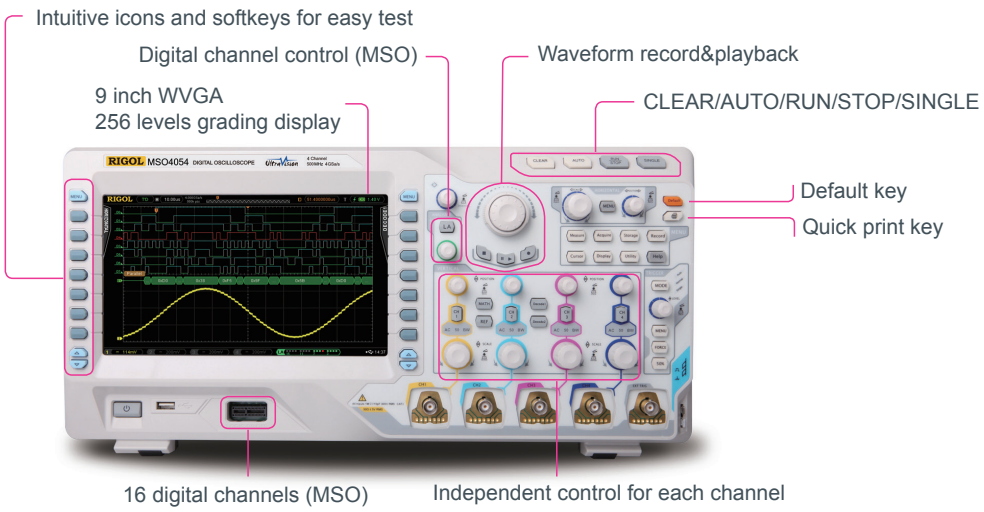
RIGOL

- Bandwidth: 500 MHz, 350 MHz, 200 MHz, 100 MHz
- Real-time Sample Rate: analog channel up to 4 GSa/s, digital channel up to 1 GSa/s (MSO)
- Standard Memory Depth: analog channel up to 140 Mpts, digital channel up to 28 Mpts (MSO)
- 2 or 4 analog channels, 16 digital channels (MSO)
- Waveform capture rate up to 110,000 waveforms per second
- Hardware real-time waveform record, playback and analysis functions (standard up to 200,000 frames)
- Lower noise floor, the minimum vertical sensitivity is 1mV/div
- Innovative “UltraVision” technology
- A variety of trigger and bus decoding functions (both analog and digital channels)
- Supports bandwidth update for 200 MHz and 350 MHz bandwidth models
- Complete Connectivity: USB HOST&DEVICE, LAN (LXI-C), VGA, AUX, USB-GPIB (optional)
- 9 inch WVGA (800×480), 256 level intensity grading display

MSO/DS4000 series is the new mainstream digital scope to meet the customer's applications with its innovative technology. MSO4000 has 2+16 or 4+16 channels, target for the embedded design and test market with its industry leading specifications, powerful trigger functions and broad analysis capabilities.

MSO/DS4000 Series Digital Oscilloscope



Product Dimensions: Width×Height×Depth = 440.0 mm×218.0 mm×130.0 mm
Weight: 4.8 kg±0.2 kg (Without Package)

▶ Innovative UltraVision Technology (Analog Channel)

UltraVision

- Deeper memory depth (standard 140 Mpts)
- Higher waveform capture rate (up to 110,000 wfms/s)
- Real-time waveform record, playback and analysis (up to 200,000 frames)
- Multi-level intensity grading display (up to 256 levels)

▶ Models and Key Specifications

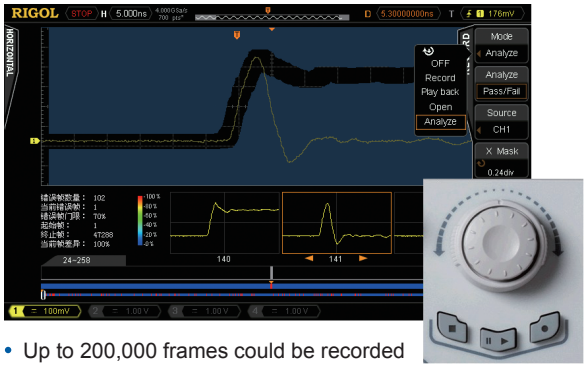
Model Number	DS4054	DS4052	DS4034	DS4032	DS4024	DS4022	DS4014	DS4012
	MSO4054	MSO4052	MSO4034	MSO4032	MSO4024	MSO4022	MSO4014	MSO4012
Analog BW	500 MHz		350 MHz		200 MHz		100 MHz	
Number of Analog Channels	4	2	4	2	4	2	4	2
Number of Digital Channels (MSO)	16							
Max. Real-time Sample Rate	Analog channel: 4 GSa/s (interleaved), 2 GSa/s (non-interleaved) Digital channel: 1 GSa/s per channel							
Max. Memory Depth	Analog channel: 140 Mpts (interleaved), 70 Mpts (non-interleaved) Digital channel: 28 Mpts per channel							
Max. Waveform Capture Rate	110,000 wfms/s (digital channels turned off), 85,000 wfms/s (digital channel turned on)							
Hardware Real-time Waveform Record, Playback and Analysis Functions	Analog channel: up to 200,000 frames (standard) Digital channel: up to 64,000 frames (standard)							
Standard Probes	2 or 4 sets RP3500A 500 MHz BW Passive Probe; 1 set RPL2316 LA Probe (MSO only)							

➤ Features and Benefits

UltraVision: up to 110,000 wfms/s waveform capture rate

Find the infrequent problem easily

UltraVision: real-time waveform record, playback and analysis functions (standard)

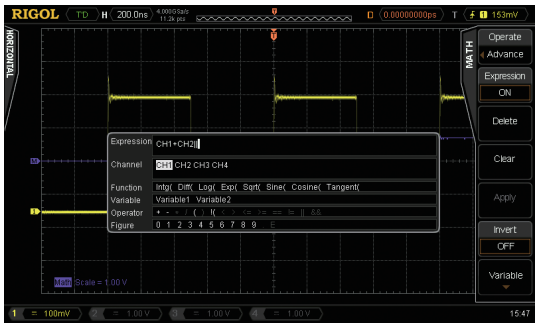


- Up to 200,000 frames could be recorded
- "WaveFinder"-dedicated data search knob
- Play back and analyze the recorded waveforms

UltraVision: deeper memory with up to 256-level intensity grading display

Provide the capability to see both the panorama and detail simultaneously

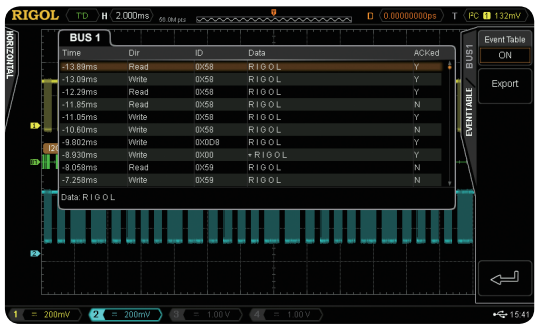
Advanced math function (user defined)



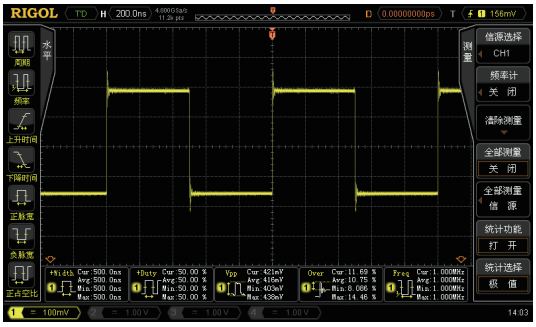
Mask test functions

User defined mask, Pass/Fail counts, stop on fail, fail alarm

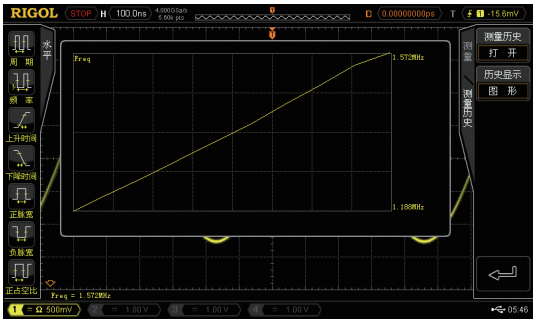
Serial bus triggering and decoding (supports both analog and digital channels)



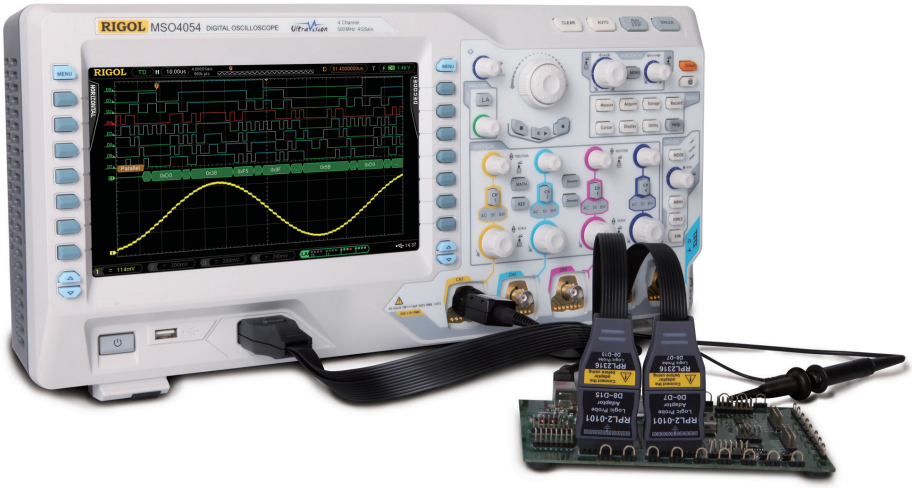
Automatic measurements with statistics



Measurement history: show the trend of the parameters



▶ MSO4000 Series Mixed Signal Oscilloscope



Besides the powerful functions of DS4000, you could get more from MSO4000 with:

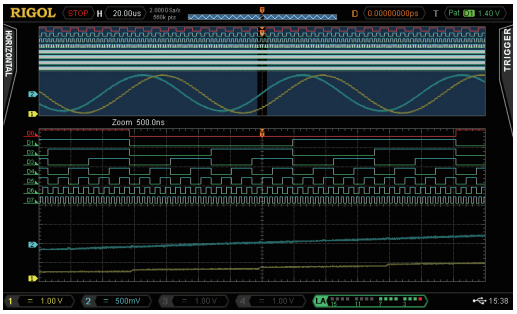
- 16 digital channels
- Sample rate of digital channel up to 1 GSa/s
- Memory depth of digital channel up to 28 Mpts per channel
- Waveform capture rate of digital channel up to 85,000 wfms/s
- Hardware real-time waveform record and playback functions, up to 64,000 frames can be recorded
- Triggering and decoding across analog and digital channels
- Easy to be grouped for digital channels
- Supports a variety of logic levels
- Time correlated display for both analog and digital channel waveforms

Innovative UltraVision Technology (Digital Channel)

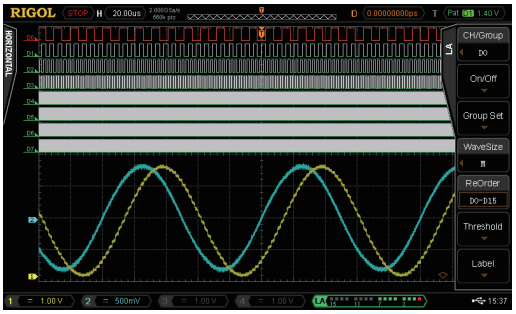
UltraVision

- Deeper memory depth (standard 28 Mpts per channel)
- Higher waveform capture rate (up to 85,000 wfms/s)
- Real-time waveform record and playback functions (up to 64,000 frames)
- Multi-level intensity grading display

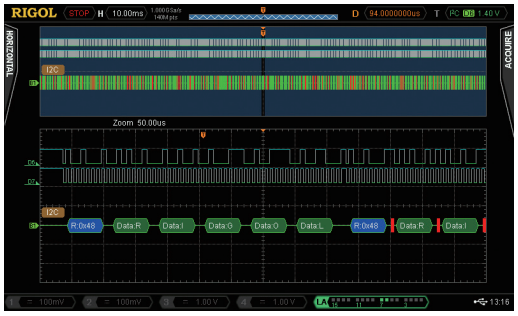
Mixed signal analysis with analog and digital channels



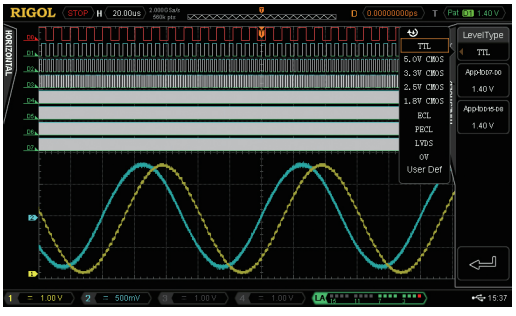
Easy to be grouped and labeled for digital channels



Deeper memory depth for the digital channels, serial bus triggering and decoding on digital channels



Supports a variety of logic levels



RIGOL Probes Supported by MSO/DS4000 Series

RIGOL Passive Probes

Model Number	Tpye	Description
 RP2200	High Z Probe	1X: DC to 7 MHz 10X: DC to 150 MHz Compatibility: all **RIGOL** scopes.
 RP3300A	High Z Probe	10X: DC to 350 MHz Compatibility: all **RIGOL** scopes.
 RP3500A	High Z Probe	DC to 500 MHz Compatibility: all **RIGOL** scopes.
 RP5600A	High Z Probe	DC to 600 MHz Compatibility: MSO/DS4000 series and DS6000 series.
 RP6150A	Low Z Probe	DC to 1.5 GHz Compatibility: MSO/DS4000 series and DS6000 series.
 RP1300H	High Voltage Probe	DC to 300 MHz CAT I 2000 V (DC+AC), CAT II 1500 V (DC+AC) Compatibility: all **RIGOL** scopes.
 RP1010H	High Voltage Probe	DC to 40 MHz DC: 0 to 10 kV DC, AC: pulse ⩽ 20 kVpp, AC: sine wave ⩽ 7 kVrms Compatibility: all **RIGOL** scopes.
 RP1018H	High Voltage Probe	DC to 150 MHz DC+AC Peak: 18 kV AC RMS: 12 kV Compatibility: all **RIGOL** scopes.
 RPL2316	Logic Analysis Probe	Logic analysis probe (for MSO4000 and MSO2000A)

RIGOL Active&Current Probes

Model Number	Tpye	Description
 RP7150	Differential /Single Eended Probe	BW: DC to 1.5 GHz 30 V peak, CAT I Compatibility: MSO/DS4000 series and DS6000 series.
 RP1001C	Current Probe	BW: DC to 300 kHz Max. input DC: ±100 A, AC P–P: 200 A, AC RMS: 70 A Compatibility: all **RIGOL** scopes.
 RP1002C	Current Probe	BW: DC to 1 MHz Max. input DC: ±70 A, AC P–P: 140 A, AC RMS: 50 A Compatibility: all **RIGOL** scopes.
 RP1003C	Current Probe	BW: DC to 50 MHz Max. input AC P–P: 50 A (noncontinuous), AC RMS: 30 A Compatibility: all **RIGOL** scopes. Must order RP1000P power supply.
 RP1004C	Current Probe	BW: DC to 100 MHz Max. input AC P–P: 50 A (noncontinuous), AC RMS: 30 A Compatibility: all **RIGOL** scopes. Must order RP1000P power supply.
 RP1005C	Current Probe	BW: DC to 10 MHz Max. input AC P–P: 300 A (noncontinuous), 500 A (@ pulse width ⩽ 30 us), AC RMS: 150 A Compatibility: all **RIGOL** scopes. Must order RP1000P power supply.
 RP1000P	Power Supply	Power supply for RP1003C, RP1004C and RP1005C, support 4 channels.
 RP1025D	High Voltage Differential Probe	BW: 25 MHz Max. voltage ⩽ 1400 Vpp Compatibility: all **RIGOL** scopes.
 RP1050D	High Voltage Differential Probe	BW: 50 MHz Max. voltage ⩽ 7000 Vpp Compatibility: all **RIGOL** scopes.
 RP1100D	High Voltage Differential Probe	BW: 100 MHz Max. voltage ⩽ 7000 Vpp Compatibility: all **RIGOL** scopes.

▶ Specifications

All the specifications are guaranteed except the parameters marked with "Typical" and the oscilloscope needs to operate for more than 30 minutes under the specified operation temperature.

Sample

Sample Mode	Real-time sample
Real-time Sample Rate	Analog channel: 4.0 GSa/s (interleaved); 2.0 GSa/s (non-interleaved) Digital channel: 1.0 GSa/s
Peak Detect	Analog channel: 250 ps (interleaved); 500 ps (non-interleaved) Digital channel: 1 ns
Averaging	After all the channels finish N samples at the same time, N can be 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096 or 8192.
High Resolution	12 bit of resolution when ≥5 μs/div @ 4 GSa/s (or ≥10 μs/div @ 2 GSa/s).
Minimum Detectable Pulse Width	Digital channel: 5 ns
Memory Depth	Analog channel: Interleaved: Auto, 14 kpts, 140 kpts, 1.4 Mpts, 14 Mpts and 140 Mpts are available Non-interleaved: Auto, 7 kpts, 70 kpts, 700 kpts, 7 Mpts and 70 Mpts are available Digital channel: maximum 28 Mpts

Input

Number of Channels	MSO40X4: 4-analog-channel + 16-digital-channel MSO40X2: 2-analog-channel + 16-digital-channel DS40X4: 4-channel DS40X2: 2-channel
Input Coupling	DC, AC or GND
Input Impedance	Analog channel: (1 MΩ±1%) || (15 pF±3 pF) or 50 Ω±1.5% Digital channel: (101 kΩ±1%) || (9 pF±1 pF)
Probe Attenuation Coefficient	Analog channel: 0.01X to 1000X, in 1-2-5 step
Maximum Input Voltage (1 MΩ)	Analog channel: CAT I 300 Vrms, CAT II 100 Vrms, transient overvoltage 1000 Vpk with RP2200 10:1 probe: CAT II 300 Vrms with RP3300A 10:1 probe: CAT II 300 Vrms with RP3500A 10:1 probe: CAT II 300 Vrms with RP5600A 10:1 probe: CAT II 300 Vrms Digital channel: CAT I 40 Vrms, transient overvoltage 800 Vpk

Horizontal

Time Base Scale	MSO405X/DS405X: 1 ns/div to 1 ks/div MSO403X/DS403X: 2 ns/div to 1 ks/div MSO402X/DS402X: 2 ns/div to 1 ks/div MSO401X/DS401X: 5 ns/div to 1 ks/div
Deviation between Channels	1 ns (typical), 2 ns (maximum)
Max. Recording Length	140 Mpts
Time Base Accuracy[1]	≤ ±4 ppm
Time Base Drift	≤ ±2 ppm/year
Delay Range	Pre-trigger (negative delay): Memory Depth/Sample Rate Post-trigger (positive delay): 1 s to 100 ks
Time Base Mode	Y-T, X-Y, Roll, Delayed
Number of X-Ys	2 paths at the same time (four-channel model)
Waveform Capture Rate[2]	110,000 wfms/s (digital channels are turned off, dots display) or 85,000 wfms/s (digital channels are turned on, dots display)
Zero Offset	±0.5 div*minimum time base scale

Vertical (Analog Channel)

Bandwidth (-3 dB) (50 Ω)	MSO405X/DS405X: DC to 500 MHz MSO403X/DS403X: DC to 350 MHz MSO402X/DS402X: DC to 200 MHz MSO401X/DS401X: DC to 100 MHz
Single Bandwidth (50 Ω)	MSO405X/DS405X: DC to 500 MHz MSO403X/DS403X: DC to 350 MHz MSO402X/DS402X: DC to 200 MHz MSO401X/DS401X: DC to 100 MHz
Vertical Resolution	Analog channel: 8 bit, two channels sample at the same time Digital channel: 1 bit
Vertical Scale	1 MΩ input impedance: 1 mV/div to 5 V/div 50 Ω input impedance: 1 mV/div to 1 V/div
Offset Range	1 MΩ input impedance: 1 mV/div to 225 mV/div: ±2 V 230 mV/div to 5 V/div: ±40 V 50 Ω input impedance: 1 mV/div to 124 mV/div: ±1.2 V 126 mV/div to 1 V/div: ±12 V
Dynamic Range	±5 div
Bandwidth Limit[1]	MSO405X/DS405X: 20 MHz/100 MHz/200 MHz MSO403X/DS403X: 20 MHz/100 MHz/200 MHz MSO402X/DS402X: 20 MHz/100 MHz MSO401X/DS401X: 20 MHz
Low Frequency Response (AC coupling, -3 dB)	≤5 Hz (on BNC)
Calculated Rise Time[1]	MSO405X/DS405X: 700 ps MSO403X/DS403X: 1 ns MSO402X/DS402X: 1.8 ns MSO401X/DS401X: 3.5 ns
DC Gain Accuracy	±2% full scale
DC Offset Accuracy	200 mV/div to 5 V/div: ±0.1 div ± 2 mV ± 0.5% offset 1 mV/div to 195 mV/div: ±0.1 div ± 2 mV ± 1.5% offset
ESD Tolerance	±2 kV
Channel to Channel Isolation	DC to maximum bandwidth: >40 dB

Vertical (Digital Channel)

Threshold	1 group with 8 channels adjustable threshold
Threshold Selected	TTL (1.4 V) 5.0 V CMOS (+2.5 V) 3.3 V CMOS (+1.65 V) 2.5 V CMOS (+1.25 V) 1.8 V CMOS (+0.9 V) ECL (-1.3 V) PECL (+3.7 V) LVDS (+1.2 V) 0 V User
Threshold Range	±20.0 V, with 10 mV step
Threshold Accuracy	±(100 mV + 3% of threshold setting)
Dynamic Range	±10 V + threshold
Min Voltage Swing	500 mVpp
Input Resistance	//101 kΩ
Probe Load	≈8 pF
Vertical Resolution	1 bit

Trigger

Trigger Level Range	Internal: ±6 div from center of the screen EXT: ±0.8 V
Trigger Mode	Auto, Normal, Single
Holdoff Range	100 ns to 10 s
High Frequency Rejection[1]	50 kHz
Low Frequency Rejection[1]	5 kHz
Edge Trigger	
Edge Type	Rising, Falling, Rising&Falling
Pulse Trigger	
Pulse Condition	Positive Pulse Width (greater than, lower than, within specific interval); Negative Pulse Width (greater than, lower than, within specific interval)
Pulse Width Range	4 ns to 4 s
Runt Trigger	
Pulse Polarity	Positive, Negative
Qualifier	None, >, <, <>
Pulse Width Range	4 ns to 4 s
Nth Edge Trigger	
Edge Type	Rising, Falling
Idle Time	40 ns to 1 s
Number of Edges	1 to 65535
Slope Trigger	
Slope Condition	Positive Slope (greater than, lower than, within specific interval); Negative Slope (greater than, lower than, within specific interval)
Time Setting	10 ns to 1 s
Video Trigger	
Polarity	Positive, Negative
Synchrony	All Lines, Line Num, Odd Field, Even Field
Signal Standard	NTSC, PAL/ECAM, 480P, 576P, 720P, 1080P and 1080I
Pattern Trigger	
Pattern Setting	H, L, X, Rising Edge, Falling Edge
RS232/UART Trigger	
Polarity	Normal, Invert
Trigger Condition	Start, Error, Check Error, Data
Baud	2400 bps, 4800 bps, 9600 bps, 19200 bps, 38400 bps, 57600 bps, 115200 bps, 230400 bps, 460800 bps, 921600 bps, 1Mbps, User
Data Bits	5 bit, 6 bit, 7 bit, 8 bit
I2C Trigger	
Trigger Condition	Start, Restart, Stop, Missing ACK, Address, Data, A&D
Address Bits	7 bit, 8 bit, 10 bit
Address Range	0 to 127, o to 255, 0 to 1023
Byte Length	1 to 5
SPI Trigger	
Trigger Condition	CS, Timeout
Timeout Value	100 ns to 1 s
Data Bits	4 bit to 32 bit
Data Line Setting	H, L, X
Clock Edge	Rising Edge, Falling Edge

CAN Trigger	
Signal Type	Rx, Tx, CAN_H, CAN_L, Differential
Trigger Condition	SOF, EOF, Frame Type, Frame Error
Baud	10 kbps, 20 kbps, 33.3 kbps, 50 kbps, 62.5 kbps, 83.3 kbps, 100 kbps, 125 kbps, 250 kbps, 500 kbps, 800 kbps, 1 Mbps, User
Sample Point	5% to 95%
Frame Type	Data, Remote, Error, OverLoad
Error Type	Bit Fill, Answer Error, Check Error, Format Error, Random Error
FlexRay Trigger	
Baud	2.5 Mb/s, 5 Mb/s, 10 Mb/s
Trigger Condition	Frame, Symbol, Error, TSS
USB Trigger	
Signal Speed	Low Speed, Full Speed
Trigger condition	SOP, EOP, RC, Suspend, Exit Suspend

Measure

Cursor	Manual mode: Voltage deviation between cursors (△V), time deviation between cursors (△T), reciprocal of △T (Hz) (1/△T) Track mode: voltage and time values of the waveform point Auto mode: allow to display cursors during auto measurement
Auto Measurement	Analog channel: Maximum, Minimum, Peak-Peak Value, Top Value, Bottom Value, Amplitude, Average, Vrms–N, Vrms-1, Overshoot, Pre-shoot, Area, Period Area, Period, Frequency, Rise Time, Fall Time, Positive Pulse Width, Negative Pulse Width, Positive Duty Cycle, Negative Duty Cycle, Delay A→B, Delay A→B, Delay A→B, Delay A→B, Phase A→B, Phase A→B, Phase A→B, Phase A→B Digital channel: Frequency, Period, Positive Pulse Width, Negative Pulse Width, Positive Duty Cycle, Negative Duty Cycle, Delay A→B, Delay A→B, Delay A→B, Delay A→B, Phase A→B, Phase A→B, Phase A→B, Phase A→B
Number of Measurements	Display 5 measurements at the same time.
Measurement Range	Screen Region, Cursor Region
Statistic Mode	Extremum, Difference
Measurement Statistic	Average, Max, Min, Standard Deviation, Number of Measurements
Frequency Counter	Hardware 6 bits frequency counter (channels are selectable)

Math Operation

Waveform Operation	A+B, A-B, A×B, A÷B, FFT, Digital Filter, Editable Advanced Operation, Logic Operation
FFT Window	Rectangle, Hanning, Blackman, Hamming
FFT Display	Split, Full Screen
FFT Vertical Scale	Vrms, dB
Logic Operation	AND, OR, NOT, XOR
Math Function	Intg, Diff, Lg, Ln, Exp, Abs, Square, Sqrt, Sine, Cosine, Tangent

Decoding

Number of Buses	2
Decoding Type	Parallel (standard), RS232/UART (optional), I2C (optional), SPI (optional), CAN (optional), FlexRay (optional)
Parallel	Combine the sample data of the source channel waveforms as a parallel multi-channel bus and display the data as a single bus value
RS232/UART	Display the input signal(s) of the TX source channel or/and RX source channel as bus
I2C	Display the input signal of the SDA source channel as bus
SPI	Display the input signal(s) of the MISO source channel or/and MOSI source channel as bus
CAN	Display the input signal of the source channel (Rx, Tx, CAN_H, CAN_L or differential) as bus
FlexRay	Display the input signal of the source channel (BP, BM or RX/TX) as bus

Display

Display Type	9 inches (229 mm) TFT LCD display
Display Resolution	800 horizontal×RGB×480 vertical pixel
Display Color	160,000 color
Persistence Time	Min, 50 ms, 100 ms, 200 ms, 500 ms, 1 s, 2 s, 5 s, 10 s, 20 s, Infinite
Display Type	Dots, Vectors
Real-time Clock	Time and Date (user adjustable)

I/O

Standard Ports	Dual USB HOST, USB DEVICE, LAN, VGA Output, 10 MHz Input/Output, Aux Output (TrigOut, Fast, PassFail, GND)
Printer Compatibility	PictBridge

General Specifications

Probe Compensation Output		
Output Voltage[1]	About 3 V, peak-peak	
Frequency[1]	1 kHz	
Power		
Power Voltage	100 to 127 V, 45 to 440Hz 100 to 240 V, 45 to 65Hz	
Power	Maximum 120 W	
Fuse	3 A, T degree, 250 V	
Environment		
Temperature Range	Operating: 0℃ to +50℃	
	Non-operating: -40℃ to +70℃	
Cooling Method	Fan	
Humidity Range	0℃ to +30℃ : ≤95% relative humidity	
	+30℃ to +40℃ : ≤75% relative humidity	
	+40℃ to +50℃ : ≤45% relative humidity	
Altitude	Operating: under 3,000 meters	
	Non-operating: under 15,000 meters	
Physical Characteristics		
Size[3]	Width×Height×Depth = 440.0 mm×218.0 mm×130.0 mm	
Weight[4]	Package Excluded	4.8 kg±0.2 kg
	Package Included	7.1 kg±1.0 kg
Adjustment Interval		
The recommended calibration interval is one year.		
Regulatory Information		
Electromagnetic Compatibility	2004/108/EC Execution standard EN 61326-1:2006 EN 61326-2-1:2006	
Safety	UL 61010-1:2004; CAN/CSA-C22.2 NO. 61010-1-2004; EN 61010-1:2001; IEC 61010-1:2001	

Note[1]: Typical value.
Note[2]: Maximum value. Interleaved, sine signal with 10 ns horizontal time base, 4 div input amplitude and 10 MHz frequency, edge trigger.
Note[3]: Supporting legs and handle folded, knob height included, front panel cover excluded.
Note[4]: Standard configuration.

Ordering Information

	Description	Order Number
Model	DS4012 (100 MHz, 4 GSa/s, 140 Mpts, 2-channel Digital Oscilloscope)	DS4012
	DS4014 (100 MHz, 4 GSa/s, 140 Mpts, 4-channel Digital Oscilloscope)	DS4014
	DS4022 (200 MHz, 4 GSa/s, 140 Mpts, 2-channel Digital Oscilloscope)	DS4022
	DS4024 (200 MHz, 4 GSa/s, 140 Mpts, 4-channel Digital Oscilloscope)	DS4024
	DS4032 (350 MHz, 4 GSa/s, 140 Mpts, 2-channel Digital Oscilloscope)	DS4032
	DS4034 (350 MHz, 4 GSa/s, 140 Mpts, 4-channel Digital Oscilloscope)	DS4034
	DS4052 (500 MHz, 4 GSa/s, 140 Mpts, 2-channel Digital Oscilloscope)	DS4052
	DS4054 (500 MHz, 4 GSa/s, 140 Mpts, 4-channel Digital Oscilloscope)	DS4054
	MSO4012 (100 MHz, 4 GSa/s, 140 Mpts, 2+16-channel Mixed Signal Oscilloscope)	MSO4012
	MSO4014 (100 MHz, 4 GSa/s, 140 Mpts, 4+16-channel Mixed Signal Oscilloscope)	MSO4014
	MSO4022 (200 MHz, 4 GSa/s, 140 Mpts, 2+16-channel Mixed Signal Oscilloscope)	MSO4022
	MSO4024 (200 MHz, 4 GSa/s, 140 Mpts, 4+16-channel Mixed Signal Oscilloscope)	MSO4024
	MSO4032 (350 MHz, 4 GSa/s, 140 Mpts, 2+16-channel Mixed Signal Oscilloscope)	MSO4032
	MSO4034 (350 MHz, 4 GSa/s, 140 Mpts, 4+16-channel Mixed Signal Oscilloscope)	MSO4034
	MSO4052 (500 MHz, 4 GSa/s, 140 Mpts, 2+16-channel Mixed Signal Oscilloscope)	MSO4052
	MSO4054 (500 MHz, 4 GSa/s, 140 Mpts, 4+16-channel Mixed Signal Oscilloscope)	MSO4054
Standard Accessories	Power Cord conforming to the standard of the country	-
	Front Panel Cover	FPC-DS4000
	USB Data Cable	CB-USBA-USBB-FF-150
	2 or 4 Passive Probes (500 MHz)	RP3500A
	1 set logic analysis probe (for MSO)	RPL2316
	Quick Guide (Hard Copy)	-
	Resource CD (User's Guide and Application Software)	-
Optional Accessories	Active Differential Probe (1.5 GHz)	RP7150
	Rack Mount Kit	RM-DS4000
	USB-GPIB Interface Converter	USB-GPIB
	TekProbe Interface Adaptor	T2R1000
Decoding Options	RS232/UART Decoding Kit	SD-RS232-DS4000
	I2C/SPI Decoding Kit	SD-I2C/SPI-DS4000
	CAN Decoding Kit	SD-CAN-DS4000
	FlexRay Decoding Kit	SD-FlexRay-DS4000
Bandwidth Update Option	Bandwidth upgrade from 200 MHz to 350 MHz for MSO/DS402x	BW2T3-MSO/DS4000
	Bandwidth upgrade from 200 MHz to 500 MHz for MSO/DS402x	BW2T5-MSO/DS4000
	Bandwidth upgrade from 350 MHz to 500 MHz for MSO/DS403x	BW3T5-MSO/DS4000

Warranty

Three –year warranty, excluding probes and accessories.

RIGOL

HEADQUARTER

RIGOL TECHNOLOGIES, INC.
No.156,Cai He Village,
Sha He Town,
Chang Ping District, Beijing,
102206 P.R.China
Tel:+86-10-80706688
Fax:+86-10-80705070
Electronic Measurement Instrument service and support email:EMD_support@rigol.com
Chemical Analysis Instrument service and support email:service.chem@rigol.com

EUROPE

RIGOL TECHNOLOGIES GmbH
Lindbergh str. 4
82178 Puchheim
Germany
Tel: 0049- 89/89418950
Email: info-europe@rigoltech.com

NORTH AMERICA

RIGOL TECHNOLOGIES, USA INC.
10200 SW Allen Blvd, Suite C
Beaverton, OR 97005, USA
Toll free: 877-4-RIGOL-1
Office: (440) 232-4488
Fax: (216)-754-8107
Email: info@rigol.com

JAPAN

RIGOL TECHNOLOGIES JAPAN G.K.
Tonematsu Bldg. 5F, 2-33-8 Nihonbashi-Ningyocho, Chuo-ku,
Tokyo 103-0013
Japan
Tel: +81-3-6264-9251
Fax: +81-3-6264-9252
Email: info-japan@rigol.com

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