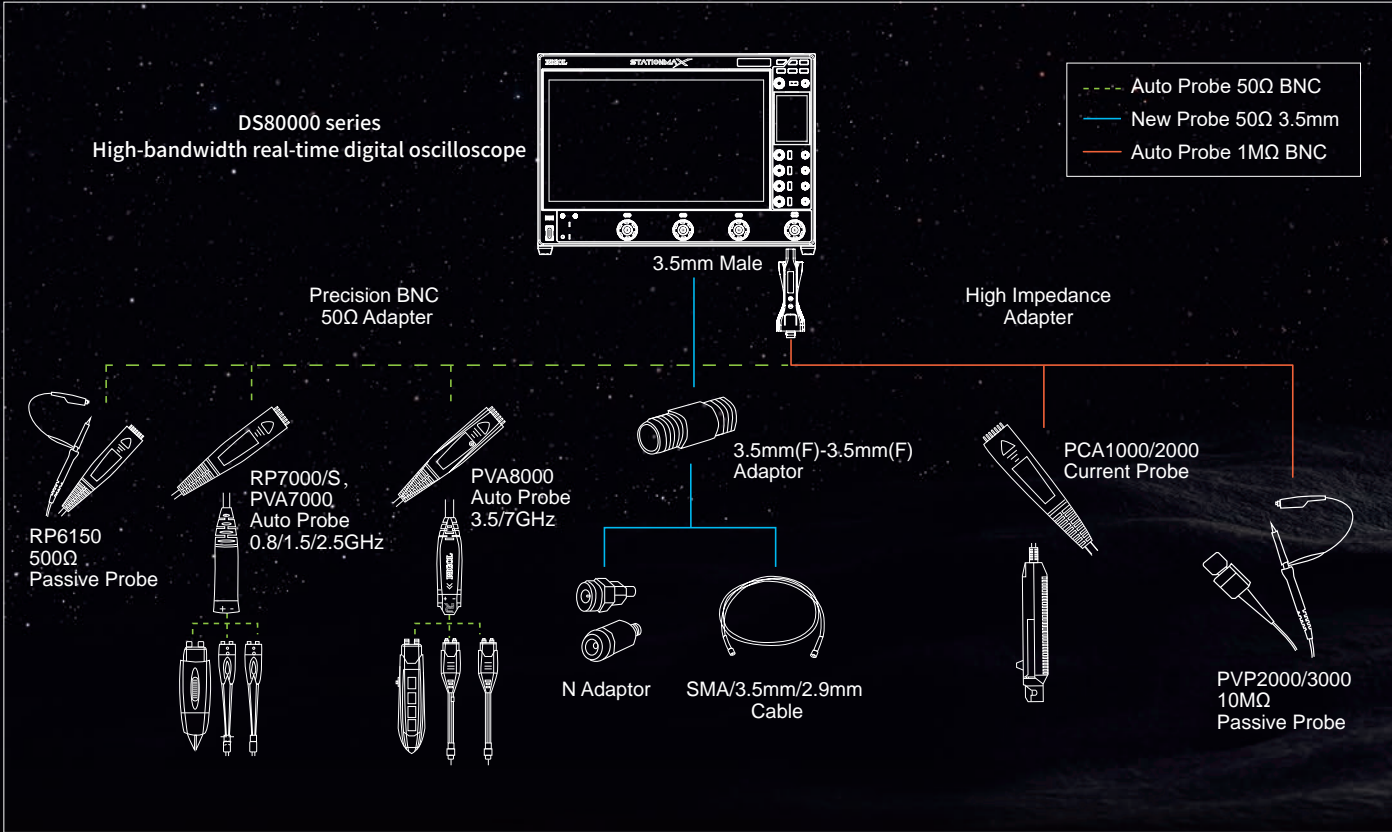




Order Information

Description		Order No.
Measurement and Analysis Option	Advanced Eye Diagram and Jitter Analysis Option	DS80000-JITTA
	100M/1000M Ethernet Compliance Test	DS80000-ENETC
Pre-compliance Test Option	USB 2.0 Compliance Test	DS80000-USBC
	CAN/LIN/FlexRay/CAN-FD Serial Bus Trigger and Decoding	DS80000-AUTOA
Serial Protocol Decoding Options	MIL-STD-1553 Serial Bus Trigger and Decoding	DS80000-AEROA
	RS232/UART/I2C/SPI Serial Bus Trigger and Decoding	DS80000-EMBDA
	I2S Serial Bus Trigger and Decoding	DS80000-AUDIQA
Adapter Option	High-impedance Probe Adapter, 3.5 mm to BNC (1 M Ω)	High Impedance Adapter
Upgrade Option	2 Gpts Memory Depth Upgrade Option	DS80000-RLU-20
	4 Gpts Memory Depth Upgrade Option	DS80000-RLU-40



Boundless Exploration

13GHz
Max. Analog Bandwidth

40GSa/s
Real-time Sample Rate



13/10/8/6GHz
Analog Bandwidth

40GSa/s
Real-time Sample Rate

4
Analog Channel

4Gpts
Memory Depth

DS80000 Series High-Bandwidth Real-Time Digital Oscilloscope



RIGOL Service and Support Line 4006 200 002



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Notice: This manual contains preliminary information about the product, and the text, data, images, etc., included are for reference only. Please refer to the final product for accuracy. The information is subject to change due to the change or termination of the product design, R&D plan, and other factors without notice.

RIGOL TECHNOLOGIES CO., LTD.

Product Overview

DS80000 series high-bandwidth real-time digital oscilloscope is the 8th generation of RIGOL's self-developed oscilloscopes. It provides 13 GHz analog bandwidth, 40 GSa/s real-time sample rate, 4 Gpts memory depth. It supports the compliance analysis of various protocols, helping you locate the problem in high-speed design and address the verification problem.



Customer Value

High Performance

- Up to 13 GHz analog bandwidth, powerful high-speed signal analysis;
- Up to 40 Gsa/s real-time sample rate on each channel, powerful signal acquisition capability;
- Up to 4 Gpts memory depth, allowing signal details to be presented clearly.

High Availability

- The tilt of the 15.6-inch high-definition large touch screen can be electronically adjusted with one button, supporting gesture-enabled operation, multi-pane windowing;
- High-definition smart and quick-responsive shortcut menu display can be extended as a secondary display with user-defined quick operation menu;
- Control with the SCPI command sets;
- Provides USB/LAN/HDMI® interfaces to meet diversified test application scenarios.

Powerful Analysis Capability

Various advanced analysis functions, compliance analysis tests of various protocols, jitter analysis, etc.



Typical Application

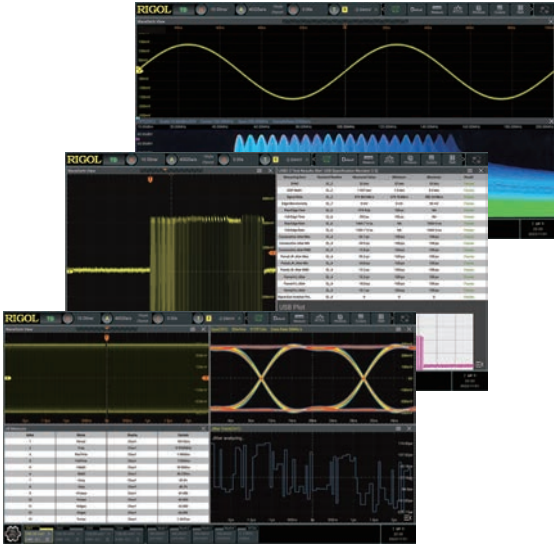
1 High-Speed Signal Protocol Compliance Analysis

With the 13 GHz bandwidth and 40 Gsa/s real-time sample rate, the DS80000 series digital oscilloscope can cover more high-speed signal protocol compliance analysis application scenarios, providing more compliance analysis tests such as PCIe, and USB2.0.



2 High-Speed Components and System Performance Validation

DS80000 series provides advanced jitter and eye diagram analysis functions, which can be widely applied to the following scenarios such as complex embedded system debugging, high-speed serial and parallel bus performance test, clock jitter, signal integrity, and PLL performance validation.



DS80000 Selection Table

Product Model(consistent with the model specified in Order Information) and Specifications	DS81304	DS81004	DS80804	DS80604
Max. Analog Bandwidth	13 GHz	10 GHz	8 GHz	6 GHz
Sample Rate	40 GSa/s on all channels			
No. of Analog Channels	4CH 13 GHz on all channels	4CH 10 GHz on all channels	4CH 8 GHz on all channels	4CH 6 GHz on all channels
Vertical Resolution	8 bits 9 bits to 16 bits (in High Resolution Mode)			
Vertical Scale Range	1 mV/div~1 V/div			
Capture Rate	250,000 wfms/s			
Max. Memory Depth	2 Gpts/CH or 4 Gpts/CH(opt.)			
Input Impedance	50 Ω			
Connector Type	3.5 mm Input			
I/O	HDMI, LAN, USB3.0 Host&Device			
Screen	15.6-inch Touch Screen			
Programming Standard	SCPI Standard			