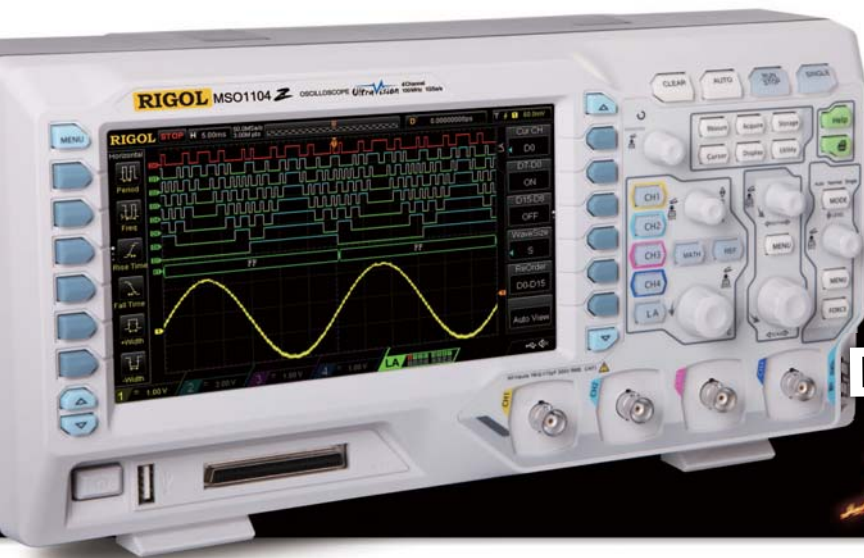


RIGOL
Beyond Measure



MSO/DS1000Z Series Digital Oscilloscope

UltraVision

- Analog channel Bandwidth: 100MHz,70MHz
- 4 Analog channels,16 Digital channels
- Max. Sample Rate up to 1G Sa/s
- Memory Depth up to 12Mpts /24Mpts(Opt.)
- Innovative "UltraVision" technology
- Up to 30,000wfms/s Waveform Capture Rate
- Up to 60,000frames Real-time Waveform Record(Opt.)
- Low noise floor, Dynamic Range: 1mV/div to 10V/div
- Optional Serial Buses Triggering and Decoding(RS232,I2C,SPI)
- Multi- Levels intensity grading waveform display
- Built in 2 channels 25MHz waveform Generator(MSO/DS1000Z-S)
- Complete Connectivity: LAN(LXI),USB Host & Device,AUX, USB-GPIB(Opt.)
- Compact size, light weight, easy to use
- 7 Inch WVGA (800x480), multiple intensity levels waveform display

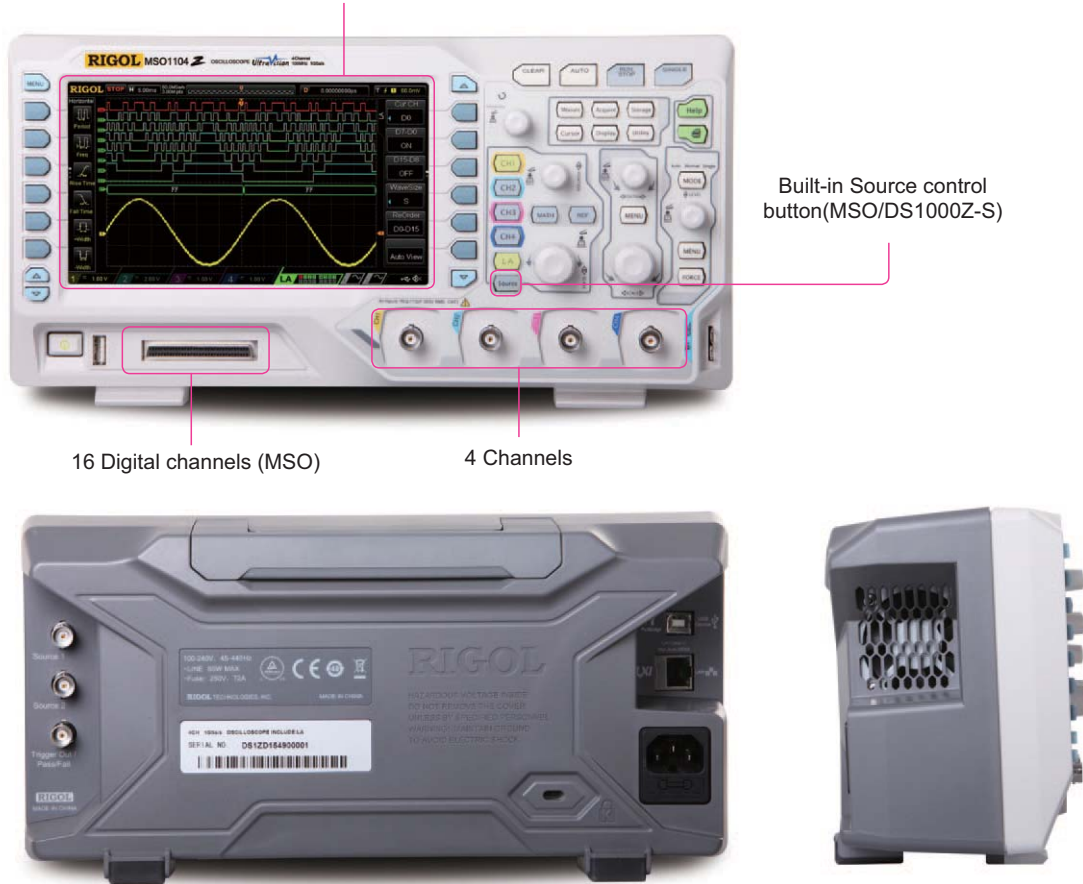
MSO/DS1000Z Series is the new mainstream digital scope to meet the customer's applications with its innovative technology. MSO1000Z Series has 16channels, target for the embedded design and test market with its industry leading specifications, powerful trigger functions and broad analysis capabilities.

RIGOL TECHNOLOGIES, INC.



MSO/DS1000Z Series Digital Oscilloscope

7 inch WVGA(800X480) TFT, Multiple intensity Level waveform display



16 Digital channels (MSO)

4 Channels

Built-in Source control button(MSO/DS1000Z-S)

Product Dimensions: Width X Height X Depth=313.1 mm×160.8 mm×122.4 mm Weight: 3.2 kg ± 0.2 kg(Without Package)

► Innovative UltraVision technology(Analog Channel)



- Deeper Memory Depth (Std.12Mpts,Opt.24Mpts)
- Higher Waveform Capture Rate (Up to 30,000 wfms/s)
- Real Time Waveform Record&Replay (Up to 60,000 frames, opt.)
- Multi-level Intensity Grading Display

► Models and key Specifications

| Model Number | DS1074Z | DS1074Z-S | DS1104Z | DS1104Z-S |
|---|---|------------|----------|------------|
| | MSO1074Z | MSO1074Z-S | MSO1104Z | MSO1104Z-S |
| Analog BW | 70 MHz | | 100MHz | |
| Analog Channels | | | 4 | |
| Digital Channel(MSO) | | | 16 | |
| Max. Sample rate | Analog Channel:1GSa/s (1 CH),500MSa/s(2 CH),250MSa/s(3/4 CH); Digital Channel: 1GSa/s (8 CH),500MSa/s(16 CH) | | | |
| Max. Memory Depth | Analog Channel: 12Mpts(1 CH), 6Mpts(2 CH), 3Mpts(3/4 CH)Std.; 24Mpts(1 CH), 12Mpts(2 CH), 6Mpts(3/4 CH) Opt. Digital Channel: 12Mpts(8 CH) / 6Mpts(16 CH) Std.; 24Mpts(8 CH) / 12Mpts(16 CH) Opt. | | | |
| Max. Waveform Capture rate | Up to 30,000 wfms/s | | | |
| Real Time waveform Record, Replay and Analysis function | Up to 60, 000 Frames(Opt.) | | | |
| Std. Probes | RP2200 150MHz BW Passive Probe:4 sets;1 set RPL1116 LA Probe(MSO only) | | | |
| Built-in 2Ch 25MHz Source | No | Yes | No | Yes |

► Features and Benefits

4 Channels



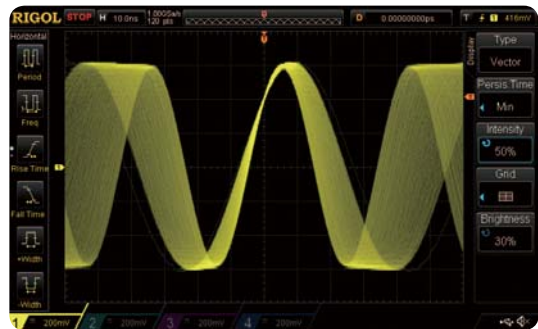
UltraVision: Deeper memory(Std.12Mpts,Opt.24Mpts)



UltraVision: Up to 30,000 wfms/s Waveform capture rate



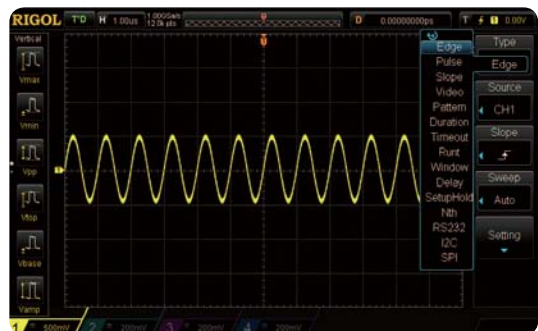
UltraVision: Multi-Level intensity grading display



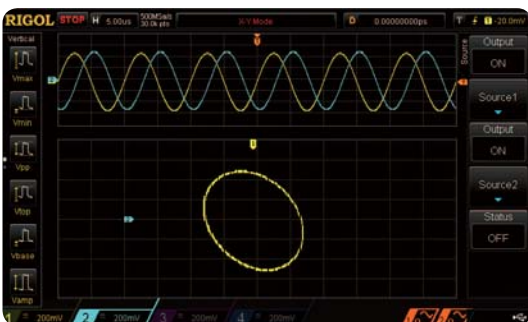
UltraVision:Realtime waveform Record,Replay, function (Opt.)



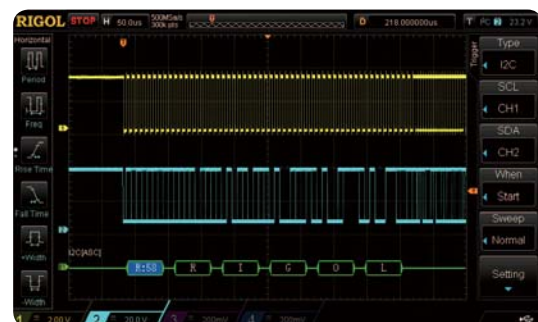
A variety of Trigger Functions



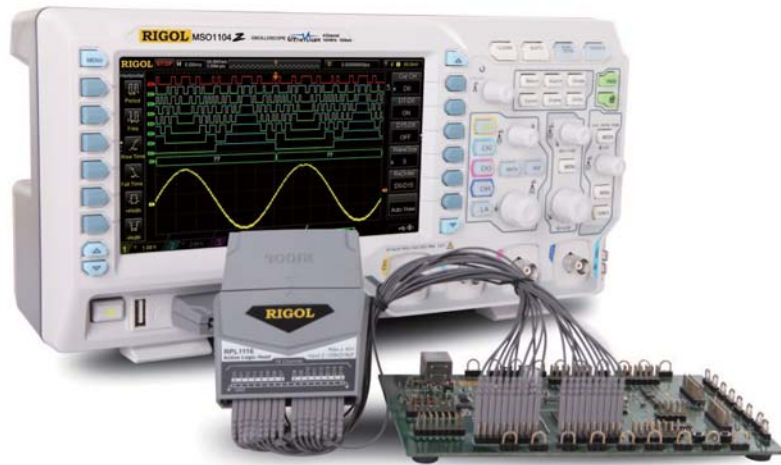
Built in 2 channel 25MHz Signal Source(MSO/ DS1000Z-S)



Optional Serial Bus Triggering and Decoding functions(RS232,I2C,SPI)



► **MSO1000Z Series Mixed Signal Oscilloscope**



Besides the powerful functions of DS1000Z, you could get more from MSO1000Z with:

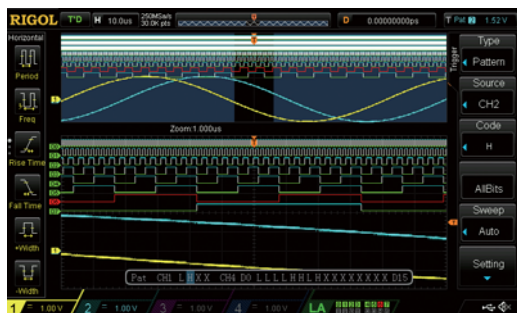
- 16 Digital channels
- Sample rate of Digital channel up to 1 GSa/s
- Memory depth of Digital channel up to 24Mpts
- Waveform capture rate of Digital channel up to 30,000wfms/s
- Real Time Waveform Record, Replay and analysis functions, up to 60,000 frames
- Triggering and Decoding across Analog and Digital channels
- Easy to be grouped for digital channels
- Support a variety of logic levels
- Time correlation display for both analog and digital signals

Innovative UltraVision technology(Digital Channel)

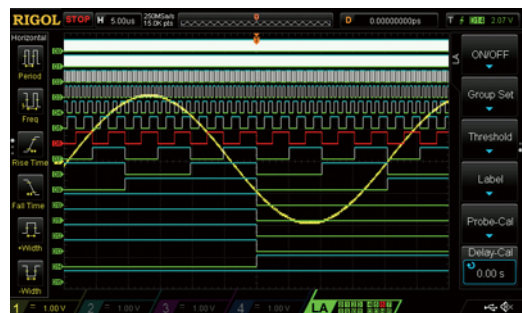


- Deeper Memory Depth(Up to 24Mpts)
- Higher Waveform capture rate(Up to 30,000wfms/s)
- Real Time waveform record & replay(Up to 60,000 frames)
- Multi-level intensity grading display

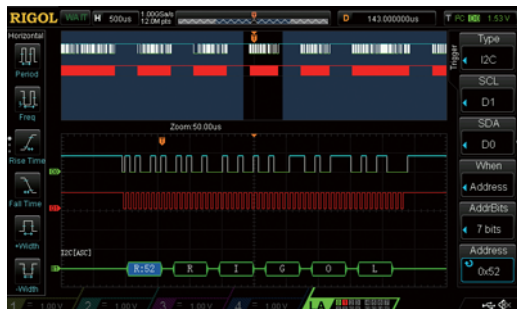
Mixed Signal Analysis with analog and digital channels



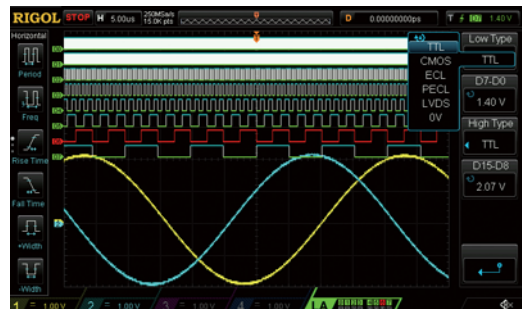
Easy to be grouped and labeled for digital channels



Serial bus triggering and decoding on digital channels











Support a variety of logic levels












RIGOL Probes and Accessories supported by MSO/DS1000Z Series:

► RIGOL Passive Probes

| Model Number | Type | Description |
|--|----------------------|---|
|  RP2200 | High Z Probe | 1X: DC~7MHz 10X:DC~150MHz Compatibility: All RIGOL Scopes. |
|  RP3300A | High Z Probe | 10X:DC~350MHz Compatibility: All RIGOL Scopes. |
|  RP3500A | High Z Probe | DC~500MHz Compatibility: All RIGOL Scopes. |
|  RP1300H | High Voltage Probe | DC~300MHz CATI 2000V(DC+AC), CATII 1500 V(DC+AC) Compatibility: All RIGOL Scopes. |
|  RP1010H | High Voltage Probe | DC~50MHz DC:0~10KV DC,AC:pulse <=20KVp-p, AC:sine wave <=7KVrms Compatibility: All RIGOL Scopes. |
|  RP1018H | High Voltage Probe | DC~150MHz DC+AC Peak:18KV CAT II AC RMS : 12KVrms CAT II Compatibility: All RIGOL Scopes. |
|  RPL1116 | Logic analysis Probe | Logic analysis Probe(For MSO1000Z) |
|  RT50J | Adapter | 50ohm Impedance adapter(2W,1GHz) |

► RIGOL Active & Current Probes

| Model Number | Type | Description |
|---|---------------------------------|---|
|  RP1001C | Current Probe | BW:DC~300kHz, Max.DC:±100A, AC P-P:200A,AC RMS:70A Compatibility: All RIGOL Scopes. |
|  RP1002C | Current Probe | BW:DC~1MHz, Max.DC:±70A, AC P-P:140A,AC RMS:50A Compatibility: All RIGOL Scopes. |
|  RP1003C | Current Probe | BW:DC~50MHz, Max.AC RMS:30A AC Peak:50A(Noncontinuous) Compatibility: All RIGOL Scopes. Must order RP1000P Power supply. |
|  RP1004C | Current Probe | BW:DC~100MHz, Max. AC RMS:30A, AC Peak:50A(Noncontinuous) Compatibility: All RIGOL Scopes. Must order RP1000P Power supply. |
|  RP1005C | Current Probe | BW:DC~10MHz, Max.150 A rms, 300 A peak (Noncontinuous), 500 A peak (@pulse width <=30 ms) Compatibility: All RIGOL Scopes. Must order RP1000P Power supply. |
|  RP1000P | Power Supply | Power supply for RP1003C,RP1004C,RP1005C, support 4 channels. |
|  RP1025D | High Voltage Differential Probe | BW:25MHz; Max. Voltage ≤1400Vpp Compatibility: All RIGOL Scopes. |
|  RP1050D | High Voltage Differential Probe | BW:50MHz; Max. Voltage ≤7000Vpp Compatibility: All RIGOL Scopes. |
|  RP1100D | High Voltage Differential Probe | BW:100MHz; Max. Voltage ≤7000Vpp Compatibility: All RIGOL scopes |

► Specifications

All the specifications are guaranteed except 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: 1 GSa/s (single-channel), 500 MSa/s (dual-channel), 250 MSa/s (four-channel) Digital channel: 1 GSa/s (8-channel), 500 MSa/s (16-channel) |
| Peak Detect | Analog channel: 4 ns Digital channel: 4 ns |
| Averaging | After both the channels finish N samples at the same time, N can be 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024. |
| High Resolution | The highest resolution is 12 bit |
| Interpolation | Sin(x)/x (selectable) |
| Minimum Detectable Pulse Width | Digital channel: 10 ns |
| Memory Depth | Analog channel: Single-channel: Auto, 12k pts, 120k pts, 1.2M pts, 12M pts and 24M pts (opt.) are available Dual-channel: Auto, 6k pts, 60k pts, 600k pts, 6M pts and 12M pts (opt.) are available Four-channel: Auto, 3k pts, 30k pts, 300k pts, 3M pts and 6M pts (opt.) are available Digital Channel: 12Mpts(8 CH) / 6Mpts(16 CH) Std.; 24Mpts(8 CH) / 12Mpts(16 CH) Opt. |

Input

| | |
|-------------------------------|--|
| Number of Channels | MSO1XX4Z/1XX4Z-S: 1,2 analog-channel + 16-digital-channel DS1XX4Z/1XX4Z-S: 4-analog-channel |
| Input Coupling | DC, AC or GND |
| Input Impedance | Analog channel: (1 MΩ±1%) (15 pF±3 pF) Digital channel: (100 kΩ±1%) 8 pF±3 pF |
| Probe Attenuation Coefficient | Analog channel: 0.01X-1000X, 1-2-5 step |
| Max Input Voltage (1MΩ) | Analog channel: CAT I 300 Vrms, CAT II 100 Vrms, transient overvoltage 1000 Vpk With RP2200 10:1 probe: CAT II 300 Vrms Digital channel: CAT I 40 Vrms, transient overvoltage 800 Vpk |

Horizontal

| | |
|--------------------------------------|---|
| Time Base Scale | 5 ns/div to 50 s/div |
| Time Base Accuracy ^[1] | ≤ ± 25 ppm |
| Time Base Drift | ≤ ± 5 ppm/year |
| Max Delay Range | negative delay: ≥1 screen width positive delay: 1 s to 100,000 s |
| Time Base Mode | Y-T, X-Y, Roll, Delayed |
| Number of X-Ys | 1 path |
| Waveform Capture Rate ^[2] | 30,000 wfms/s (dots display) |

Vertical

| | |
|--|---|
| Bandwidth (-3dB) | MSO1104Z/1104Z-S/DS1104Z/1104Z-S: DC to 100 MHz MSO1074Z/1074Z-S/DS1074Z/1074Z-S: DC to 70 MHz |
| Single Bandwidth | MSO1104Z/1104Z-S/DS1104Z/1104Z-S: DC to 100 MHz MSO1074Z/1074Z-S/DS1074Z/1074Z-S: DC to 70 MHz |
| Vertical Resolution | Analog channel: 8 bits Digital channel: 1 bit |
| Vertical Scale | 1 mV/div to 10 V/div |
| Offset Range | 1 mV/div to 499 mV/div: ± 2 V 500 mV/div to 10 V/div: ± 100 V |
| Bandwidth Limit ^[1] | 20 MHz |
| Low Frequency Response (AC coupling, -3dB) | ≤5 Hz (on BNC) |
| Rise Time ^[1] | MSO1074Z/1074Z-S/DS1074Z/1074Z-S: 3.5 ns MSO1104Z/1104Z-S/DS1104Z/1104Z-S: 5 ns |
| DC Gain Accuracy ^[3] | <10 mV: ±4% full scale ≥10 mV: ±3% full scale |
| DC Offset Accuracy | ±0.1 div ± 2 mV ± 1% offset |

| | |
|------------------------------|---------------------------------|
| Channel to Channel Isolation | DC to maximum bandwidth: >40 dB |
|------------------------------|---------------------------------|

Vertical (Digital Channel)

| | |
|---------------------|--|
| Threshold LevelType | 1 group with 8 channels adjustable threshold 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 | ±15.0 V, in 10 mV step |
| Threshold accuracy | ±(100 mV + 3% of threshold setting) |
| Dynamic range | ±10 V + threshold |
| Min Voltage Swing | 500 mVpp |
| Vertical resolution | 1 bit |

Trigger

| | |
|---|--|
| Trigger Level Range | ±5 div from the center of the screen |
| Trigger Mode | Auto, Normal, Single |
| Holdoff Range | 16 ns to 10 s |
| High Frequency Rejection ^[1] | 75 kHz |
| Low Frequency Rejection ^[1] | 75 kHz |
| Trigger Sensitivity ^[1] | 1.0div (below 5mV or noise rejection is enabled) 0.3div (above 5mV and noise rejection is disabled) |

Edge Trigger

| | |
|-----------|---------------------------------|
| Edge Type | Rising, Falling, Rising/Falling |
|-----------|---------------------------------|

Pulse Trigger

| | |
|-----------------|--|
| Pulse Condition | Positive Pulse Width (greater than, lower than, within specified interval) Negative Pulse Width (greater than, lower than, within specified interval) |
|-----------------|--|

| | |
|-------------------|--------------|
| Pulse Width Range | 8 ns to 10 s |
|-------------------|--------------|

Runt Trigger

| | |
|-----------------|--|
| Pulse Condition | None, > (greater than), < (lower than), <> (within the specified interval) |
|-----------------|--|

| | |
|----------|--------------------|
| Polarity | Positive, Negative |
|----------|--------------------|

| | |
|-------------------|-------------|
| Pulse Width Range | 8 ns to 4 s |
|-------------------|-------------|

Windows Trigger

| | |
|--------------|---------------------------------|
| Windows Type | Rising, Falling, Rising/Falling |
|--------------|---------------------------------|

| | |
|------------------|-------------------|
| Trigger Position | Enter, Exit, Time |
|------------------|-------------------|

| | |
|--------------|--------------|
| Windows Time | 8 ns to 10 s |
|--------------|--------------|

Nth Edge Trigger

| | |
|-----------|-----------------|
| Edge Type | Rising, Falling |
|-----------|-----------------|

| | |
|-----------|---------------|
| Idle Time | 16 ns to 10 s |
|-----------|---------------|

| | |
|-----------------|------------|
| Number of Edges | 1 to 65535 |
|-----------------|------------|

Slope Trigger

| | |
|-----------------|--|
| Slope Condition | Positive Slope (greater than, lower than, within specified interval) Negative Slope (greater than, lower than, within specified interval) |
|-----------------|--|

| | |
|--------------|--------------|
| Time Setting | 8 ns to 10 s |
|--------------|--------------|

Video Trigger

| | |
|-----------------|--|
| Signal Standard | Support standard NTSC, PAL and SECAM broadcasting standards Support 480P, 576P HDTV standards |
|-----------------|--|

Pattern Trigger

| | |
|-----------------|------------------------------------|
| Pattern Setting | H, L, X, Rising Edge, Falling Edge |
|-----------------|------------------------------------|

Delay Trigger

| | |
|-----------|-----------------|
| Edge Type | Rising, Falling |
|-----------|-----------------|

| | |
|------------|---|
| Delay Type | > (greater than), < (lower than), <> (within the specified interval), >< (outside the specified interval) |
|------------|---|

| | |
|------------|--------------|
| Delay Time | 8 ns to 10 s |
|------------|--------------|

TimeOut Trigger

| | |
|-----------|---------------------------------|
| Edge Type | Rising, Falling, Rising&Falling |
|-----------|---------------------------------|

| | |
|---------------|---------------|
| TimeOut Value | 16 ns to 10 s |
|---------------|---------------|

Duration Trigger

| | |
|-----------------|---------|
| Pattern Setting | H, L, X |
|-----------------|---------|

| | |
|-------------------|--|
| Trigger Condition | > (greater than), < (lower than), <> (within the specified interval) |
|-------------------|--|

| | |
|---------------|--------------|
| Duration Time | 8 ns to 10 s |
|---------------|--------------|

Setup/Hold Trigger

| | |
|-----------|-----------------|
| Edge Type | Rising, Falling |
|-----------|-----------------|

| | |
|--------------|---------|
| Data Pattern | H, L, X |
|--------------|---------|

| | |
|------------|-------------|
| Setup Time | 8 ns to 1 s |
|------------|-------------|

| | |
|-----------|-------------|
| Hold Time | 8 ns to 1 s |
|-----------|-------------|

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, User |
| Data Bits | 5 bits, 6 bits, 7 bits, 8 bits |
| I2C Trigger | |
| Trigger Condition | Start, Restart, Stop, Missing Ack, Address, Data, A&D |
| Address Bits | 7 bits, 8 bits, 10 bits |
| Address Range | 0x0 to 0x7F, 0x0 to 0xFF, 0x0 to 0x3FF |
| Byte Length | 1 to 5 |
| SPI Trigger | |
| Trigger Condition | TimeOut, CS |
| Timeout Value | 16 ns to 10 s |
| Data Bits | 4 bit to 32 bit |
| Data Line Setting | H, L, X |

Measure

| | | |
|------------------------|--|---|
| Cursor | Manual mode | Voltage deviation between cursors (ΔV) Time deviation between cursors (ΔT) Reciprocal of ΔT (Hz) (1/ ΔT) |
| | Track mode | Voltage and time values of the waveform point |
| | Auto mode | Allow to display cursors during auto measurement |
| Auto Measurement | Measurements of Maximum, Minimum, Peak-Peak Value, Top Value, Bottom Value, Amplitude, Average, Mean Square Root, Overshoot, Pre-shoot, Area, Period Area, Frequency, Period, Rise Time, Fall Time, Positive Pulse Width, Negative Pulse Width, Positive Duty Cycle, Negative Duty Cycle, Delay A→B, Delay A→B, Phase A→B, Phase A→B | |
| Number of Measurements | Display 5 measurements at the same time | |
| Measurement Range | Screen Region or Cursor Region | |
| Measurement Statistic | Average, Max, Min, Standard Deviation, Number of Measurements | |
| Counter | Hardware 6 bits counter (channels are selectable) | |

Math

| | |
|------------------------------|---|
| Waveform Operation | A+B, A-B, A×B, A/B, FFT, &&, , ^, !, intg, diff, sqrt, lg, ln, exp, abs |
| FFT Window | Rectangle, Hanning, Blackman, Hamming, Flat Top, Triangle |
| FFT Display | Split, Full Screen |
| FFT Vertical Scale | dB/dBm, Vrms |
| Number of Buses for Decoding | 2 |
| Decoding Type | Parallel (standard), RS232/UART (option), I2C (option), SPI (option) |

Display

| | |
|--------------------|---|
| Display Type | 7.0 inches TFT LCD display |
| Display Resolution | 800 horizontal×RGB×480 vertical pixel |
| Display Color | 160,000 Color (TBD) |
| 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 |

I/O

| | |
|----------------|--|
| Standard Ports | USB HOST, USB DEVICE, LAN, Aux (TrigOut /PassFail) |
|----------------|--|

Signal Source (MSO/DS1000Z-S)

| | | |
|---------------------|--|-----------------------------|
| Number of Channels | 2 | |
| Sample Rate | 200 MSa/s | |
| Vertical Resolution | 14 bits | |
| Highest Frequency | 25 MHz | |
| Standard Waveform | Sine, Square, Pulse, Triangle, Noise, DC | |
| Arbitrary Waveform | Sine, Exp.Rise, EXP.Fall, ECG, Gauss, Lorentz, Haversine | |
| Sine | Frequency Range | 0.1 Hz to 25 MHz |
| | Flatness | ±0.5 dB (relative to 1 kHz) |
| | Harmonic Distortion | -40 dBc |
| | Stray (Non-Harmonic) | -40 dBc |
| | Total Harmonic Distortion | 1% |
| | Signal-to-Noise ration | 40 dB |

| | | |
|------------------------------|------------------------|---|
| Square /Pulse | Frequency Range | 0.1 Hz to 15 MHz |
| | Rise/Fall time | <15 ns |
| | Overshoot | <5% |
| | Duty Cycle | 10% to 90% |
| | Duty Cycle Resolution | 1% to 10 ns (select the greater one) |
| | Minimum Pulse Width | 20 ns |
| | Pulse Width Resolution | 10 ns or 5 bits (select the greater one) |
| | Jitter | 500 ps |
| Triangle | Frequency Range | 0.1 Hz to 100 kHz |
| | Linearity | 1% |
| | Symmetry | 0 to 100% |
| Noise ^[1] | Bandwidth | 25 MHz |
| Internal Generated waveforms | Frequency Range | 0.1 Hz to 1 MHz |
| Arbitrary Waveforms | Frequency Range | 0.1 Hz to 10 MHz |
| | Waveform Length | 2 to 16k pts |
| Frequency | Accuracy | 100 ppm (lower than 10 kHz) 50 ppm (greater than 10 kHz) |
| | Resolution | 0.1 Hz or 4 bit, select the greater one |
| Amplitude | Output Range | 20 mVpp to 5 Vpp, High-resistance 10 mVpp to 2.5 Vpp, 50 Ω |
| | Resolution | 100 μV or 3 bit, select the greater one |
| | Accuracy | 2% (1 kHz) |
| DC Offset | Range | ±2.5 V, High-resistance ±1.25 V, 50 Ω |
| | Resolution | 100 μV or 3 bit, select the greater one |
| | Accuracy | 2% (1 kHz) |
| Modulation | AM, FM | |

General Specifications

| | | |
|---|---|-----------------|
| Probe Compensation Output | | |
| Output Voltage ^[1] | About 3 V, peak-peak | |
| Frequency ^[1] | 1 kHz | |
| Power | | |
| Power Voltage | 100-240 V, 45-440 Hz | |
| Power | Maximum 50 W | |
| Fuse | 2 A, T degree, 250 V | |
| Environment | | |
| Temperature Range | In operation: 0°C to +50°C | |
| | Out of operation: -40°C to +70°C | |
| Cooling Method | Fan | |
| Humidity Range | 0°C to +30°C : ≤95°C relative humidity | |
| | +35°C to +40°C : ≤75°C relative humidity | |
| | +40°C to +50°C : ≤45°C relative humidity | |
| Altitude | In operation: under 3,000 meters | |
| | Out of operation: under 15,000 meters | |
| Mechanical | | |
| Dimensions ^[4] | Width×Height×Depth =313.1 mm× 160.8 mm×122.4 mm | |
| Weight ^[4] | Without package | 3.2 kg ± 0.2 kg |
| | With package | 3.8 kg ± 0.5 kg |
| Adjustment Interval | | |
| The recommended calibration interval is one year. | | |
| Regulation Standards | | |
| 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.

[2]:Maximum value with 50 ns, single-channel, dots display and auto memory depth.

[3]:Tilt tabs and handle folded, knob height included.

[4]:Standard configuration.

► Ordering Information

| | Description | Order Number |
|----------------------------|--|---------------------|
| Model | DS1074Z (70MHz, 4 CH Scope) | DS1074Z |
| | DS1074Z-S (70MHz, 4 CH Scope + 2 CH Source) | DS1074Z-S |
| | MSO1074Z (70MHz, 2+16 MSO) | MSO1074Z |
| | MSO1074Z-S (70MHz, 2+16 MSO + 2 CH Source) | MSO1074Z-S |
| | DS1104Z (100MHz, 4 CH Scope) | DS1104Z |
| | DS1104Z-S (100MHz, 4 CH Scope + 2 CH Source) | DS1104Z-S |
| | MSO1104Z (70MHz, 2+16 MSO) | MSO1104Z |
| | MSO1104Z-S (70MHz, 2+16 MSO + 2 CH Source) | MSO1104Z-S |
| Standard Accessories | Power Cord conforming to the standard of the country | - |
| | USB Data Cable | CB-USBA-USBB-FF-150 |
| | 4 Passive Probes (150 MHz) | RP2200 |
| | 1 Set LA probe(MSO only) | RPL1116 |
| | Quick Guide | - |
| Optional Accessories | Resource CD (User's Guide and Application Software) | - |
| Optional Accessories | Rack Mount Kit | RM-DS1000Z |
| Deep Memory Option | 24Mpts (1 CH) /12Mpts (2 CH) /6Mpts (4 CH) Memory | MEM-DS1000Z |
| Waveform record option | Real Time Waveform Record and Replay function | REC-DS1000Z |
| Advanced Trigger option | RS232/UART,I2C,SPI,Runt,Windows,Nth Edge, Delay,Time Out,Setup/Hold Time | AT-DS1000Z |
| Serial Bus Analysis Option | RS232/UART,I2C,SPI Trigger and Decoding function | SA-DS1000Z |

Warranty

Three –year warranty, excluding probes and accessories.

RIGOL



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