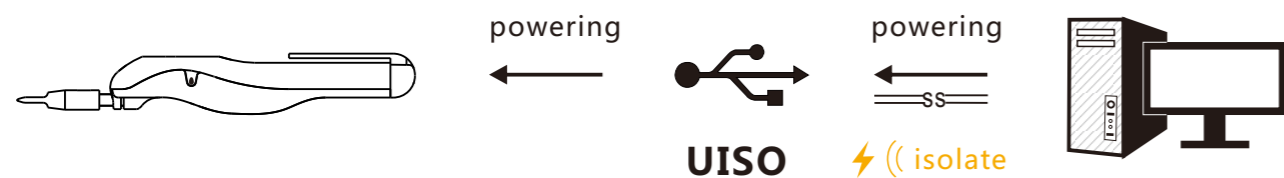
Designed to be easily- disassembled
Special metal material made probe- tip assures
durable lifetime.

	The running/ stopping of Wave Rambler, is under the control of trackball.
	The zero voltage position, horizontal trigger position, and voltage base / time base could be adjusted by rolling the trackball, which makes the device-operation more comfortable, and convenient.
	The waterdrop-shape button brings you into 4 control options - the setting of trackball function, single trigger, force trigger, and autoset.

UISO function
Creative USB isolation function fulfills direct device- powering via USB port, and supports floating measurement (isolation voltage upto 1000V), making the operation more user-friendly, assuring safer T&M environment, and decreasing the interference to micro signal- measuring to the minimum.

powering   powering

UISO   isolate

+ Performance Specifications

Model	RDS1021	RDS1021I
Bandwidth	25MHz	
Sample Rate	100MS/s	
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5	
Rise Time	≤14ns	
Record Length	5K	
Input Coupling	DC, AC, and GND	
Input Impedance	10MΩ±2% (X10), 1MΩ±2% (X1)	
Input Capacitance	20pF±5pF	
Max Input Voltage	50V (DC + AC peak)	400V (DC + AC peak)
DC Gain Accuracy	±3%	
DC Accuracy (average)	average≥16 : ±(3% reading + 0.05 div) for △V	
Analog Bandwidth	25MHz	
Probe Attenuation Factor	1X, 10X	
LF Respond (AC,-3dB)	≥10Hz	
Interpolation	sin(x)/x	
Displacement	±10 divisions	
Interval (△T) Accuracy (full bandwidth)	Single : ±(1 interval time + 100ppm × reading + 0.6ns), Average>16 : ±(1 interval time + 100ppm × reading + 0.4ns)	
Vertical Resolution (A/D)	8 bits	
Vertical Sensitivity	5mV/div - 5V/div	
Trigger Type	Edge, Pulse, and Slope	
Trigger Mode	Auto, Normal, and Single	
Trigger Level	±5 divisions from screen center	
Acquisition Mode	Sample, Peak Detect, and Average	
Cursor Measurement	△V and △T between cursors	
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty	
Waveform Math	FFT	
Communication Interface	USB2.0	
Dimension (W x H x D)	150 x 20 x 18 (mm)	
Device Weight	0.27 kg	

Specifications subject to change without prior notice.

+ Application

design and debug   circuit function test   education and training

+ Accessories
The accessories subject to final delivery.

Grounding   Protection   USB   Manual   USB Cable
Clamp   Cover   flash disk

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría
¡Tu sitio de automatización!

VDS Series PC Oscilloscope

+ Up to 100MHz bandwidth,
  and max 1GS/s real-time sample rate
+ 2 / 4 channels
+ Max 10M record length
+ Friendly UI : FFT, or X-Y, and waveform 2 views
  displayed on the same screen
+ Multi-trigger option :
  edge, video, slope, pulse, and alternate
+ USB isolation - less signal interference,
  more PC protection
+ USB bus powering, and LAN remote control (optional)
+ Ultra-thin body design, easy portability
+ SCPI supported
+ LabVIEW supported (only in VDS3102, and VDS3104)

+ Performance Specifications

Model	VDS1022I	VDS1022	VDS2062	VDS2064	VDS3102	VDS3104
Bandwidth	25MHz		60MHz		100MHz	
Channel	2+1 (multi)			4+1 (multi)	2+1 (multi)	4+1 (multi)
Sample Rate	100MS/s		500MS/s		1GS/s	
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5				2ns/div - 100s/div, step by 1 - 2 - 5	
Rise Time	≤14ns		≤5.8ns		≤3.5ns	
Record Length	5K		10M	5M	10M	5M
Input Coupling	DC, AC, and GND					
Input Impedance	1MΩ ± 2%, in parallel with 10pF ± 5pF					
Channel Isolation	50Hz : 100 : 1 ; 10MHz : 40 : 1					
Max Input Voltage	400V (DC + AC peak)	40V (DC + AC peak)				
DC Gain Accuracy	±3%					
DC Accuracy	Average≥16 : ±(3% reading + 0.05 div) for △T					
Probe Attenuation Factor	1X, 10X, 100X, 1000X					
LF Respond (AC, -3dB)	≥10Hz (at input, AC coupling, -3dB)					
Sample Rate / Relay Time Accuracy	150ps					
Interpolation	sin(x)/x					
Interval (△T) Accuracy (full bandwidth)	Single : ± (1 interval time + 100ppm × reading + 0.6ns), Average >16 : ±(1 interval time + 100ppm × reading + 0.4ns)					
Vertical Resolution (A/D)	8 bits (2 channels simultaneously)					

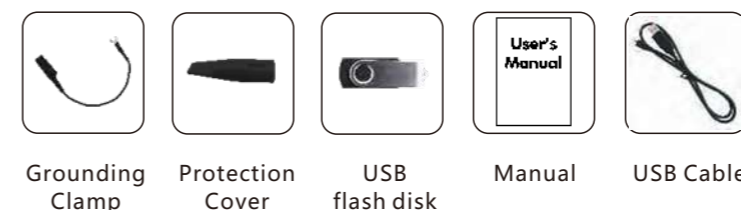| Model	VDS1022I	VDS1022	VDS2062	VDS3102	VDS2064	VDS3104
Vertical Sensitivity	5mV/div - 5V/div					
Trigger Type	Edge, Pulse, Video, Slope, and Alternate					
Trigger Mode	Auto, Normal, and Single					
Trigger Level	±5 divisions from screen center					
Acquisition Mode	Sample, Peak Detect, and Average					
Line / Field Frequency (video)	NTSC, PAL, and SECAM standard					
Cursor Measurement	△V, and △T between cursors					
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B↲, Delay A→B↳, +Width, -Width, +Duty, -Duty					
Waveform Math	+, -, *, /, invert, FFT					
Lissajous Figure	Bandwidth	full bandwidth				
	Phase Difference	±3 degrees				
Communication Interface	USB2.0 (isolation)	USB2.0	USB2.0, LAN (optional)			
Multi-function Interface	Signal Type	synchronized input / output, Pass / Fail, external trigger input				
	Level Standard	TTL				
Power Supply	5.0V/1A					
Power Consumption	≤1.5W		≤5W			
Dimensions (W x H x D)	170 x 120 x 18 (mm)		190 x 120 x 18 (mm)			
Device Weight	0.26 kg		0.30 kg			

Specifications subject to change without prior notice.

+ Application

design and debug   circuit function test   education and training

+ Accessories
The accessories subject to final delivery.
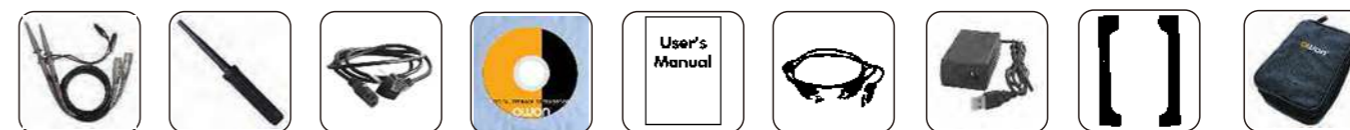
Probe   Probe Adjust   Power Cord*   CD Rom   Manual   USB Cable   Adapter*   Silicon Gel Case   Soft Bag (optional)

* Power cord and adapater only available for models with LAN port.

PLCs   Adquisición   Instrumentos Registradores   Potencia   HMIs   Switches   Movimiento   Sensores Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

AG Series Dual-channel Arbitrary Waveform Generator

+ Advanced DDS technology, max 60MHz frequency output
+ Up to 250MS/s sample rate, and 1µHz frequency resolution
+ Vertical Resolution : 14 bits, up to 1M arb waveform length
+ Comprehensive waveform output : 5 basic waveforms, and 45 built-in arbitrary waveforms
+ Comprehensive modulation functions : AM, FM, PM, FSK, PWM, Sweep, and Burst
+ High-accuracy frequency counter integrated, supported range 100mHz - 200MHz
+ SCPI, and LabVIEW supported
+ 4 inch high resolution (480 x 320 pixels) LCD

+ *could work with OWON SDS Series DSO smoothly*

+ Performance Specifications

Model	AG1012	AG1012F	AG1022	AG1022F	AG2052F	AG2062F
Channel	dual					
Frequency Output	10MHz		25MHz		50MHz	60MHz
Sample Rate	125MS/s				250MS/s	
Vertical Resolution	14 bits					
Waveform						
Standard Waveform	Sine, Square, Pulse, Ramp, and Noise					
Arbitrary Waveform	Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 45 built-in waveforms, and user-defined arbitrary waveform					
Frequency (resolution 1µHz)						
Sine	1µHz - 10MHz		1µHz - 25MHz		1µHz - 50MHz	1µHz - 60MHz
Square	1µHz - 5MHz				1µHz - 25MHz	1µHz - 30MHz
Pulse	1µHz - 5MHz			1µHz - 10MHz		
Ramp	1µHz - 1MHz					
Noise	25MHz (-3dB) (typical)					
Arbitrary Waveform	1µHz - 10MHz					
Amplitude						
Amplitude	1m Vpp - 10 Vpp (50Ω), 1m Vpp - 20 Vpp (high impedance)					
Resolution	1m Vpp or 4 digits					
DC Offset Range (AD+DC)	±5V (50Ω), ±10V (high impedance)					
DC Offset Range Resolution	1mV or 4 digits					
Load Impedance	50Ω (typical)					

| Model	AG1012	AG1022	AG1012F	AG1022F	AG2052F	AG2062F
Arbitrary Waveform						
Wave Length	2 pts to 8K pts				2 pts to 1M pts	
Non-volatile Memory	64M byte					
Modulation						
Modulation Waveform	/		AM, FM, PM, FSK, Sweep, and Burst		AM, FM, PM, FSK, PWM, Sweep, and Burst	
Modulation Frequency	/		2mHz to 20.00KHz (FSK 1µHz - 100KHz)			
Counter						
Function	/		Frequency Period, +Width, -Width, +Duty, and -Duty			
Frequency Range	/		100mHz - 200MHz			
Frequency Resolution	/		6 digits			
Power Amplifier Module (optional)						
Input Impedance	50 kΩ			Output Impedance	<2 Ω	
Max Input Voltage	2.2Vpp			Gain	X10	
Max Output Voltage	22Vpp			Offset	<7%	
Output Slew Rate	10V/us			Bandwidth (at full power)	DC 100kHz	
Max Output Power	10W					
Input / Output						
Display	4 inch (480 x 320 pixels) LCD					
Type	external reference clock input / output		counter external modulation input / output, external trigger input / output, external reference clock input / output			
Communication Interface	USB host, and USB device, RS232 (option)					
Mechanical						
Dimension (W x H x D)	235 x 110 x 295 (mm)					
Device Weight	3.00 kg					

Specifications subject to change without prior notice.

+ Application

design and debug   circuit function test   education and training

+ Accessories

The accessories subject to final delivery.

Power Cord   CD Rom   Manual   USB Cable   Q9

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

AG -S Series Single-channel Arbitrary Waveform Generator - {80 - 150MHz}

+ Advanced DDS technology, max 150MHz frequency output
+ Up to 400MS/s sample rate, and 1μHz frequency resolution
+ Vertical Resolution : 14 bits, up to 1M arb waveform length
+ Comprehensive waveform output : 5 basic waveforms,
  and 45 built-in arbitrary waveforms
+ Comprehensive modulation functions :
  AM, FM, PM, FSK, PWM, Sweep, and Burst
+ SCPI, and LabVIEW supported
+ 4 inch high resolution (480 x 320 pixels) LCD

+ *could work with OWON SDS Series DSO smoothly*

CE

+ Performance Specifications

Model	AG4081	AG4101	AG4121	AG4151
Channel	single + trigger			
Frequency Output	80MHz	100MHz	120MHz	150MHz
Sample Rate	400MS/s			
Vertical Resolution	14 bits			
Waveform				
Standard Waveform	Sine, Square, Pulse, Ramp, and Noise			
Arbitrary Waveform	Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 45 built-in waveforms, and user-defined arbitrary waveform			
Frequency (resolution 1μHz)				
Sine	1μHz - 80MHz	1μHz - 100MHz	1μHz - 120MHz	1μHz - 150MHz
Square	1μHz - 40MHz	1μHz - 50MHz		
Pulse	1μHz - 20MHz	1μHz - 25MHz		
Ramp	1μHz - 1MHz			
Noise	50MHz (-3dB) (typical)			
Arbitrary Waveform	1μHz - 10MHz			
Amplitude				
Amplitude	10m Vpp - 10 Vpp (50Ω), 20m Vpp - 20 Vpp (high impedance)			
Resolution	1m Vpp or 4 digits			
DC Offset Range (AD+DC)	±5V (50Ω), ±10V (high impedance)			
DC Offset Range Resolution	1mV or 4 digits			
Load Impedance	50Ω (typical)			

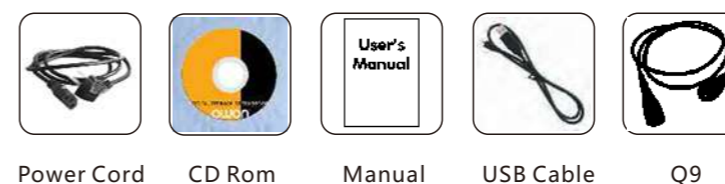| Model	AG4081	AG4101	AG4121	AG4151
Arbitrary Waveform				
Wave Length	2 pts to 1M pts			
Sample Rate	200MS/s			
Vertical Resolution	14 bits			
Non-volatile Memory	64M byte			
Modulation				
Modulation Waveform	AM, FM, PM, FSK, PWM, Sweep, and Burst			
Modulation Frequency	2mHz to 20.00KHz (FSK 1μHz - 100KHz)			
Input / Output				
Display	4 inch (480 x 320 pixels) LCD			
Type	external modulation input, external trigger input / output, external reference clock input / output			
Communication Interface	USB host, USB device, RS232, and LAN			
Mechanical				
Dimension (W x H x D)	235 x 110 x 295 (mm)			
Device Weight	3.00 kg			

Specifications subject to change without prior notice.

+ Application

design and debug   circuit function test   education and training

+ Accessories

The accessories subject to final delivery.

Power Cord   CD Rom   Manual   USB Cable   Q9

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

AG -S Series Single-channel Arbitrary Waveform Generator - {5 - 10MHz}

+ Advanced DDS technology, upto 10MHz frequency output
+ 125MS/s sample rate, and 1μHz frequency resolution
+ Vertical Resolution : 14 bits, and 8K arb waveform length
+ Comprehensive waveform output : 5 basic waveforms,
   and 45 built-in arbitrary waveforms
+ Comprehensive modulation functions :
   AM, FM, PM, FSK, Sweep, and Burst
+ SCPI, and LabVIEW supported
+ 4'' high resolution (480 x 320 pixels) LCD

C E

+ Performance Specifications

Model	AG051	AG051F	AG1011	AG1011F
Channel	single + trigger			
Frequency Output	5MHz		10MHz	
Sample Rate	125MS/s			
Vertical Resolution	14 bits			

Waveform

Standard Waveform	Sine, Square, Pulse, Ramp, and Noise
Arbitrary Waveform	Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 45 built-in waveforms, and user-defined arbitrary waveform

Frequency (resolution 1μHz)

Sine	1μHz - 5MHz	1μHz - 10MHz
Square	1μHz - 5MHz	
Pulse	1μHz - 5MHz	
Ramp	1μHz - 1MHz	
Noise	5MHz (-3dB) (typical)	
Arbitrary Waveform	1μHz - 5MHz	

Amplitude

Amplitude	1m Vpp - 12.5 Vpp (50Ω), 1m Vpp - 25 Vpp (high impedance)
Resolution	1m Vpp, or 4 digits
DC Offset Range (AD+DC)	±6.25V (50Ω), ±12.5V (high impedance)
DC Offset Range Resolution	1mV, or 4 digits
Load Impedance	50Ω (typical)

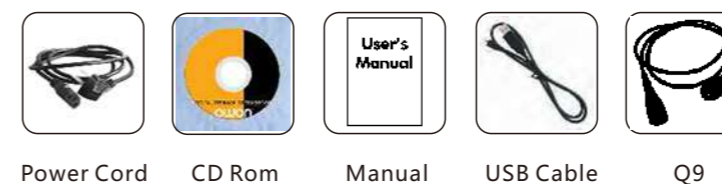| Model	AG051	AG051F	AG1011	AG1011F
Arbitrary Waveform				
Wave Length	2 pts to 8K pts			
Sample Rate	125MS/s			
Vertical Resolution	14 bits			
Non-volatile Memory	64M byte			
Modulation				
Modulation Waveform	/	AM, FM, PM, FSK, Sweep, and Burst	/	AM, FM, PM, FSK, Sweep, and Burst
Modulation Frequency	/	2mHz to 20.00KHz (FSK 2mHz - 100KHz)	/	2mHz to 20.00KHz (FSK 2mHz - 100KHz)
Input / Output				
Display	4 inch (480 x 320 pixels) LCD			
Type	external reference clock input	external modulation input, external trigger input, external reference clock input	external reference clock input	external modulation input, external trigger input, external reference clock input
Communication Interface	USB device			
Mechanical				
Dimension (W x H x D)	235 x 110 x 295 (mm)			
Device Weight	3.00 kg			

Specifications subject to change without prior notice.

+ Application

design and debug   circuit function test   education and training

+ Accessories
The accessories subject to final delivery.

Power Cord   CD Rom   Manual   USB Cable   Q9

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

¡Tu sitio de automatización!

⊙DP Series Programmable DC Power Supply

[ODP3031]   [ODP3032]   CE

+ ODP3032 : two independent controllable channels; ODP3031 : one controllable channel
+ Max output resolution : 1mV / 1mA
+ Low ripples / low noise : <300 µVrms / 2 mVpp
+ Up to 100 group timers
+ Up to 10 group preset system configurations
+ Over-voltage / Over-current protection
+ Auto-cooling system
+ 3.9 inch high resolution (480 x 320 pixels) LCD
+ USB2.0, and RS232 seril port digital communication supported
+ SCPI, and LabVIEW supported

+ Display

Model	ODP3031	ODP3032
Display Type	3.9 inch colored LCD	
Display Resolution	480 x 320 pixels	
Display Color	65536 colors	

+ Mechanical Specifications

Model	ODP3031	ODP3032
Dimension (W x H x D)	250 x 158 x 358 (mm)	
Device Weight	7.00 kg	10.50 kg

+ Performance Specifications
The specifications based upon the instrument having run for at least 30 minutes continuously, under the specified operating environment.

Model		ODP3031		ODP3032	
Channel		1	Fixed 3.3V / 5V	2 (independent)	Fixed 5V
DC Output Rating	Voltage	0 - 30V	3.3V / 5V	0- 30V (Independent / Parallel) 0 - 60V (Series) -30V - 30V (Plus-minus)	5V
	Current	0 - 3A	3A	0 - 3A (Independent / Series / Plus-minus), 0 - 6A (Parallel)	3A
Line Regulation	CV	≤0.01% + 3mV	≤3mV	≤0.01% + 3mV	≤3mV
	CC	≤0.1% + 3mA	/	≤0.1% + 3mA	/
Load Regulation	CV	≤0.01% + 3mV	≤0.1% + 3mV	≤0.01% + 3mV	≤0.1% + 3mV
	CC	≤0.2% + 3mA	/	≤0.2% + 3mA	/
Noise and Ripple (20Hz - 7MHz)	CV	≤300 µVrms / 2 mVpp		≤300 µVrms / 2 mVpp	
	CC	≤3mArms	/	≤3mArms	/
Settings Resolution	Voltage	1mV	/	1mV	/
	Current	1mA	/	1mA	/
Settings Accuracy (25℃ ± 5℃)	Voltage	≤0.05% + 3mV	/	≤0.05% + 3mV	/
	Current	≤0.1% + 3mA	/	≤0.1% + 3mA	/
Read Back Resolution	Voltage	1mV (<10V), 10mV (≥10V)	/	1mV (<10V), 10mV (≥10V)	/
	Current	1mA	/	1mA	/
Read Back Accuracy (25℃ ± 5℃)	Voltage	≤0.05% + 3 digits	/	≤0.05% + 3 digits	/
	Current	≤0.1% + 3 digits	/	≤0.1% + 3 digits	/
Communication Interface		USB Host, USB Device and RS232			

Specifications subject to change without prior notice.

+ Application

general detection in R&D laboratory   QC test   industrial production automation test
automobile and electronic circuit test power-supplying   education / teaching experimentation
electronic components test, aging test   to monitor the real-time status of power system via remote control
to monitor battery charging curve

+ Accessories
The accessories subject to final delivery.
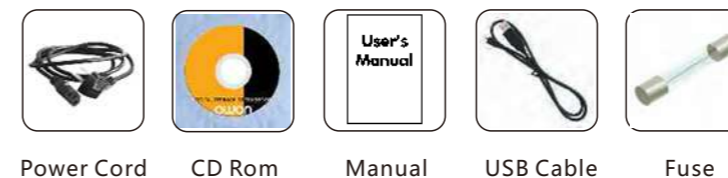
Power Cord   CD Rom   Manual   USB Cable   Fuse

XDM3051

Bench-type Digital Multimeter

+ 4 inch 480 x 320 pixels high resolution LCD
+ resolutions up to 5 1/2 digits
+ reading rates up to 150 readings/s
+ true RMS AC voltage / current measurement
+ dual line display supported
+ the change trend analysis accessible via special chart mode
+ SCPI supported - remote control, and data-sharing possible via LAN, USB, RS232 port, and WiFi*
   * WiFi module is optional
+ multi- IO interface: USB Device / Host, RS232, LAN, and ext. trigger input

CE

Data-logger Mode

during recording the measurement value, possible to set the logging duration (min. 5ms), and length, then get access to chart or table result

No.	Function	Reading
63	DCV	6.966 V
64	DCV	6.966 V
65	DCV	6.966 V
66	DCV	3.747 V
67	DCV	3.747 V
68	DCV	3.747 V
69	DCV	1.822 V
70	DCV	1.821 V
71	DCV	1.821 V

●Trigger   Record
Memory
Internal
Display
Table

-000.54 mVDC   Auto 200 mV   Read   Back

●Trigger   Record
Memory
Internal
Display
Graph

20.866 V

1.821 V
Points:100

000.23 mVDC   Auto 200 mV   Read   Back

+ Performance Specifications

XDM3051	Measurement Range	Frequency Range	Accuracy: 1 Year ± (% of reading +% of range)
DC Voltage	200mV, 2V, 20V, 200V, 1000V	/	0.015 ± 0.004
True RMS AC Voltage	200mV, 2V, 20V, 200V, 750V	20Hz - 45Hz	1.5 + 0.10
		45Hz - 20kHz	0.2 + 0.05
		20kHz -50kHz	1.0 + 0.05
		50kHz -100 kHz	3.0 + 0.05
DC Current	200.000 µA	/	0.055 + 0.005
	2.00000 mA		0.055 + 0.005
	20.0000 mA		0.095 + 0.020
	200.000 mA		0.070 + 0.008
	2.00000 A		0.170 + 0.020
	10.0000 A		0.250 + 0.010
True RMS AC Current	20.0000 mA, 200.000 mA 2.00000 A, 10.0000 A	20Hz - 45Hz	1.5 + 0.10
		45Hz - 2kHz	0.50 + 0.10
		2kHz - 10kHz	2.50 + 0.20

XDM3051	Measurement Range	Frequency Range	Accuracy: 1 Year ± (% of reading +% of range)
Resistance	200.000 Ω	/	0.030 + 0.005
	2.00000 kΩ		0.020 + 0.003
	20.0000 kΩ		0.020 + 0.003
	200.000 kΩ		0.020 + 0.003
	2.00000 MΩ		0.040 + 0.004
	10.0000 MΩ		0.250 + 0.003
	100.000 MΩ		1.75 + 0.004
Diode Test	2.0000 V	/	0.05 + 0.01
Continuity	2000Ω	/	0.05+0.01
Frequency Period	200 mV - 750 V	20 Hz - 2 kHz	0.01 + 0.003
		2 kHz - 20 kHz	0.01 + 0.003
		20 kHz - 200 kHz	0.01 + 0.003
		200 kHz - 1 MHz	0.01 + 0.006
	20 mA - 10 A	20Hz-2kHz	0.01 + 0.003
		2 kHz - 10 kHz	0.01 + 0.003
Test Current			
Capacitance	2.000 nF	200 nA	3 + 1.0
	20.00 nF	200 nA	1 + 0.5
	200.0 nF	2 µA	1 + 0.5
	2.000 µF	10 µA	1 + 0.5
	200 µF	100 µA	1 + 0.5
	10000 µF	1 mA	2 + 0.5
Temperature	temperature sensors under 2 categories supported - thermocouple (ITS-90 conversion between B / E / J / K / N / R / S /T type), and thermal resistance (RTD sensor conversion between Pt100 and Pt385 type)		
Miscellaneous	barmeter	bar charts, trend chart	Vavg, Vmax, Vmin	standard deviation	DB / DBm	Pass / Fail		
Data-logger Function			
Logging Duration	5ms		
Logging Length	1M points		
General			
Dimension (W x H x D)	235 x 110 x 295 (mm)		
Device Weight	3.00 kg		

Specifications subject to change without prior notice.

+ Application

electronic circuit debugging   circuit testing   design and manufacture
education and training   automobile maintenance and testing

+ Accessories

The accessories subject to final delivery.

Power Cord   Manual   USB Cable   Fuse   Multimeter Lead   Alligator Clip

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría
¡Tu sitio de automatización!

XDM3041

Bench-type Digital Multimeter NEW!

+ 4 inch 480 x 320 pixels high resolution LCD
+ resolutions up to 4 1/2 digits
+ reading rates up to 150 readings/s
+ true RMS AC voltage / current measurement
+ dual line display supported
+ the change trend analysis accessible via special chart mode
+ SCPI supported - remote control, and data-sharing
  possible via LAN, USB, RS232 port, and WiFi*
   * WiFi module is optional
+ multi- IO interface: USB Device / Host, RS232, LAN, and ext.
  trigger input

CE

Data-logger Mode

during recording the measurement value, possible to set the logging duration (min. 5ms), and length, then get access to chart or table result

No.	Function	Reading
0	ACV	019.18 mV
1	ACV	027.75 mV
2	ACV	019.22 mV
3	ACV	019.28 mV
4	ACV	025.39 mV
5	ACV	027.48 mV
6	ACV	027.33 mV
7	ACV	004.52 mV
8	ACV	003.62 mV

●Trigger Record Memory Internal Display Table Read Back
005.48 mVAC Manual 200 mV

●Trigger Record Memory Internal Display Graph Read Back
27.756mV ... 3.123mV Points:25
005.40 mVAC Manual 200 mV

+ Performance Specifications

XDM3041	Measurement Range	Frequency Range	Accuracy: 1 Year ± (% of reading +% of range)
DC Voltage	600mV, 6V, 60V, 600V, 1000V	/	0.02±0.01
True RMS AC Voltage	600mV, 6V, 60V, 600V, 750V	20Hz - 50Hz	2 + 0.10
		50Hz - 20kHz	0.2 + 0.06
		20kHz -50kHz	1.0 + 0.05
		50kHz -100 kHz	3.0 + 0.08
DC Current	600.00 µA	/	0.06 + 0.02
	6.0000 mA		0.06 + 0.02
	60.000 mA		0.1 + 0.05
	600.00 mA		0.2 + 0.02
	6.000 A		0.2 + 0.05
	10.0000 A		0.250 + 0.05
True RMS AC Current	60.000 mA, 600.00 mA, 6.0000 A, 10.000 A	20Hz - 45Hz	2 + 0.10
		45Hz - 2kHz	0.50 + 0.10
		2kHz - 10kHz	2.50 + 0.20

XDM3041	Measurement Range	Frequency Range	Accuracy: 1 Year ± (% of reading +% of range)
Resistance	600.00 Ω	/	0.040 + 0.01
	6.0000 kΩ		0.030 + 0.01
	60.000 kΩ		0.030 + 0.01
	600.00 kΩ		0.040 + 0.01
	6.0000 MΩ		0.120 + 0.03
	60.000 MΩ		0.90 + 0.03
	100.00 MΩ		1.75 + 0.03
Diode Test	3.0000 V	/	0.5 + 0.01
Continuity	1000Ω	/	0.5 + 0.01
Frequency Period	200 mV - 750 V	20 Hz - 2 kHz	0.01 + 0.003
		2 kHz - 20 kHz	0.01 + 0.003
		20 kHz - 200 kHz	0.01 + 0.003
		200 kHz - 1 MHz	0.01 + 0.006
	20 mA - 10 A	20Hz-2kHz	0.01 + 0.003
		2 kHz - 10 kHz	0.01 + 0.003

		Test Current	
Capacitance	2.000 nF	200 nA	3 + 1.0
	20.00 nF	200 nA	1 + 0.5
	200.0 nF	2 µA	1 + 0.5
	2.000 µF	10 µA	1 + 0.5
	200 µF	100 µA	1 + 0.5
	10000 µF	1 mA	2 + 0.5
Temperature	temperature sensors under 2 categories supported - thermocouple (ITS-90 conversion between B / E / J / K / N / R / S /T type), and thermal resistance (RTD sensor conversion between Pt100 and Pt385 type)		
Miscellaneous	barmeter	bar charts, trend chart	Vavg, Vmax, Vmin	standard deviation	DB / DBm	Pass / Fail		

Data-logger Function			
Logging Duration	5ms		
Logging Length	1M points		

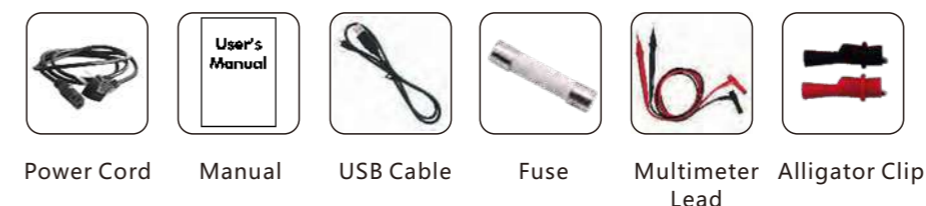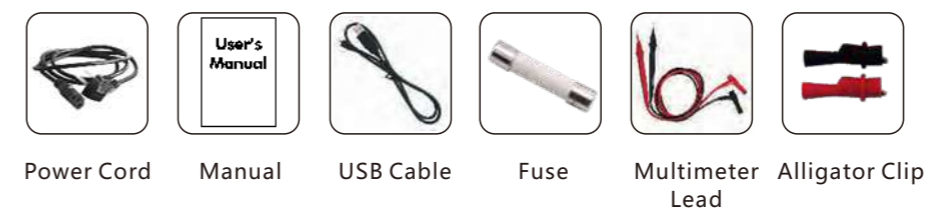| General			
Dimension (W x H x D)	235 x 110 x 295 (mm)		
Device Weight	3.00 kg		

Specifications subject to change without prior notice.

+ Application

electronic circuit debugging
education and training

circuit testing
automobile maintenance and testing

design and manufacture

+ Accessories

The accessories subject to final delivery.

Power Cord   Manual   USB Cable   Fuse   Multimeter Lead   Alligator Clip

37   38

PLCs Adquisición Instrumentos Registradores Potencia HMIs Switches Movimiento Sensores Convertidores Teclados SCADA Telemetría

¡Tu sitio de automatización!

DM Series
Bluetooth Digital Multimeter

+ function as 3 in 1 :   datalogger + multimeter + temperature meter
+ multi-connection (more than one device) supported via mobile app
+ the change trend analysis accessible via special chart mode
+ voice warning supported, which assures measurement safety
+ smart voice-reading accessible
+ 4000 / 6000 - count full scale reading
+ larger display, easier data-reading; simulated bar chart
+ offline recording function (only in B33+, B35+, and B35T+)
+ true RMS value available (only in B35T, B35T+ and D35T)
+ Bluetooth 2.0 version - supports mobile device with Android 4.0
    or above OS
+ Bluetooth 4.0 version - supports mobile device with Android 4.3
    or above / iOS 7.0 or above OS, and equipped with ble 4.0 module

CAT III
1000V   CE

offline recording function - your process analyzer

B33+ / B35+ / B35T+ possible to record data into memory,
but no need to leave mobile device on-site
when data-processing, use mobile device to recall the saved data
offline data-recording could continue for max 7 days (168 hours)

Record interval: 2
Records count: 10000
Offline record will cost time about 5H33Min20Sec
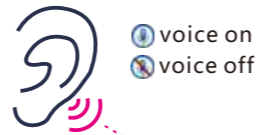
Start to record

functioning as multimeter + datalogger

the measured data always updated, and auto- recorded to
mobile device, saving labor to do on-site records;
the recoding duration, and sampling duration could be
customized, accessible in chart mode, facilitating comparison
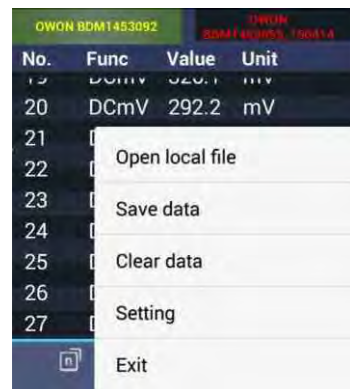analysis between several B35
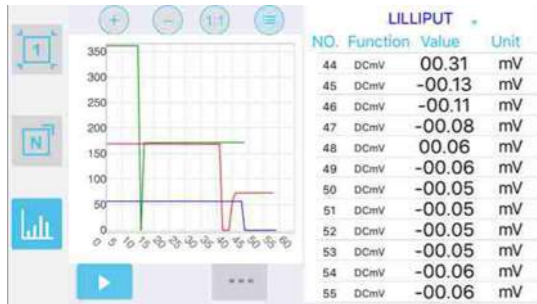
remote control supported

the function activated after
TTS voice pack installed, which
frees the eye-watch, making
on-site measurement more
comfortable

🔊 voice on
🔇 voice off

OWON BDM1453098

AUTO   Select
DCmV   346.3   Range
Hold   Hz/Duty
Rel   mV   Max/Min

+ Performance Specifications

Model		D33	B33	B33+	
		Measurement Range		Resolution	Accruacy
DC Voltage	V	400.0mV / 4.000V / 40.00V / 400.0V		0.1mV	±(0.5%+2-digit)
		1000V		1V	±(0.8%+2-digit)
AC Voltage	V	4.000V / 40.00V		1mV	±(0.8%+2-digit)
		400.0V / 750V		0.1V	±(1%+3-digit)
DC Current	μA	400.0μA / 4000μA		0.1μA	±(0.8%+2-digit)
	mA	40.00mA / 400.0mA		0.01mA	±(0.8%+2-digit)
	A	4.000A / 10.00A		1mA	±(1.2%+3-digit)
AC Current	μA	400.0μA / 4000μA		0.1μA	±(1%+3-digit)
	mA	40.00mA / 400.0mA		0.01mA	±(0.8%+2-digit)
	A	4.000A / 10.00A		1mA	±(2%+3-digit)
Resistance		400.0Ω / 4.000kΩ / 40.00kΩ / 400.0kΩ / 4.000MΩ		0.1Ω	±(0.8%+2-digit)
		40.00MΩ		0.01MΩ	±(2%+3-digit)
Capacitance		40.00nF / 400.0nF / 4.000μF / 40.00μF		0.01nF	±(2.5%+3-digit)
		100.0μF		0.1μF	±(3%+5-digit)
Frequency		4.999Hz / 49.99Hz / 499.9Hz / 4.999kHz / 49.99kHz / 499.9kHz / 4.999MHz		1mHz	±(0.8%+2-digit)
Duty Ratio		0.1% - 99.9% (typical value: Vrms = 1V, f = 1kHz)		0.1%	±(1.2%+3-digit)
		0.1% - 99.9% (≥1kHz)			±(2.5%+3-digit)
Temperature		-50℃ - 400℃		1℃	±(2.5%+3-digit)
Display		3999 count			
Frequency Response		40Hz - 400Hz			
Shift Rate		3 times / s			

data- saving, recalling, and comparatively analyzing

CSV format data export supported, the history data could be recalled for comparison analysis;
with the assistance of chart mode, the measured result more visualized, easier for decision- making

OWON BDM1453092

No.	Func	Value	Unit
19	DCmV	320.1	mV
20	DCmV	292.2	mV
21			
22	Open local file		
23	Save data		
24			
25	Clear data		
26	Setting		
27			
	Exit		

OWON BDM1453092

No.	Func	Value	Unit
19	DCmV	320.1	mV
20	DCmV	292.2	mV
21	DCmV	188.9	mV
22	DCmV	144.9	mV
23	DCmV	280.2	mV
24	DCmV	363.3	mV
25	DCmV	528.1	mV
26	DCmV	553.0	mV
27	DCmV	431.3	mV

Auto-scale	√	Max / Min Value	√
Offline Recording Function	available in B33+	Bluetooth Module	available in B33, and B33+
Record Period	168 hours (7 days)		
Record Length	10,000 points	LCD Backlight	√
Diode Test	√	Input Protection	√
Simulated Chart	√	Input Impedance	≥10MΩ
Auto Power-off	√	LCD Size	69mm x 52mm
On-off Warning	√	Display Area	67 x 46 mm (effective area 66 x 45 mm)
Low-battery Indicator	√	Battery	3V (1.5V x 2)
Data Hold	√	Dimension (W x H x D)	85 x 185 x 30 (mm)
Relative Measurement	√	Device Weight	0.32 kg

Specifications subject to change without prior notice.

PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

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Model	D35	D35T	B35	B35T	B35+	B35T+
	Measurement Range				**Resolution**	**Accruacy**
DC Voltage — mV	60.00mV / 600.0mV				0.01mV	±(0.5%+2-digit)
DC Voltage — V	60.00mV / 600.0mV / 6.000V / 60.00V				0.1mV	
DC Voltage — V	600.0V / 1000V				0.1V	
AC Voltage — mV	60.00mV / 600.0mV				0.01mV	±(0.8%+2-digit)
AC Voltage — V	60.00mV / 600.0mV / 6.000V / 60.00V				1mV	±(0.8%+2-digit)
AC Voltage — V	600.0V / 750V				0.1V	±(1%+3-digit)
DC Current — µA	600.0µA				0.1µA	±(0.8%+2-digit)
DC Current — mA	600.0µA / 6.000mA / 60.00mA / 600.0mA / 6.000A				0.01mA	±(0.8%+2-digit)
DC Current — A	20.00A				1mA	±(1.2%+3-digit)
AC Current — µA	600.0µA				0.1µA	±(1%+3-digit)
AC Current — mA	600.0µA / 6.000mA / 60.00mA / 600.0mA / 6.000A				0.01mA	±(0.8%+2-digit)
AC Current — A	20.00A				1mA	±(2%+3-digit)
Resistance	600.0Ω / 6.000kΩ / 60.00kΩ / 600.0kΩ / 6.000MΩ / 10.00MΩ				0.1Ω	±(0.8%+2-digit)
Resistance	60.00MΩ				0.01MΩ	±(2%+3-digit)
Capacitance	40.00nF				0.01nF	±(2.5%+3-digit)
Capacitance	400.0nF / 4.000µF / 40.00µF				0.1nF	±(2.5%+3-digit)
Capacitance	400.0µF / 4000µF				0.1µF	±(3%+5-digit)
Frequency	9.999Hz / 99.99Hz / 999.9Hz / 9.999kHz / 99.99kHz / 999.9kHz / 9.999MHz				1mHz	±(0.8%+2-digit)
Duty Ratio	0.1% - 99.9% (typical value: Vrms = 1V, f = 1kHz)				0.1%	±(1.2%+3-digit)
Duty Ratio	0.1% - 99.9% (≥1kHz)					±(2.5%+2-digit)
Temperature	(-50℃) - (+400℃)				1°C	±(2.5%+3-digit)
Temperature	(-58°F) - (+752°F)				1°F	±(4.5%+5-digit)
Display	6000 count					
Frequency Response	40Hz - 400Hz					
Shift Rate	3 times / s					
Simulated Chart Shift Rate	30 times / s					

Auto-scale	√	**Max / Min Value**	√	
Offline Recording Function	available in B35+, and B35T+	**Bluetooth Module**	available in B35, B35+, B35T, and B35T+	
Record Period	168 hours (7 days)			
Record Length	10,000 points	**LCD Backlight**	√	
True RMS	available in D35T, B35T, and B35T+	**Simulated Chart**	√	
Diode Test	√	**Input Protection**	√	
Audion Test	√	**Input Impedance**	10MΩ	
Auto Power-off	√	**LCD Size**	69mm x 52mm	
On-off Warning	√	**Display Area**	67 x 46 mm (effective area 66 x 45 mm)	
Low-battery Indicator	√	**Battery**	3V (1.5V x 2)	
Data Hold	√	**Dimension (W x H x D)**	85 x 185 x 30 (mm)	
Relative Measurement	√	**Device Weight**	0.32 kg	

Specifications subject to change without prior notice.

Model	B41T+		
DC Voltage — mV	220mV	0.01mV	±(0.05%+10-digit)
DC Voltage — V	2.2V	0.1mV	
DC Voltage — V	22V	1mV	
DC Voltage — V	220V	10mV	
DC Voltage — V	1000V	0.1V	±(0.1%+10-digit)
AC Voltage — mV	220mV	0.01mV	±(1.0%+25-digit)
AC Voltage — V	2.2V	0.1mV	±(0.8%+25-digit)
AC Voltage — V	22V	1mV	
AC Voltage — V	220V	10mV	
AC Voltage — V	750V	0.1V	±(1.0%+25-digit)
DC Current — µA	220µA	0.01µA	±(0.5%+10-digit)
DC Current — µA	2200µA	0.1µA	
DC Current — mA	22mA	1µA	±(0.8%+10-digit)
DC Current — mA	220mA	10µA	
DC Current — A	20.00A	1mA	±(2%+25-digit)
AC Current — µA	220µA	0.01µA	±(1.2%+25-digit)
AC Current — µA	2200µA	0.1µA	
AC Current — mA	22mA	1µA	±(1.5%+25-digit)
AC Current — mA	220mA	10µA	
AC Current — A	20.00A	1mA	±(2.5%+35-digit)
Resistance	220Ω	0.01MΩ	±(0.5%+30-digit)
Resistance	2.2kΩ	0.1Ω	
Resistance	22kΩ	1Ω	±(0.4%+5-digit)
Resistance	220kΩ	10Ω	
Resistance	2.2MΩ	100Ω	
Resistance	22MΩ	1.2kΩ	±(0.5%+25-digit)
Resistance	220MΩ	100kΩ	±(5%+10-digit)
Capacitance	22nF	1pF	±(2.5%+15-digit)
Capacitance	220nF	10pF	
Capacitance	2.2µF	100pF	
Capacitance	22µF	1nF	
Capacitance	220µF	10nF	
Capacitance	2.2mF	100nF	±(4.0%+10-digit)
Capacitance	>220mF	/	/
Frequency	22.00Hz	0.01Hz	±(0.1%+4-digit)
Frequency	220.0Hz	0.1Hz	
Frequency	22.000kHz	1Hz	
Frequency	220.00kHz	10Hz	
Frequency	22.00Hz	100Hz	
Frequency	2.2000MHz	1kHz	
Frequency	22.000MHz	10kHz	
Frequency	>220MHz	/	/
Duty Ratio	5.0% - 94.9% (typical value : Vrms=1V, f=1kHz)	0.1%	±(1.2%+3-digit)
Duty Ratio	0.1% - 99.9% (≥1kHz)		±(2.5%+3-digit)
Temperature	-50℃ - 400℃	0.1℃	±(1.0%+5-digit)
Temperature	-58 °F - 752 °F	0.1°F	±(1.2%+6-digit)
Display	21999 count		
Frequency Response	40Hz - 10000Hz		
Shift Rate	3 times / s		

PLCs Adquisición Instrumentos Registradores Potencia HMIs Switches Movimiento Sensores Convertidores Teclados SCADA Telemetría

Auto-scale	√	Max / Min Value	√
Offline Recording Function	√	Bluetooth Module	√
Record Period	168 hours (7 days)		
Record Length	10,000 points	LCD Backlight	√
True RMS	√	Simulated Chart	√
Diode Test	√	Input Protection	√
Audion Test	√	Input Impedance	10MΩ
Auto Power-off	√	LCD Size	69mm x 52mm
On-off Warning	√	Display Area	67 x 46 mm (effective area 66 x 45 mm)
Low-battery Indicator	√	Battery	3V (1.5V x 2)
Data Hold	√	Dimension (W x H x D)	85 x 185 x 30 (mm)
Relative Measurement	√	Device Weight	0.32 kg

Specifications subject to change without prior notice.

+ Application

electronic circuit debugging   circuit testing   design and manufacture
education and training   automobile maintenance and testing

+ Accessories

The accessories subject to final delivery.

Multimeter Lead   K-type Thermocouple   Manual

BT2.0

mobile app accessible via scanning QR code

optional accessories:

Alligator Clip   Multi-function Test Bench (excl. D33 / B33 / B33+)   Soft Bag

BLE4.0

mobile app accessible via scanning QR code

Current Probe

Model	CP-05⁺			
Test Range	1mA - 400A			
Resolution	1mA			
Bandwidth	DC - 200KHz (±3dB)			
Jaw Size	23mm (Max)			
Auto Zero at Power on	√			
Power Supply	9V 6F22 Battery			
Operating Temperature	0℃ to 50℃			
Operating Humidity	15% to 70% RH			
DC Current	Range	AC 4A	AC 40A	AC 200A	AC 200A ~ 400A
	Accuracy	±2.0%rdg±5 digit			±3.0%rdg±5 digit
	Sensitivity	1mV/10mA	1mV/0.1A		1mV/1A
DC Current	Range	DC 4A	DC 40A	DC 200A	DC 200~400A
	Accuracy	±1.5%rdg±5 digit			±3.0%rdg±5 digit
	Sensitivity	1mV/10mA	1mV/0.1A		1mV/1A
Dimension (W x H x D)	180 x 30 x 44 (mm)			
Device Weight	about 200g			

Specifications subject to change without prior notice.

+ Accessories

The accessories subject to final delivery.

Soft Bag

Model	CP-07⁺	
Test Range	400mA - 4A	
Resolution	0.1mA	
Bandwidth	DC - 1MHz (±3dB)	
Jaw Size	5mm (Max)	
Auto Zero at Power on	√	
Power Supply	9V 6F22 Battery	
Operating Temperature	0℃ to 50℃	
Operating Humidity	15% to 70% RH	
DC Current	Range	DCA 400mA	DCA 4A
	Accuracy	±1.5%rdg±5 digit	
	Sensitivity	1mV/1mA	1mV/10mA
AC Current	Range	ACA 400mA	ACA 4A
	Accuracy	±2.0%rdg±5 digit	
	Sensitivity	1mV/1mA	1mV/10mA
Dimension (W x H x D)	215 x 36 x 58 (mm)	
Device Weight	about 200g	

Specifications subject to change without prior notice.

+ Accessories

The accessories subject to final delivery.

BNC cable   Extension cord   Soft Bag

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PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

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General Probe

Model No	P6060	P6100	P6200
Attenuation Ratio	1X or 10X	1X or 10X	1X or 10X
Bandwidth	1X : DC-6MHz	1X : DC-6MHz	1X : DC-6MHz
	10X : DC-60MHz	10X : DC-100MHz	10X : DC-200MHz
Input R	1MΩ/10MΩ	1MΩ/10MΩ	1MΩ/10MΩ
Input C	1X : 85pF - 120pF	1X : 85pF - 120pF	1X : 85pF - 120pF
	10X :18.5pF - 22.5pF	10X :18.5pF - 22.5pF	10X :18.5pF - 22.5pF
Max Input Voltage	1X : <300VDC + AC Vpp	1X : <300VDC + AC Vpp	1X : <300VDC + AC Vpp
	10X : <600VDC + AC Vpp	10X : <600VDC + AC Vpp	10X : <600VDC + AC Vpp

Model No	P4060	P4100	P4200	P4250
Attenuation Ratio	100X	100X	100X	100X
Bandwidth	10X : DC-60MHz	10X : DC-100MHz	10X : DC-200MHz	10X : DC-250MHz
Input R	100MΩ	100MΩ	100MΩ	100MΩ
Input C	100X :18.5pF - 22.5pF	100X :18.5pF - 22.5pF	100X :18.5pF - 22.5pF	100X :18.5pF - 22.5pF
Max Input Voltage	2KV DC+ AC Vpp	2KV DC + AC Vpp	2KV DC + AC Vpp	2KV DC + AC Vpp

Model No	P5101	P5102	P5104
Attenuation Ratio	1000X	1000X	1000X
Bandwidth	1000X : DC-20MHz	1000X : DC-20MHz	1000X : DC-20MHz
Input R	100MΩ	100MΩ	100MΩ
Input C	10X : 0.5pF - 1.5pF	10X : 0.5pF - 1.5pF	10X : 0.5pF - 1.5pF
Max Input Voltage	10KV DC + AC Vpp	20KV DC + AC Vpp	40KV DC + AC Vpp

Model No	P2300	P2500
Attenuation Ratio	100X	100X
Bandwidth	100X : DC-300MHz	100X : DC-500MHz
Input R	100MΩ	100MΩ
Input C	100X :10pF - 20pF	100X :10pF - 20pF
Max Input Voltage	5KV DC + AC Vpp	5KV DC + AC Vpp

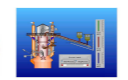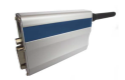PLCs   Adquisición   Instrumentos   Registradores   Potencia   HMIs   Switches   Movimiento   Sensores   Convertidores   Teclados   SCADA   Telemetría

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