Keysight S-Series Oscilloscopes

The New Standard for Superior Measurements
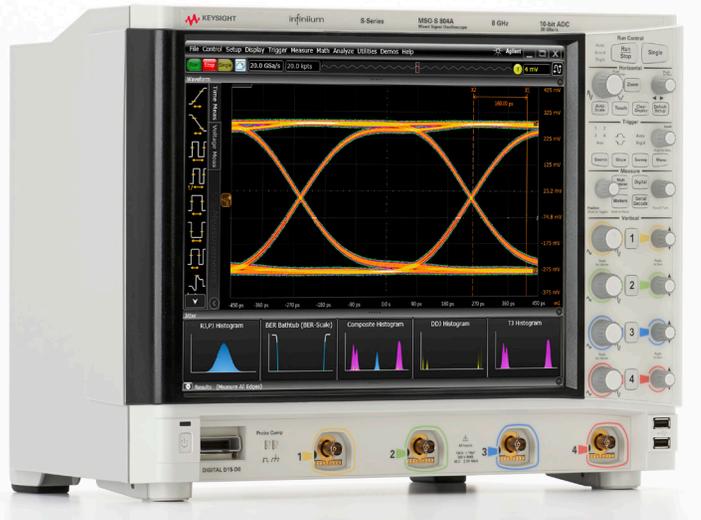
Key specifications

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)
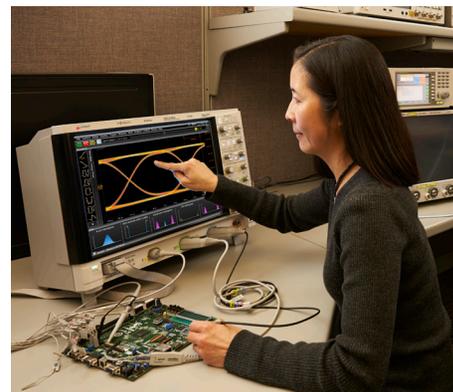
Broadest range of capability

– 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

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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 uA – A)
10076B, N2771B	Passive high voltage up to 30 kV peak pulse
N2870A – N2876A	General purpose up to 1.5 GHz

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

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	GPIB to LAN adapter

Key protocol applications

Model	Description
N8803B-1FP	CAN, LIN, FlexRay decode and trigger
N8800B-1FP	I²C, SPI, and RS-232/UART decode and trigger
N5391B-1FP	I²C/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

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

Three-Year Warranty

www.keysight.com/find/ThreeYearWarranty
Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

Keysight Assurance Plans

www.keysight.com/find/AssurancePlans
Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

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