



1 GS/s 50MHz Digital Storage Oscilloscope - Rigol DS1052E - Rigol DS1052E

PRODUCT ID: 681

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DESCRIPTION

The ultimate debugging tool for electronics, this oscilloscope will turn you into a "Circuit Whisperer". You will be able to peer into the workings of your circuits to better understand them. Difficult problems will suddenly become trivial. We tried many beginner oscilloscopes and found this one to be a perfect balance of price and function: it's perfect as a 'first scope' or as a hacker-space resource to share. [To learn about how to use oscilloscopes, we suggest reading Tektronix's great "XYZs of Oscilloscopes" and the other great Tek documents that cover everything you need to know!](#)

Bonus extras! we include an [awesome sew/iron-on embroidered "Oscilloscope Skill Badge"](#) and [vinyl sticker!](#)

- **1 Giga-sample per second Analog/Digital Converter** - 1000 MSa/s real-time sample rate for one channel or 500 MS/s for two channels gives you the most detail even at high frequency signals
- 50 MHz software bandwidth (you can view up to 50 MHz digital/analog signals clearly)
- 5.7" Full color LCD display
- Digital storage with 16 Kpoints memory depth, 1Mpoints for long memory
- Trigger via Edge, Pulse Width, Video, Slope, Alternate, Pattern and Duration
- 20 types of wave parameter measurements built in: Vmax, Vmin, Vpp, Vtop, Vbase, Vamplitude, Vaverage, Vrms, Overshoot, Preshoot, Period, Freq, Rise time, Fall time, + Width, - Width, + Duty, - Duty, Delay falling, Delay Rising, Phase falling, Phase Rising
- Auto trigger/display is great for beginners
- Math and FFT functions
- Comes with two 150MHz probes with color tabs and adjustment tool
- Plug in a USB key and save waveforms as a CSV or bitmap. Also lets you save your setup in case you have a testing jig you want to recreate
- Isolated Pass/Fail output BNC
- External trigger in
- RS-232 and USB B connector for remote control via a computer using NI VISA, LabVIEW, Visual Basic or Visual C (examples included on CD)
- Ultrascope software for PC control
- Powers via a standard computer power cable, 100-240VAC
- Lightweight, 2.5 kg makes it easy to carry around wherever you need it!

Comes with:

- 2 x 150MHz 10x/1x probes
- USB Cable
- CD-ROM with datasheets, manuals and software
- **Bonus! Oscilloscope sew on patch and vinyl sticker**

[Data sheet for the DS1000E series](#)

[User manual for the DS10000E series](#)

TECHNICAL DETAILS

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- Powers via a standard computer power cable, 100-240VAC
- Lightweight, 2.5 kg makes it easy to carry around wherever you need it!
- Comes with the latest hardware revision HW58 and firmware v2.06

Included probes, 1x Mode:

- Bandwidth: 7MHz DC
- Rise Time: 50ns
- Input Resistance: $1M \pm 2\%$
- Input Capacitance: $100pF \pm 20pF$

and 10x Mode (the 'default' mode, highly recommended!):

- Bandwidth: 150MHz DC
- Rise Time: 2.3ns
- Input Resistance: $10M \pm 2\%$
- Input Capacitance: $17pF \pm 5pF$
-

Software version 00.03.01.

The [User manual for the DS10000E series](#) has details on how to use this particular scope

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[User manual for the DS10000E series](#)

For product support, replacement parts and warranty for all Rigol products, [click here!](#)



LEARN



[Circuit Playground: F is for Frequency](#)

Learn about frequency from a talking oscilloscope!

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1 GS/s 50 MHz 4-channel



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1 GS/s 100MHz Digital



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"In the beginner's mind there are many possibilities, in the expert's mind there are few" - [Shunryu Suzuki](#)



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