

Keysight S-Series Oscilloscopes

The New Standard for Superior Measurements



Key specifications

Bandwidth	500 MHz, 1, 2, 2.5, 4, 6, 8 GHz
Channels	4-ch and 4-ch+16 digital channel on MSO models
Maximum sample rate	20 GSa/s
ADC bits	10
Standard memory depth (2/4-channel/mode)	100 Mpts/50 Mpts
Display	15" XGA capacitive touch screen



Industry's best signal integrity

New technology blocks deliver superior signal integrity

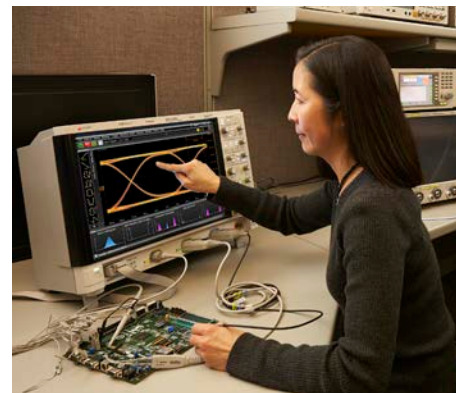
- 10-bit ADC
- Low noise front end
- Less than 200 fs intrinsic jitter
- Analog and hardware correction filters
- Responsive deep memory



Most advanced platform

Next-generation Infiniium user interface

- Capacitive touch screen with multi-touch
- Powerful motherboard for fast processing
- Removable solid state drive (SSD) for fast boot-up and high reliability
- Fast offload (up to 200 MB/s)



Broadest range of capability

- 16 digital channels on MSO models
- Standard feature-rich software with > 50 automated measurements, 16 math functions, gating, and spectral viewer
- Expandable with optional software applications
- Support for > 100 probes

Oscilloscope models

Model	Bandwidth	Sample rate	Memory depth	Scope channels
DSOS054A	500 MHz	20 GSa/s	50 Mpts	4
MSOS054A	500 MHz	20 GSa/s	50 Mpts	4+16 digital
DSOS104A	1 GHz	20 GSa/s	50 Mpts	4
MSOS104A	1 GHz	20 GSa/s	50 Mpts	4+16 digital
DSOS204A	2 GHz	20 GSa/s	50 Mpts	4
MSOS204A	2 GHz	20 GSa/s	50 Mpts	4+16 digital
DSOS254A	2.5 GHz	20 GSa/s	50 Mpts	4
MSOS254A	2.5 GHz	20 GSa/s	50 Mpts	4+16 digital
DSOS404A	4 GHz	20 GSa/s	50 Mpts	4
MSOS404A	4 GHz	20 GSa/s	50 Mpts	4+16 digital
DSOS604A	6 GHz	20 GSa/s	50 Mpts	4
MSOS604A	6 GHz	20 GSa/s	50 Mpts	4+16 digital
DSOS804A	8 GHz	20 GSa/s	50 Mpts	4
MSOS804A	8 GHz	20 GSa/s	50 Mpts	4+16 digital

Probes

Model	Description
N2873A (qty. 4 ship standard)	Passive single-ended voltage up to 500 MHz
1130A/31A/32A/34A	InfiniiMax active single-ended or differential voltage
N2750A-52A	InfiniiMode single-ended, differential, or common mode voltage
N2795A, N2796A, N2797A	Active single-ended voltage up to 2 GHz
N2790A, N2791A, N2818A, N2819A, N2891A	General purpose high voltage differential signal up to 7 kV with high CMRR
1146B, 1147B, N2780B-83B, N2893A	High current, AC/DC (mA – 100's of A)
N2820A, N2821A	High sensitivity current, AC/DC (10's of μ A – A)
10076B	Passive high voltage up to 4 kV peak pulse
N2870A – N2876A	General purpose up to 1.5 GHz
N7040A, N7041A, N7042A	High current AC, up to 3 kA
N7026A	High sensitivity AC/DC clamp-on current 150 MHz, 40 Apk

For additional information and a complete listing of applications, visit www.keysight.com/find/S-Series



Keysight Assurance Plans

www.keysight.com/find/AssurancePlans

Up to ten years of protection and no budgetary surprises to ensure your instruments are operating to specification, so you can rely on accurate measurements.

Accessories

Model	Description
Option 100	Increase to 100 Mpts/200 Mpts (4-ch/2-ch)
Option 200	Increase to 200 Mpts/400 Mpts (4-ch/2-ch)
Option 400	Increase to 400 Mpts/800 Mpts (4-ch/2-ch)
DSOS8GBW	Upgrade to 8 GHz bandwidth
DSOS6GBW	Upgrade to 6 GHz bandwidth
DSOS4GBW	Upgrade to 4 GHz bandwidth
DSO2G5BW	Upgrade to 2.5 GHz bandwidth
DSOS2GBW	Upgrade to 2 GHz bandwidth
DSOS1GBW	Upgrade to 1 GHz bandwidth
Option A6J	ANSI Z540 complaint calibration
N2902B	S-Series rack mount kit (8U high)
N2746A	Additional SSDs with Win7
N2865A	GPIO to LAN adapter

Key protocol applications

Model	Description
N8803B-1FP	CAN, LIN, FlexRay decode and trigger
N8800B-1FP	I ² C, SPI, and RS-232/UART decode and trigger
N5391B-1FP	I ² C/SPI decode
N8817B-1FP	JTAG decode
N5463B-1FP	PCIe Gen1 and Gen2 decode and trigger
N5462B-1FP	RS-232/UART decode and trigger
N5464B-1FP	USB 2.0 decode and trigger

Key analysis applications

Model	Description
Option DSA	DSA (EZJIT Complete and SDA bundle)
E2681B-1FP	EZJIT
N5400B-1FP	EZJIT Plus
N8823B-1FP	EZJIT Complete
N5415B-1FP	InfiniiScan
N2808A-1FP	PrecisionProbe
N5384A-1FP	Serial data analysis

Key compliance applications

Model ¹	Description
U7233B-1FP	DDR1 ²
N5413C-1FP	DDR2 + LPDDR2 ²
U7231C-1FP	DDR3 + LPDDR3 ²
N5392C-3FP	Ethernet ²
N5392C-1FP	Ethernet + EEE ²
U7238D-1FP	MIPI D-PHY ²
U7249D-1FP	MIPI M-PHY ²
N5393E-3FP	PCIe Gen 1 ²
N5416B-1FP	USB 2.0 ²

1. Factory-installed license on new oscilloscopes
2. May have minimum bandwidth required