

Rigol DS1000 Series Oscilloscope

Model	1022C/1022CD	1042C/1042CD	1062C/1062CD	1102C/1102CD
Bandwidth	25 MHz	40 MHz	60 MHz	100 MHz
Real-time Sample Rate	400 MSa/s, 200 MSa/s (Logic Analyzer)			
Equivalent Sample Rate	25 GSa/s			
Memory Depth	1M points (Single Channel), 512K points (Dual Channels), 512K points (Logic Analyzer)			

Advanced Features



1. A true Mixed Signal Oscilloscope with 2 analog and 16 digital channels
2. Ultra compact design, small dimensions, to save your desktop space
3. 5.7" 64K TFT color LCD, bright and vivid waveform display
4. Memory depth: 1M points (Single Channel), 512K points (Dual Channels), 512K points (Logic Analyzer)
5. Versatile trigger modes: Edge, Video, Pulse Width, Slope, Alternative, Pattern and Duration
6. Adjustable trigger sensitivity: Filters noise from the trigger signal to avoid false triggers
7. 400 MSa/s maximum real-time sample rate and 25 GSa/s maximum equivalent time sample rate
8. 20 automatic measurements
9. Cursor measurements: Manual, Track and Auto Measure Modes
10. 10 waveforms, 10 setups, BMP and CSV storage
11. Math functions: Add, Subtract, Multiply, FFT, Invert
12. Automatic self calibration
13. Special digital filter and waveform recorder
14. Built-in hardware frequency counter
15. Dual channels plus external trigger Bandwidth including 25 MHz, 40 MHz, 60 MHz, 100 MHz
16. Standard interface: USB Device, RS-232 □ USB Host, to support USB flash memory and USB printer
17. Standard Configuration includes Pass/Fail testing
18. Multi-language user interface, built-in help system

Performance Characteristics

Model		DS1022C	DS1042C	DS1062C	DS1102C
Bandwidth		25 MHz	40 MHz	60 MHz	100 MHz
Memory Depth		1M points (Single Channel), 512K points (Dual Channels)			
Channels		Dual Channels + External Trigger			
Real-time Sample Rate		400 MSa/s			
Equivalent Sample Rate		25 GSa/s			
Rise Time		14 ns	8,7 ns	5.8 ns	3.5 ns
Time Base Range		20 ns/div to 50 s/div	10 ns/div to 50 s/div	5 ns/div to 50 s/div	
X-Y Operation	Bandwidth	25 MHz	40 MHz	60 MHz	100 MHz
	Phase Difference	$\pm 3^\circ$			
Trigger Modes		Edge, Video, Pulse Width, Slope, Alternative			
Trigger Sources		CH1 <input type="checkbox"/> CH2 <input type="checkbox"/> Ext <input type="checkbox"/> Ext/5 <input type="checkbox"/> AC Line			

Model		DS1022CD	DS1042CD	DS1062CD	DS1102CD
Bandwidth		25 MHz	40 MHz	60 MHz	100 MHz
Memory Depth		1M points (Single Channel), 512K points (Dual Channels), 512K points (Logic Analyzer)			
Channels		Dual Channels + External Trigger + Logic Analyzer			
Real-time Sample Rate		400 MSa/s, 200 MSa/s (Logic Analyzer)			
Equivalent Sample Rate		25 GSa/s			
Rise Time		14 ns	8.7 ns	5.8 ns	3.5 ns
Time Base Range		20 ns/div to 50 s/div	10 ns/div to 50 s/div	5 ns/div to 50 s/div	
Voltage Level Standards (Logic Analyzer)		TTL = 1.4 V, CMOS = 2.5 V, ECL = - 1.3 V, USER = - 8.0 V to + 8.0 V			

X-Y Operation	Bandwidth	25 MHz	40 MHz	60 MHz	100 MHz
	Phase Difference	± 3°			
Trigger Modes		Edge, Video, Pulse Width, Slope, Alternative, Pattern and Duration			
Trigger Sources		CH1, CH2, Ext, Ext/5, AC Line, D0 to D15			

Common Parameters	
Input Impedance	1 MΩ±2% 15 pF±3pF
Time Base Precision	±50ppm
Vertical Sensitivity	2 mV/div to 5 V/div
Vertical Resolution	8 bits
Input Coupling	DC, AC, Ground
Maximum Input Voltage	400 V (DC + AC peak)
Roll Range	500 ms/div to 50 s/div
Automatic Measurements	Vpp, Vamp, Vmax, Vmin, Vtop, Vbase, Vavg, Vrms, Preshoot, Overshoot, Frequency, Period, Rise Time, Fall time, Positive Width, Negative Width, Positive Duty Cycle, Negative Duty Cycle, Delay 1→2  , Delay 1→2 
Cursor Measurements	Manual, Track and Auto Measure modes
Math	Add, Subtract, Multiply, FFT, Invert
Storage	Internal <input type="checkbox"/> 10 Waveforms and 10 Setups
	USB <input type="checkbox"/> BMP, CSV, Waveforms and Setups
I/O	USB Device <input type="checkbox"/> USB Host <input type="checkbox"/> RS-232 <input type="checkbox"/> P/F Out (Isolated)
Display	TFT (64K, Color LCD), 320 x 234
Power	Worldwide Use, 100 – 240 V / 50 VA Max
Weight	2.3 kg