

SIGLENT TECHNOLOGIES

RF PRODUCT CATALOG

- Spectrum Analyzer
- Spectrum & Vector Network Analyzer
- Vector Network Analyzer
- RF/MW Signal Generator



CATALOG

| | |
|---|----|
| Company Profile | 02 |
| Vector Network Analyzer | |
| SNA6000A Vector Network Analyzer | 03 |
| SNA5000A Vector Network Analyzer | 08 |
| SHN900A Portable Vector Network Analyzer | 13 |
| Switch Matrix | |
| SSM5000A Switch Matrix | 17 |
| Mechanical Switch | |
| SSU5000A Mechanical Switch | 19 |
| Spectrum Analyzer | |
| SSA5000A Spectrum Analyzer | 21 |
| SSA3000X-R Real-time Spectrum Analyzer | 24 |
| SSA3000X Plus Spectrum Analyzer | 28 |
| SSA3000X Spectrum Analyzer | 31 |
| SHA850A Portable Spectrum Analyzer | 34 |
| Spectrum & Vector Network Analyzer | |
| SVA1000X Spectrum & Vector Network Analyzer | 37 |
| RF/MW Signal Generator | |
| SSG6000A RF Signal Generator | 41 |
| SSG5000A RF Signal Generator | 44 |
| SSG5000X RF Signal Generator | 46 |
| SSG3000X RF Signal Generator | 51 |
| Accessories | 55 |
| Other Products Overview | 60 |
| Service | 64 |

Company Profile

SIGLENT TECHNOLOGIES Co., Ltd.

Every Bench. Every Engineer. Every Day.

SIGLENT has been providing test & measurement solutions for almost 18 years from its headquarter in Shenzhen, China. There are more than 300 employees, one third of whom are high-educated R&D engineers.

SIGLENT has many patent technologies. We are dedicated to develop sophisticated and high quality digital oscilloscopes, waveform generators, RF signal generators, handheld digital oscilloscopes, spectrum analyzers, vector network analyzers and DC power supplies, DC Electronic Loads, digital multimeters. We strive to deliver the highest quality of customer service and satisfaction to our customers.



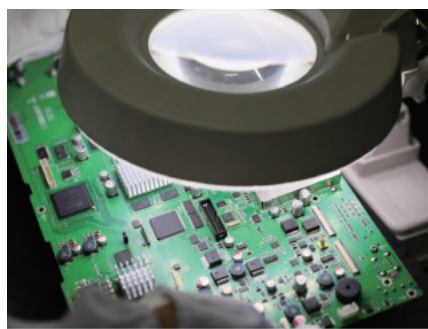
SIGLENT provides the following instruments:

- Digital Oscilloscope
- Handheld Oscilloscope
- Waveform Generator
- RF/MW Signal Generator
- Spectrum Analyzer
- Vector Network Analyzer
- DC Power Supply
- DC Electronic Load
- Digital Multimeter
- Probes & Accessories

SIGLENT sincerely invite you to join

Please email :

sales@siglent.com





SNA6000A

Vector Network Analyzer

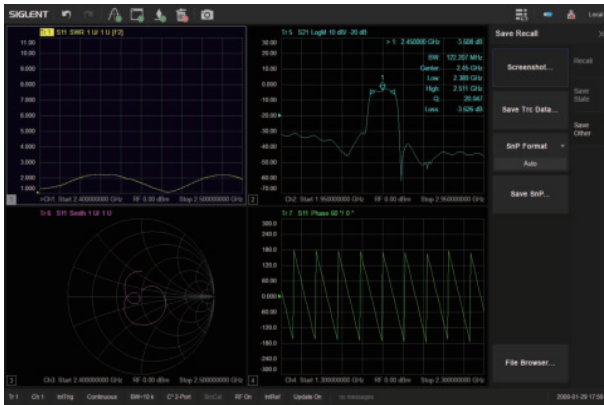


Features and Benefits

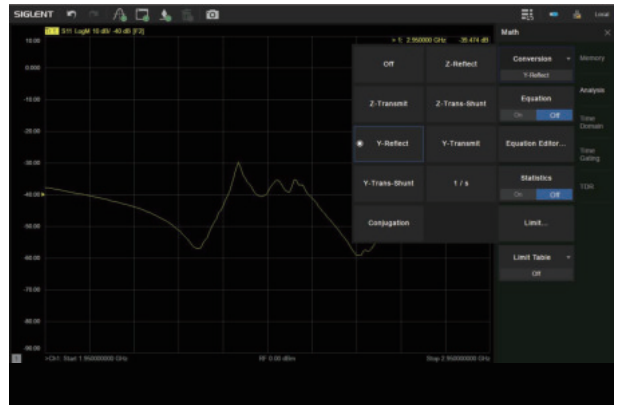
- Frequency range: 100 kHz - 13.5 GHz and 100 kHz - 26.5 GHz
- Frequency resolution: 1 Hz
- Level resolution: 0.05 dB
- Range of IFBW: 1 Hz~10 MHz
- Setting range of output level: -55 dBm ~ +10 dBm
- Dynamic range: 135 dB
- Types of calibration: Response calibration, Enhanced Response calibration, Full-one port calibration, Full-two port calibration, Full-three port calibration, Full-four port calibration, TRL calibration
- Types of measurement: Scattering-parameter measurement, differential-parameter measurement, receiver measurement, time-domain parameter analysis, limit test, ripple test, impedance conversion, fixture simulation, adapter removal/insertion, spectrum analysis frequency offset, scalar mixer measurement, pulse measurement, Material Measurement
- Internal Bias-Tee connections
- Interface: LAN, USB Device, USB Host (USB-GPIB)
- Remote control: SCPI/ Labview/ IVI based on USB-TMC / VXI-11 / Socket /Telnet / WebServer
- 12.1-inch touch screen
- Video output: HDMI/DVI-D/DP

 Design features

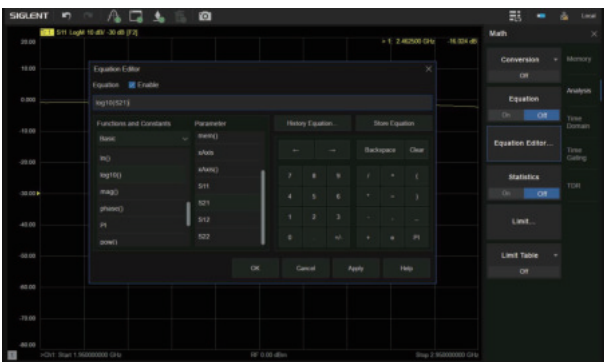
• Multi-format display



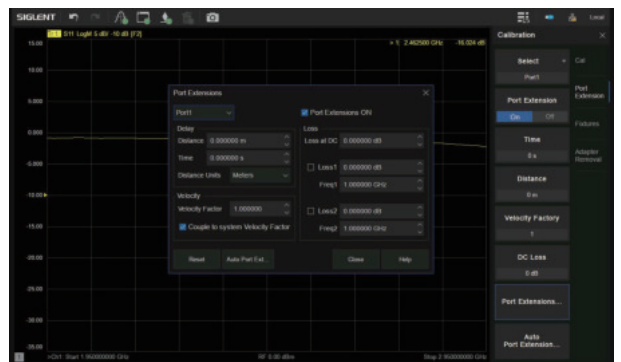
• Impedance conversion



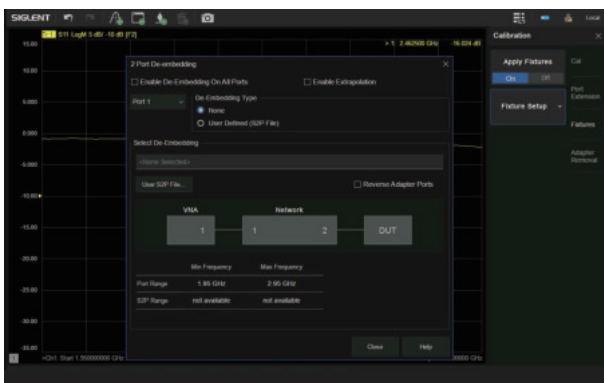
• Equation Editor



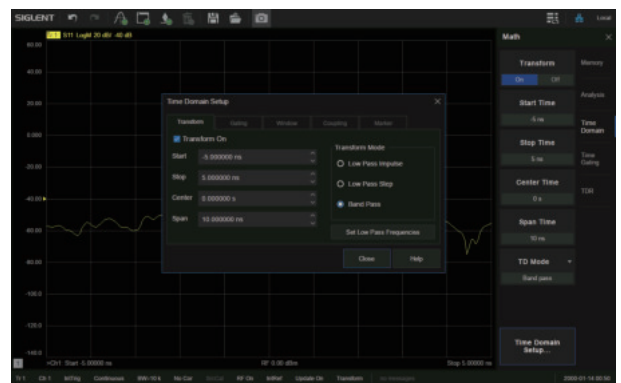
• Port Extensions



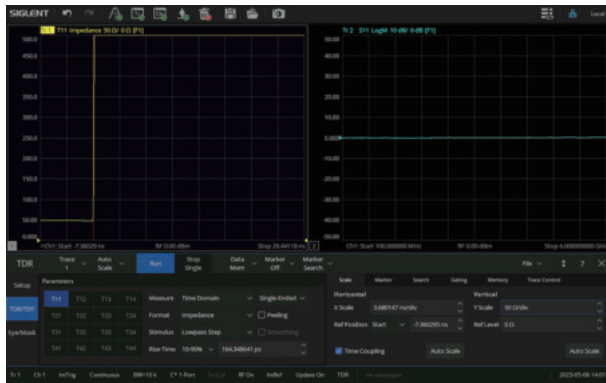
• Embedding and De-Embedding



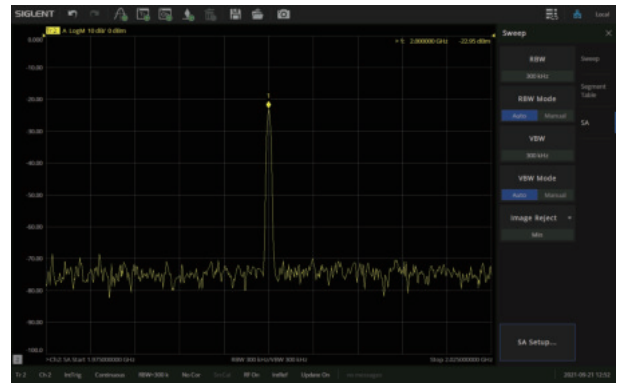
• Time-Domain analysis



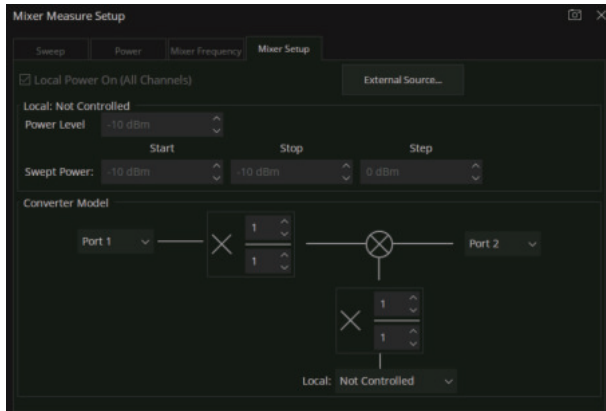
Enhanced Time-Domain analysis (TDR)



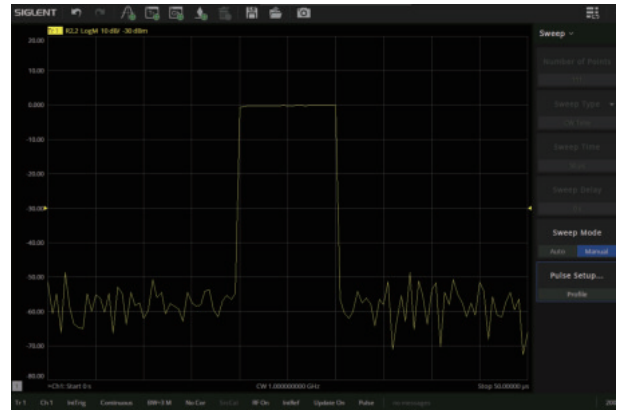
Spectrum analysis



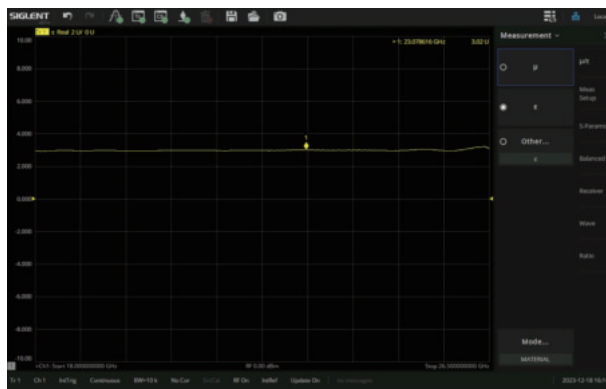
Scalar mixer measurement



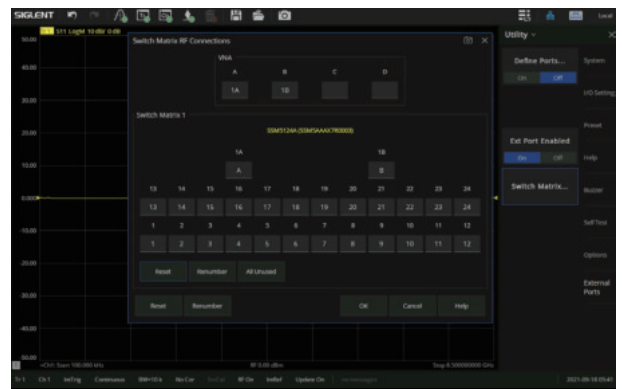
Pulse Modulation



Material Measurement



Switch matrix measurement





Model and Main index

| Model | SNA6034A SNA6134A | SNA6032A SNA6132A | SNA6024A SNA6124A | SNA6022A SNA6122A |
|-------------------------------|---|----------------------|----------------------|----------------------|
| Frequency range | 100 kHz~26.5 GHz | | 100 kHz~13.5 GHz | |
| Ports | 4 | 2 | 4 | 2 |
| Frequency resolution | 1 Hz | | | |
| Level resolution | 0.05 dB | | | |
| Range of IFBW | 1 Hz~10 MHz | | | |
| Number of points | 2 to 100,001 | | | |
| Setting range of output level | -55 dBm ~ +10 dBm | | | |
| Dynamic range | 135 dB | | | |
| Types of calibration | Response calibration, Enhanced Response calibration, Full-one port calibration, Full-two port calibration, Full-three port calibration, Full-four port calibration, TRL calibration | | | |
| Types of measurement | Scattering-parameter measurement, differential-parameter measurement, receiver measurement, time-domain parameter analysis, limit test, ripple test, impedance conversion, fixture simulation, adapter removal/insertion, enhanced time-domain parameter analysis (TDR), spectrum analysis, frequency offset, scalar mixer measurement, pulse measurement, Material Measurement | | | |
| Bias-Tees | Support | | | |
| Interface | LAN, USB Device, USB Host (USB-GPIB) | | | |
| Remote control | SCPI/ Labview/ IVI based on USB-TMC/ VXI-11/ Socket/ Telnet/ WebServer | | | |
| Display | 12.1-inch touch screen | | | |
| Video output | HDMI/DVI-D/DP | | | |



Ordering Information

| Items | Description | Order Number |
|----------------------|--|--------------|
| Products | 4 ports, 26.5G Vector Network Analyzer | SNA6034A |
| | 2 ports, 26.5G Vector Network Analyzer | SNA6032A |
| | 4 ports, 13.5G Vector Network Analyzer | SNA6024A |
| | 2 ports, 13.5G Vector Network Analyzer | SNA6022A |
| | 4 ports, 26.5G Vector Network Analyzer (Includes front panel jumper interface) | SNA6134A |
| | 2 ports, 26.5G Vector Network Analyzer (Includes front panel jumper interface) | SNA6132A |
| | 4 ports, 13.5G Vector Network Analyzer (Includes front panel jumper interface) | SNA6124A |
| | 2 ports, 13.5G Vector Network Analyzer (Includes front panel jumper interface) | SNA6122A |
| Standard Accessories | 1 x Quick-start, 1 x Power-cable, 1 x USB-cable, 1 x calibration-certificate, 1 x Wireless mouse, 1 x Protective Cover | |
| Optional Accessories | High-performance reference source | SNA6000-HPR |
| | Time-Domain analysis | SNA6000-TDA |
| | Enhanced Time-Domain analysis | SNA6000-TDR |
| | Spectrum analysis | SNA6000-SA |
| | Scalar mixer measurement | SNA6000-SMM |
| | Pulse measurement | SNA6000-PM |
| | Material Measurement | SNA6000-MT |
| | SEM5000A series electronic calibrators | SEM5000A |
| | N-type, Male, 50Ω Calibration Kit, 0-4.5 GHz | F503ME |
| | N-type, Female, 50Ω Calibration Kit, 0-4.5 GHz | F503FE |
| | N-type, Male, 50Ω Calibration Kit, 0-9 GHz | F504MS |

| Items | Description | Order Number |
|----------------------|--|-------------------|
| Optional Accessories | N-type, Female, 50Ω Calibration Kit, 0-9 GHz | F504FS |
| | N-type, Male, 50Ω Calibration Kit, 0-9 GHz | Y504MS |
| | N-type, Female, 50Ω Calibration Kit, 0-9 GHz | Y504FS |
| | N-type, Male and Female, 50Ω Calibration Kit,0-9 GHz | F504TS |
| | N-type, Male and Female, 50Ω Calibration Kit,0-18 GHz | F505TS |
| | 3.5 mm, Male, 50Ω Calibration Kit, 0-4.5 GHz | F603ME |
| | 3.5 mm, Female, 50Ω Calibration Kit, 0-4.5 GHz | F603FE |
| | 3.5 mm, Male, 50Ω Calibration Kit, 0-9 GHz | F604MS |
| | 3.5 mm, Female, 50Ω Calibration Kit, 0-9 GHz | F604FS |
| | 3.5 mm, Male and Female, 50Ω Calibration Kit, 0-9 GHz | F604TS |
| | 3.5 mm, Male, 50Ω Calibration Kit, 0-26.5 GHz | Y606MS |
| | 3.5 mm, Female, 50Ω Calibration Kit, 0-26.5 GHz | Y606FS |
| | 3.5 mm, Female, 50Ω Calibration Kit, 0-26.5 GHz | F606FS |
| | 3.5 mm, Male and Female, 50Ω Calibration Kit, 0-26.5 GHz | F606TS |
| | 50Ω Waveguide calibration kit, 18-26.5 GHz | KWR42A |
| | N(M)-SMA(F) RF Cable DC~6 GHz,1000 mm | S06-NMSF-1M |
| | N(M)-SMA(F) RF Cable DC~18 GHz,1000 mm | S18-NMSF-1M |
| | 2.9 mm(M)- 2.9 mm (F) RF Cable DC~40 GHz,1000 mm | S40-29M29F-1M |
| | N(M)-SMA(M) RF Cable DC~18 GHz,1000 mm | N-SMA-18L |
| | N(M)-N(M) RF Cable DC~18 GHz,1000 mm | N-N-18L |
| | SMA(M)-SMA(M) RF Cable DC~18 GHz,1000 mm | SMA-SMA-18L |
| | SMA(M)-SMA(M) RF Cable DC~26.5 GHz,1000 mm | SMA-SMA-26L |
| | SMA(F)-SMA(M) RF Cable DC~26.5 GHz,1000 mm | SMAF-SMA-26L |
| | NMD 3.5 female-NMD 3.5 Male DC-26.5 GHz,635 mm | V26-N35MN35F-25IN |
| | NMD 3.5 female-APC 3.5 female DC-26.5 GHz,635 mm | V26-N35FA35F-25IN |
| | USB-GPIB Adapter | USB-GPIB |
| | RF demonstration board | SNA-TB01 |
| | Adjustable Differential TDR probe DC-18 GHz | ADP-18 |
| | Adjustable Differential TDR probe DC-26.5 GHz | ADP-26 |
| | Adjustable Single-end TDR probe DC-18 GHz | ASP-18 |
| | Adjustable Single-end TDR probe DC-26.5 GHz | ASP-26 |



SNA5000A

Vector Network Analyzer

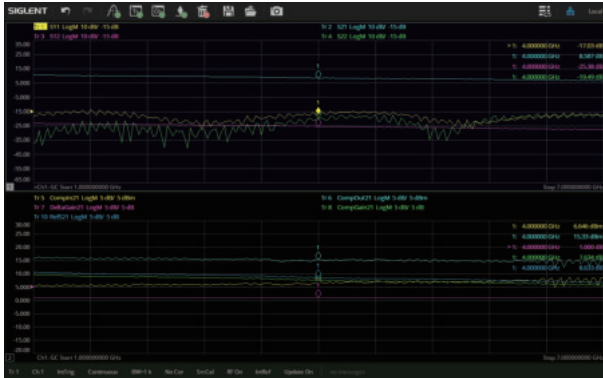


Features and Benefits

- Frequency range: 9 kHz~8.5 GHz and 100 kHz~26.5 GHz
- Frequency resolution: 1 Hz
- Level resolution: 0.05 dB
- Range of IFBW: 1 Hz~10 MHz
- Setting range of output level: -55 dBm~+10 dBm
- Dynamic range: 125 dB
- Types of calibration: Response calibration, Enhanced Response calibration, Full-one port calibration, Full-two port calibration, Full-three port calibration, Full-four port calibration, TRL calibration
- Types of measurement: Scattering-parameter measurement, differential-parameter measurement, receiver measurement, time-domain parameter analysis, limit test, ripple test, impedance conversion, fixture simulation, adapter removal/insertion, spectrum analysis frequency offset, scalar mixer measurement, pulse measurement, Material Measurement, Gain Compression measurement, Vector mixer measurement
- Support Bias-Tees
- Interface: LAN, USB Device, USB Host(USB-GPIB)
- Remote control: SCPI/Labview/IVI based on USB-TMC/VXI-11/Socket/Telnet/WebServer
- 12.1-inch touch screen
- Video output: HDMI

Design features

Gain compression measurement



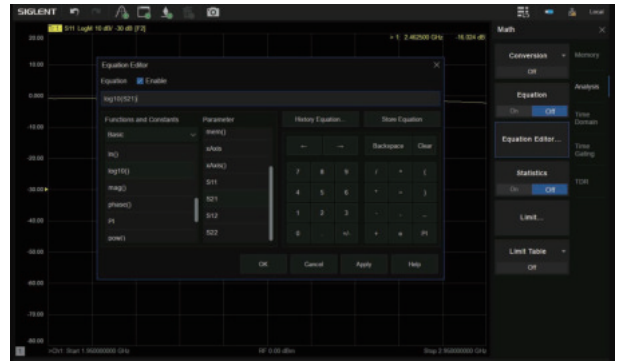
Vector mixer measurement



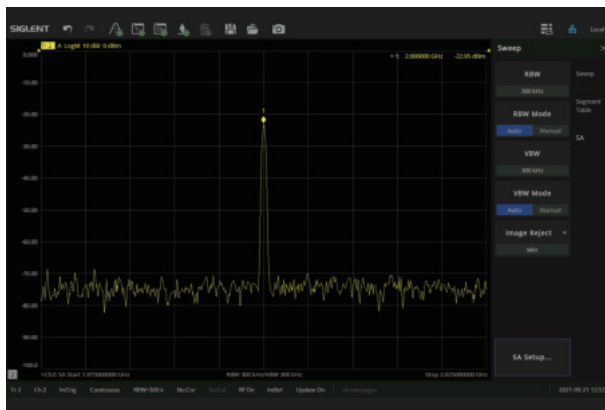
Impedance conversion



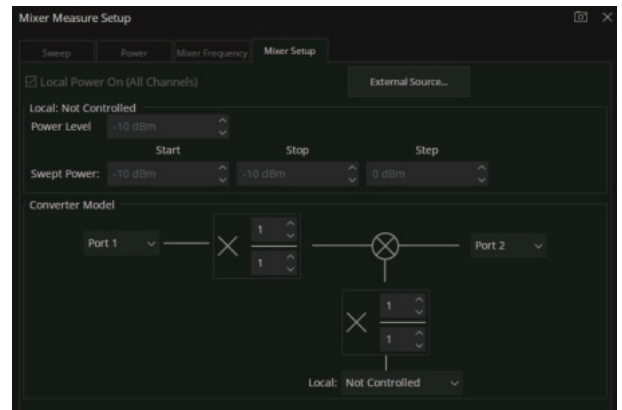
Equation Editor



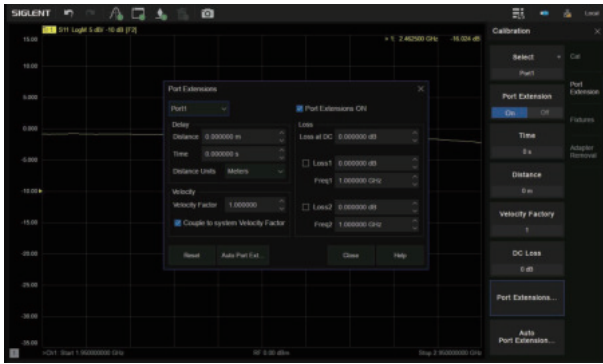
Spectrum analysis



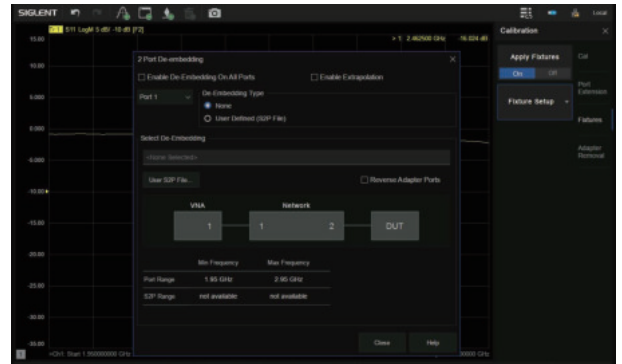
Scalar mixer measurement



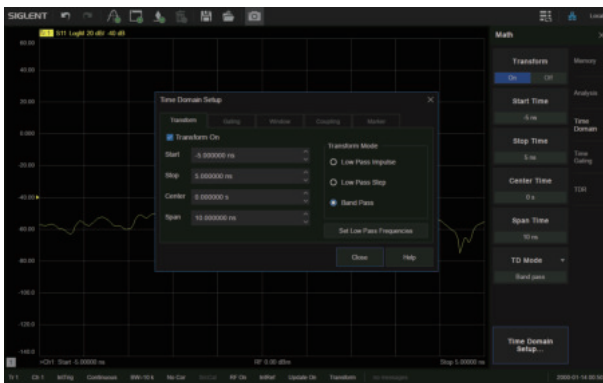
• Port Extensions



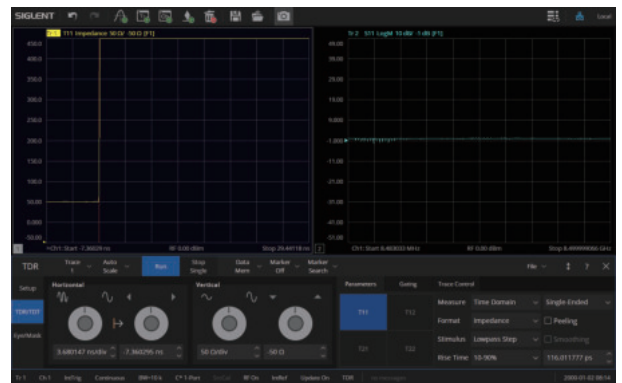
• Embedding and De-Embedding



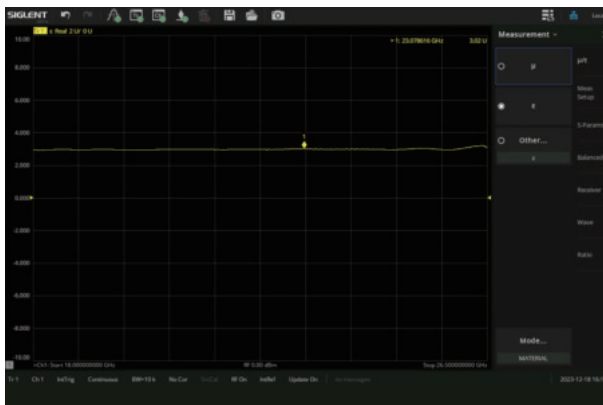
• Time-Domain analysis



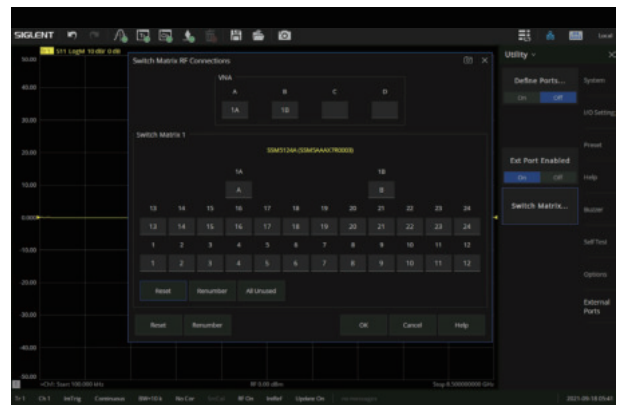
• Enhanced Time-Domain analysis(TDR)



• Material Measurement



• Switch matrix measurement





Model and Main index

| Model | SNA5002A SNA5004A | SNA5012A SNA5014A | SNA5022A | SNA5032A |
|-------------------------------|--|----------------------|------------------|------------------|
| Frequency range | 9 kHz~4.5 GHz | 9 kHz~8.5 GHz | 100 kHz~13.5 GHz | 100 kHz~26.5 GHz |
| Ports | 2/4 | 2/4 | 2 | 2 |
| Frequency resolution | 1 Hz | | | |
| Level resolution | 0.05 dB | | | |
| Range of IFBW | 1 Hz~10 MHz | | | |
| Setting range of output level | -55 dBm ~ +10 dBm | | | |
| Dynamic range | 125 dB | | | |
| Types of calibration | Response calibration, Enhanced Response calibration, Full-one port calibration, Full-two port calibration, Full-three port calibration, Full-four port calibration, TRL calibration | | | |
| Types of measurement | Scattering-parameter measurement, differential-parameter measurement, receiver measurement, time-domain parameter analysis, limit test, ripple test, impedance conversion, fixture simulation, adapter removal / insertion, enhanced time-domain parameter analysis (TDR), spectrum analysis, frequency offset, scalar mixer measurement | | | |
| Bias-Tees | Support | | | |
| Interface | LAN, USB Device, USB Host(USB-GPIB) | | | |
| Remote control | SCPI/Labview/IVI based on USB-TMC/VXI-11/Socket/Telnet/WebServer | | | |
| Display | 12.1-inch touch screen | | | |
| Video output | HDMI | | | |



Ordering Information

| Items | Description | Order Number |
|----------------------|--|--------------|
| Products | 2 ports, 4.5G Vector Network Analyzer | SNA5002A |
| | 2 ports, 8.5G Vector Network Analyzer | SNA5012A |
| | 4 ports, 4.5G Vector Network Analyzer | SNA5004A |
| | 4 ports, 8.5G Vector Network Analyzer | SNA5014A |
| | 2 ports, 13.5G Vector Network Analyzer | SNA5022A |
| | 2 ports, 26.5G Vector Network Analyzer | SNA5032A |
| Standard Accessories | 1 x Quick-start, 1 x Power-cable, 1 x USB-cable, 1 x calibration-certificate, 1 x Wireless mouse, 1 x Protective Cover | |
| Optional Accessories | High-performance reference source | SNA5000-HPR |
| | Time-Domain analysis | SNA5000-TDA |
| | Enhanced Time-Domain analysis | SNA5000-TDR |
| | Spectrum analysis | SNA5000-SA |
| | Scalar mixer measurement | SNA5000-SMM |
| | Performance Tests | SNA5000-PV |
| | Pulse measurement | SNA5000-PM |
| | Material Measurement | SNA5000-MT |
| | Gain Compression measurement | SNA5000-GC |
| | Vector mixer measurement | SNA5000-VMM |
| | SEM5000A series electronic calibrators | SEM5000A |
| | N-type, Male, 50Ω Calibration Kit, 0-4.5 GHz | F503ME |
| | N-type, Female, 50Ω Calibration Kit, 0-4.5 GHz | F503FE |
| | N-type, Male, 50Ω Calibration Kit, 0-9 GHz | F504MS |
| | N-type, Female, 50Ω Calibration Kit, 0-9 GHz | F504FS |

| Items | Description | Order Number |
|----------------------|--|-------------------|
| Optional Accessories | N-type, Male, 50Ω Calibration Kit, 0-9 GHz | Y504MS |
| | N-type, Female, 50Ω Calibration Kit, 0-9 GHz | Y504FS |
| | N-type, Male and Female, 50Ω Calibration Kit,0-9 GHz | F504TS |
| | N-type, Male and Female, 50Ω Calibration Kit,0-18 GHz | F505TS |
| | 3.5 mm, Male, 50Ω Calibration Kit, 0-4.5 GHz | F603ME |
| | 3.5 mm, Female, 50Ω Calibration Kit, 0-4.5 GHz | F603FE |
| | 3.5 mm, Male, 50Ω Calibration Kit, 0-9 GHz | F604MS |
| | 3.5 mm, Female, 50Ω Calibration Kit, 0-9 GHz | F604FS |
| | 3.5 mm, Male and Female, 50Ω Calibration Kit, 0-9 GHz | F604TS |
| | 3.5 mm, Male, 50Ω Calibration Kit, 0-26.5GHz | Y606MS |
| | 3.5 mm, Female, 50Ω Calibration Kit, 0-26.5 GHz | Y606FS |
| | 3.5 mm, Female, 50Ω Calibration Kit, 0-26.5 GHz | F606FS |
| | 3.5 mm, Male and Female, 50Ω Calibration Kit, 0-26.5 GHz | F606TS |
| | 50Ω Waveguide calibration kit, 18-26.5 GHz | KWR42A |
| | N(M)-SMA(F) RF Cable DC~6 GHz,1000 mm | S06-NMSF-1M |
| | N(M)-SMA(F) RF Cable DC~18 GHz,1000 mm | S18-NMSF-1M |
| | 2.9 mm(M)- 2.9 mm (F) RF Cable DC~40 GHz,1000 mm | S40-29M29F-1M |
| | N(M)-SMA(M) RF Cable DC~18 GHz,1000 mm | N-SMA-18L |
| | N(M)-N(M) RF Cable DC~18 GHz,1000 mm | N-N-18L |
| | SMA(M)-SMA(M) RF Cable DC~18 GHz,1000 mm | SMA-SMA-18L |
| | SMA(M)-SMA(M) RF Cable DC~26.5 GHz,1000 mm | SMA-SMA-26L |
| | SMA(F)-SMA(M) RF Cable DC~26.5 GHz,1000 mm | SMAF-SMA-26L |
| | NMD 3.5 female-NMD 3.5 Male DC-26.5 GHz,635 mm | V26-N35MN35F-25IN |
| | NMD 3.5 female-APC 3.5 female DC-26.5 GHz,635 mm | V26-N35FA35F-25IN |
| | USB-GPIB Adapter | USB-GPIB |
| | RF demonstration board | SNA-TB01 |
| | Adjustable Differential TDR probe DC-18 GHz | ADP-18 |
| | Adjustable Differential TDR probe DC-26.5 GHz | ADP-26 |
| | Adjustable Single-end TDR probe DC-18 GHz | ASP-18 |
| | Adjustable Single-end TDR probe DC-26.5 GHz | ASP-26 |



SHN900A

Portable Vector Network Analyzer

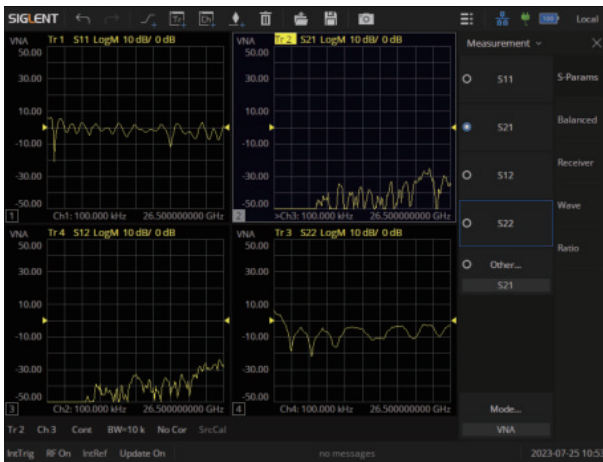


Features and Benefits

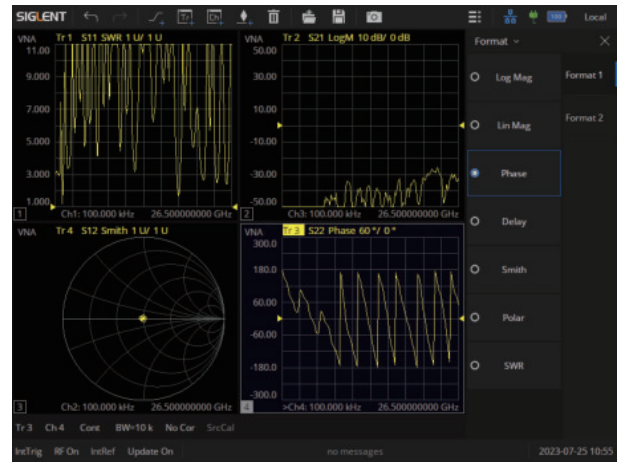
- Standard VNA and CAT mode, Optional SA mode
- Frequency range: 30 kHz - 26.5 GHz
- Frequency resolution: 1 Hz
- Level resolution: 0.05 dB
- Range of IFBW: 10 Hz~3 MHz
- Setting range of output level: -45 dBm ~ +10 dBm
- Dynamic range: 110 dB(Typ.)
- Types of calibration: Response calibration, Enhanced Response calibration, Full-one port calibration, Full-two port calibration, TRL calibration
- Types of measurement: Scattering-parameter measurement, differential-parameter measurement, receiver measurement, time-domain parameter analysis, limit test, ripple test, impedance conversion, fixture simulation, adapter removal/insertion, spectrum analysis frequency offset, scalar mixer measurement, pulse measurement
- Internal Bias-Tee connections
- Support GPS, Time and Location Information Saving
- Interface: LAN, USB Device, USB Host (USB-GPIB)
- Remote control: SCPI/ Labview/ IVI based on USB-TMC / VXI-11 / Socket /Telnet / WebServer
- 8.4-inch touch screen, Mouse, Keyboard
- Typical working time 4 hours, 3.2 kg net weight

Design features

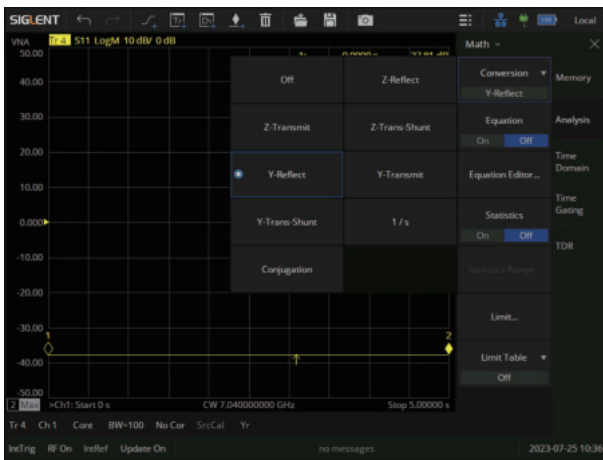
• Multi-window display



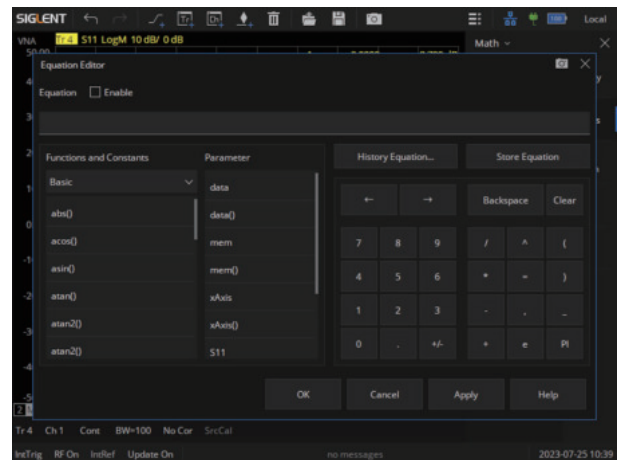
• Multi-format display



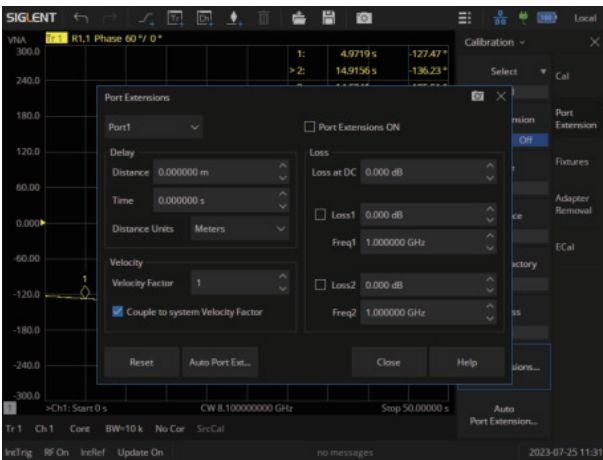
• Impedance conversion



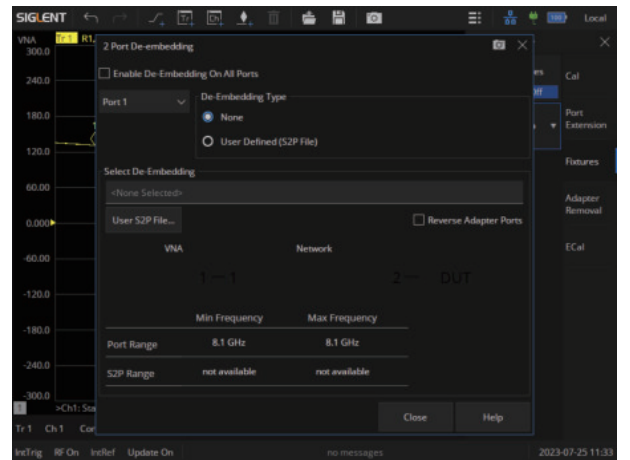
• Equation Editor



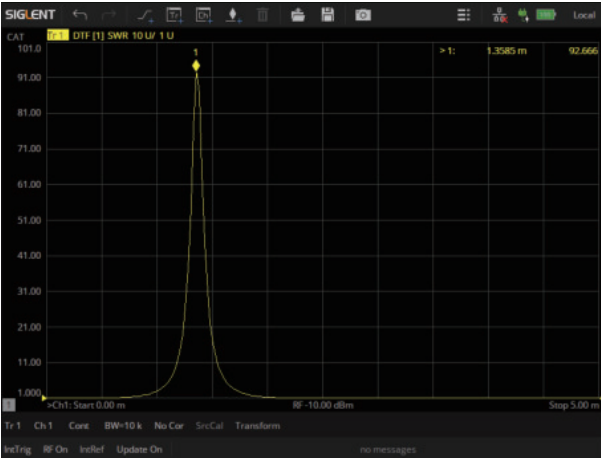
• Port Extensions



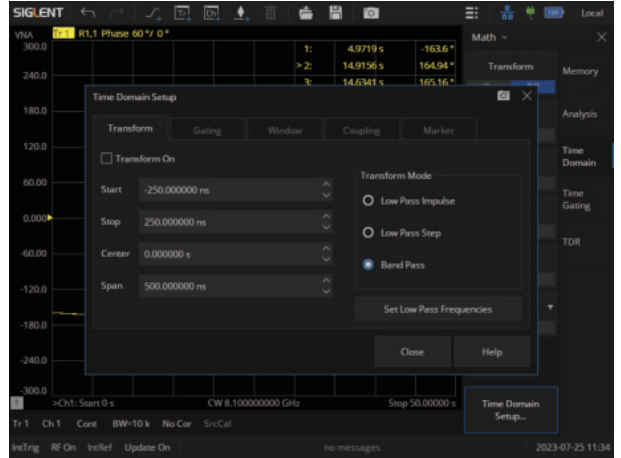
• Embedding and De-Embedding



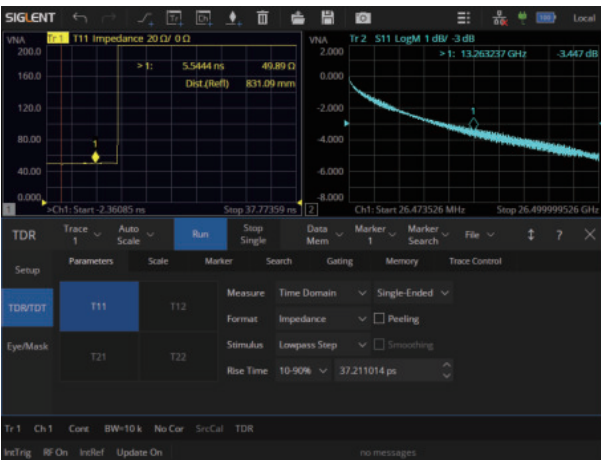
CAT



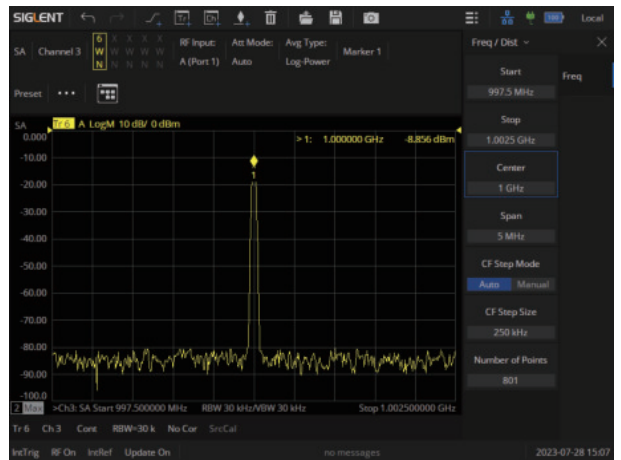
Time-Domain analysis



Enhanced Time-Domain analysis (TDR)



Spectrum analysis



Model and Main index

| Model | SHN914A | SHN920A | SHN926A |
|-------------------------------|---|---------------|-----------------|
| Frequency range | 30 kHz~14 GHz | 30 kHz~20 GHz | 30 kHz~26.5 GHz |
| Ports | 2 | | |
| Frequency resolution | 1 Hz | | |
| Level resolution | 0.05 dB | | |
| Range of IFBW | 10 Hz~3 MHz | | |
| Setting range of output level | -45 dBm ~ +10 dBm | | |
| Dynamic range | 110 dB (Typ.) | | |
| Types of calibration | Response calibration, Enhanced Response calibration, Full-one port calibration, Full-two port calibration, TRL calibration | | |
| Types of measurement | Scattering-parameter measurement, differential-parameter measurement, receiver measurement, time-domain parameter analysis, limit test, ripple test, impedance conversion, fixture simulation, adapter removal/insertion, enhanced time-domain parameter analysis (TDR), spectrum analysis, frequency offset, scalar mixer measurement, pulse measurement | | |
| Bias-Tees | Support | | |
| Interface | LAN, USB Device, USB Host (USB-GPIB) | | |
| Remote control | SCPI/ Labview/ IVI based on USB-TMC/ VXI-11/ Socket/ Telnet/ WebServer | | |
| Display | 8.4-inch touch screen | | |
| GPS | Support | | |



Ordering Information

| Items | Description | Order number |
|-------------------|---|-------------------|
| Products | 2 ports, 14 G Vector Network Analyzer | SHN914A |
| | 2 ports, 20 G Vector Network Analyzer | SHN920A |
| | 2 ports, 26.5 G Vector Network Analyzer | SHN926A |
| standard fittings | Quick Start, USB Type C Line, Rechargeable lithium battery, AC-DC adapter, Portable bag | |
| TDA Option | Time Domain Analysis | SHN900-TDA |
| TDR Option | Enhanced Time Domain Analysis | SHN900-TDR |
| SA Option | Spectrum analysis | SHN900-SA |
| | 3.5 mm, Male, 50 Ω Calibration Kit, 0~4.5 GHz | F603ME |
| | 3.5 mm, Female, 50 Ω Calibration Kit, 0~4.5 GHz | F603FE |
| | 3.5 mm, Male, 50 Ω Calibration Kit, 0~9 GHz | F604MS |
| | 3.5 mm, Female, 50 Ω Calibration Kit, 0~9 GHz | F604FS |
| | 3.5 mm, Male and Female, 50 Ω Calibration Kit, 0~9 GHz | F604TS |
| | 3.5 mm, Male and Female, 50 Ω Calibration Kit, 0~26.5 GHz | F606TS |
| | Electronic Calibration Kit | SEM5000A |
| | RF Test Demo Board | SNA-TB01 |
| | Adjustable Differential TDR probe DC-18 GHz | ADP-18 |
| | Adjustable Differential TDR probe DC-26.5 GHz | ADP-26 |
| | Adjustable Differential TDR probe DC-18 GHz | ASP-18 |
| | Adjustable Differential TDR probe DC-26.5 GHz | ASP-26 |
| | SMA(M)-SMA(M) cable DC-18 GHz, 1000 mm | SMA-SMA-18L |
| | SMA(M)-SMA(M) cable DC-26.5 GHz, 1000 mm | SMA-SMA-26L |
| | SMA(F)-SMA(M) cable DC-26.5 GHz, 1000 mm | SMAF-SMA-26L |
| | NMD 3.5 female-NMD 3.5 Male DC-26.5 GHz, 635 mm | V26-N35MN35F-25IN |
| | NMD 3.5 female-APC 3.5 female DC-26.5 GHz, 635 mm | V26-N35FA35F-25IN |
| | USB-GPIB Adaptor | USB-GPIB |
| | GPS antenna, SMA(M), 1000 mm | ANT-GPS1 |



SSM5000A

Switch Matrix



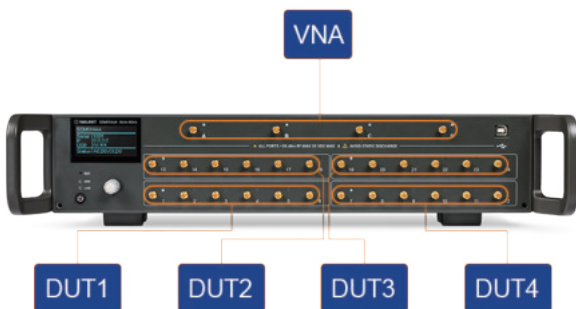
Features and Benefits

- Characteristic impedance: 50 Ω
- Highest frequency: 9 GHz (or 26.5 GHz)
- Maximum number of input ports: 4
- Maximum number of output ports: 24
- RF connector: 3.5 mm female
- Maximum input power: 20 dBm
- Maximum input DC voltage: 35 V
- Interface: LAN, USB Device, Direct Control (in), Direct Control (out)
- Screen size: 2.4-inch

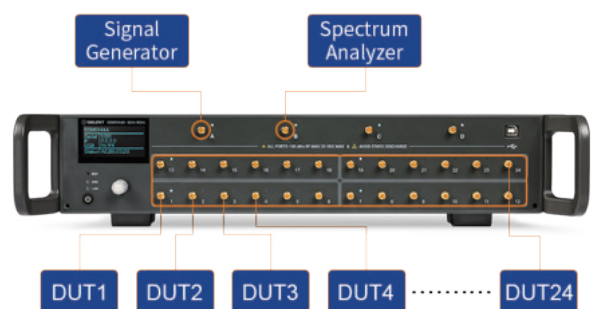


Design features

• Network Analyzer Test Port Extension



• Signal Generator and SA Test Port Extension





Model and Main index

| Model | SSM5122A | SSM5124A | SSM5142A | SSM5144A | SSM5321A | SSM5342A |
|--------------------------|---------------------------|---------------|---------------|---------------|--------------------|--------------------|
| Frequency range | 9 kHz ~ 9 GHz | 9 kHz ~ 9 GHz | 9 kHz ~ 9 GHz | 9 kHz ~ 9 GHz | 100 kHz ~ 26.5 GHz | 100 kHz ~ 26.5 GHz |
| Input | 2 | 2 | 4 | 4 | 2 | 4 |
| Output | 12 | 24 | 12 | 24 | 6 | 12 |
| RF connector | 3.5 mm Female | | | | | |
| Maximum input power | 20 dBm | | | | | |
| Maximum input DC voltage | 35 V | | | | | |
| Screen size | 2.4-inch | | | | | |
| Size | W×H×D = 88.5×425×417.6 mm | | | | | |



Ordering Information

| Items | Description | Frequency range | Order number |
|----------------------|--|--------------------|--------------|
| Products | 2 input ports, 12 output ports | 9 kHz ~ 9 GHz | SSM5122A |
| | 2 input ports, 24 output ports | 9 kHz ~ 9 GHz | SSM5124A |
| | 4 input ports, 12 output ports | 9 kHz ~ 9 GHz | SSM5142A |
| | 4 input ports, 24 output ports | 9 kHz ~ 9 GHz | SSM5144A |
| | 2 input ports, 6 output ports | 100 kHz ~ 26.5 GHz | SSM5321A |
| | 4 input ports, 12 output ports | 100 kHz ~ 26.5 GHz | SSM5342A |
| Standard Accessories | One Quick-start, One Power-cable, One USB-cable, One certificate of qualification | - | - |



SSU5000A

Mechanical Switch



Features and Benefits

- Maximum frequency: 18 GHz/ 26.5 GHz/ 50 GHz
- 1 to 4 SPDT switches or 1 to 2 SP6T switch configurations
- SCPI Controllable via VISA and EasySSU software
- USB Connectivity
- Size: WxHxD=153x62.4x137.5 mm
- RF connector: SMA female or 2.4 mm female



Model and Main index

| Model | SSU5181A/SSU5182A SSU5183A/SSU5184A | SSU5261A/SSU5262A SSU5263A/SSU5264A | SSU5265A SSU5266A | SSU5501A/SSU5502A SSU5503A/SSU5504A |
|-------------------------|--|--|----------------------|--|
| Frequency range | DC ~ 18 GHz | DC ~ 26.5 GHz | DC ~ 26.5 GHz | DC ~ 50 GHz |
| Number of Switches | 1/2/3/4 | 1/2/3/4 | 1/2 | 1/2/3/4 |
| Switch Type | SPDT | SPDT | SP6T | SPDT |
| RF connector | SMA female | | | 2.4 mm female |
| Driving voltage | 12 V | | | |
| Maximum driving current | 1.25 A | | | |
| Size | W×H×D = 153×62.4×137.5 mm | | | |
| Weight | 885 g | | | |



Ordering Information

| Model | Product Description |
|------------------------------|---|
| SSU5181A | DC ~ 18 GHz, including one SPDT mechanical switch |
| SSU5182A | DC ~ 18 GHz, including two SPDT mechanical switches |
| SSU5183A | DC ~ 18 GHz, including three SPDT mechanical switches |
| SSU5184A | DC ~ 18 GHz, including four SPDT mechanical switches |
| SSU5261A | DC ~ 26.5 GHz, including one SPDT mechanical switch |
| SSU5262A | DC ~ 26.5 GHz, including two SPDT mechanical switches |
| SSU5263A | DC ~ 26.5 GHz, including three SPDT mechanical switches |
| SSU5264A | DC ~ 26.5 GHz, including four SPDT mechanical switches |
| SSU5265A | DC ~ 26.5 GHz, including one SP6T mechanical switch |
| SSU5266A | DC ~ 26.5 GHz, including two SP6T mechanical switches |
| SSU5501A | DC ~ 50 GHz, including one SPDT mechanical switch |
| SSU5502A | DC ~ 50 GHz, including two SPDT mechanical switches |
| SSU5503A | DC ~ 50 GHz, including three SPDT mechanical switches |
| SSU5504A | DC ~ 50 GHz, including four SPDT mechanical switches |
| Standard Configurations | Quantity |
| USB-cable | 1 |
| Quick-start | 1 |
| AC-DC adapter | 1 |
| Power cord | 1 |
| Certificate of qualification | 1 |



SSA5000A

Spectrum Analyzer

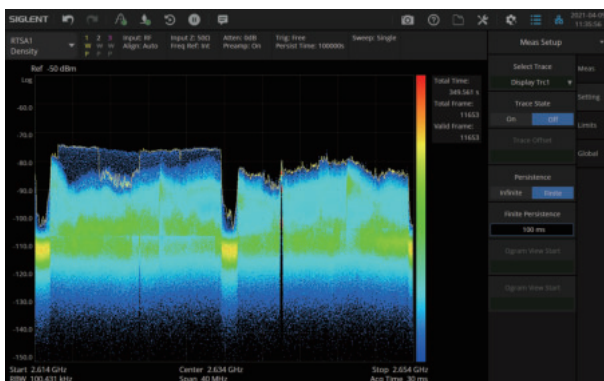
Features and Benefits

- Spectrum Analyzer Frequency Range from 9 kHz up to 13.6 GHz/26.5 GHz
- -165 dBm/Hz Displayed Average Noise Level (Typ.)
- -105 dBc/Hz@1 GHz, 10 kHz offset SSB Phase Noise (Typ.)
- 25 MHz/40 MHz Analysis Bandwidth
- 100% POI 7.20 μ s, Dynamic Range 60 dB, Multi-view for Density, Spectrogram and PVT
- Channel power, ACPR, OBW, Harmonic, TOI measurement etc.
- Analog Modulation Analysis and Vector Digital Modulation Analysis
- 12.1 inch Multi-Touch Screen, HDMI output
- Web Browser Remote Control on PC and Mobile Terminals and File Operation

Design features

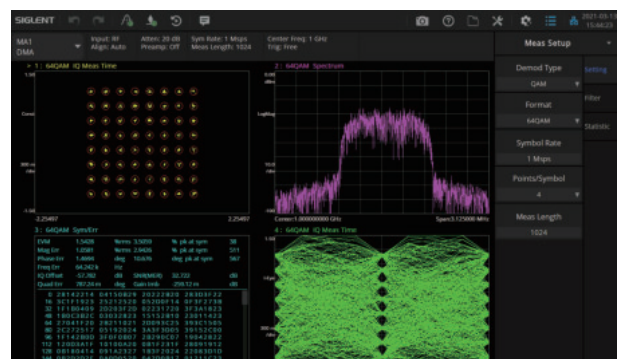
Real Time Analysis Mode

Multi-view and dimensions to monitor complex signals



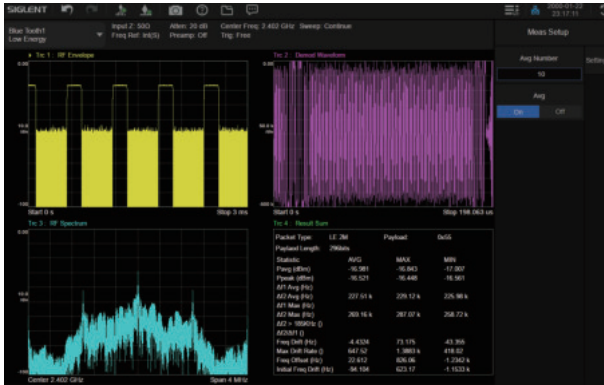
Modulation Analysis Mode

AM/FM/PM analog modulation , and ASK/FSK/PSK/MSK/QAM vector modulation a nalysis



Bluetooth Signal Modulation Analysis

Provide transmitter tests of Low Energy, Basic Rate and Enhanced Data Rate Bluetooth standard



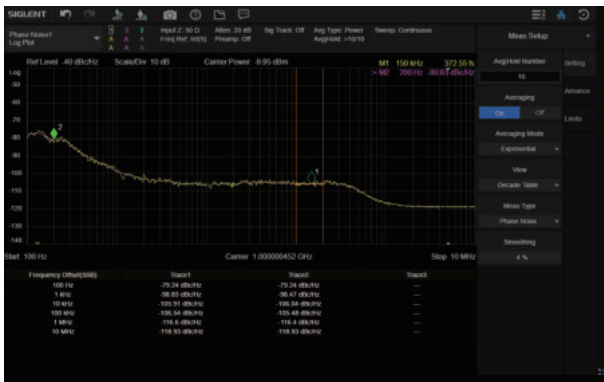
Noise Figure Mode

The noise figure of systems such as amplifiers and frequency converters



Phase Noise Analysis

One-sided band phase noise test analysis, jitter analysis, etc



Pulse Measurement Analysis

Measure the time and frequency parameters of the RF pulses



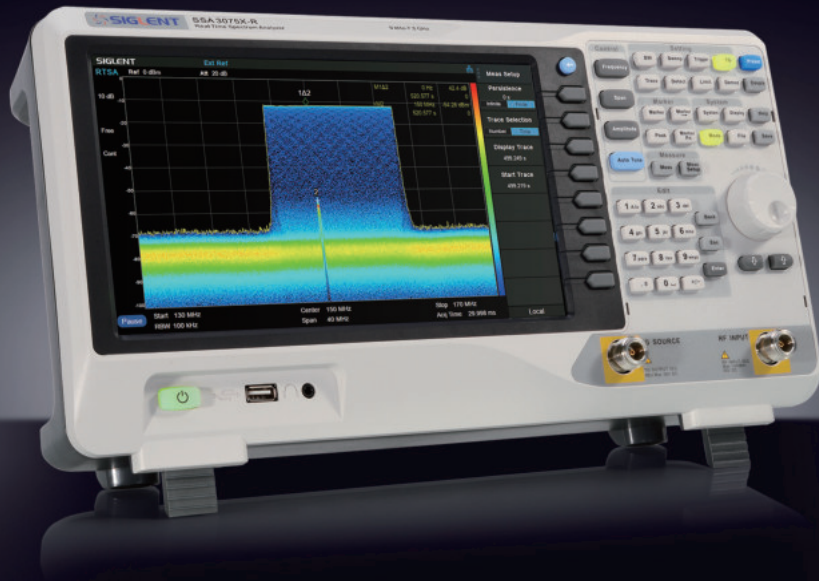
Model and Main index

| Model | SSA5083A | SSA5085A |
|-------------------------------|-----------------------|----------------|
| Frequency Range | 9 kHz~13.6 GHz | 9 kHz~26.5 GHz |
| Displayed Average Noise Level | -165 dBm/Hz | |
| SSB Phase Noise | <-105 dBc/Hz | |
| Analysis Bandwidth | 25 MHz, 40 MHz (opt.) | |



Ordering Information

| Product | Description | Order Number |
|--|---|-----------------|
| Product Code | Spectrum Analyzer, 9 kHz ~ 13.6 GHz | SSA5083A |
| | Spectrum Analyzer, 9 kHz ~ 26.5 GHz | SSA5085A |
| Standard | Quick Start, USB Cable, Power Cord, Wireless Mouse, 2.92F-2.92F-40A | |
| Options | SSA5083A upgrade to SSA5085A | SSA5000-F5 |
| | Pre-Amplifier, 9 kHz ~ 13.6 GHz | SSA5000-P3 |
| | Pre-Amplifier, 9 kHz ~ 26.5 GHz | SSA5000-P5 |
| | 40 MHz analysis bandwidth | SSA5000-B40 |
| | Real-Time Spectrum Analysis | SSA5000-RTA1 |
| | Advanced Measurement Kit | SSA5000-AMK |
| | IQ Data Acquisition | SSA5000-IQA |
| | Pulse Measurement | SSA5000-PU |
| | Phase Noise Measurement | SSA5000-PN |
| | Noise Figure Measurement | SSA5000-NF |
| | Analog Modulation Analysis | SSA5000-AMA |
| | Digital Modulation Analysis | SSA5000-DMA |
| | Bluetooth Analysis | SSA5000-BT |
| | EMI Measurement | SSA5000-EMI |
| | IF Output | SSA5000-IFO |
| Accessories | OCXO Precise Reference source, Factory installed | 10M_OCXO_L |
| | 2.92mm(F)-2.92mm(F) adaptor, DC ~ 40 GHz | 2.92F-2.92F-40A |
| | N(M)-N(M) cable, DC ~ 18 GHz, 1000 mm | N-N-18L |
| | N(M)-SMA(M) cable, 18 GHz, 1000 mm | N-SMA-18L |
| | SMA(M)-SMA(M) cable, 18 GHz, 1000 mm | SMA-SMA-18L |
| | SMA(M)-SMA(M) cable, 26.5 GHz, 1000 mm | SMA-SMA-26L |
| | SMA(F)-SMA(M) cable, 26.5 GHz, 1000 mm | SMAF-SMA-26L |
| | USB-GPIB Adaptor | USB-GPIB |
| 300 kHz~3 GHz Near Field Probe Kit: 3 H-probes (20/10/5 mm), 1 E-probe (5 mm) | SRF5030T | |



SSA3000X-R

Real-Time Spectrum Analyzer



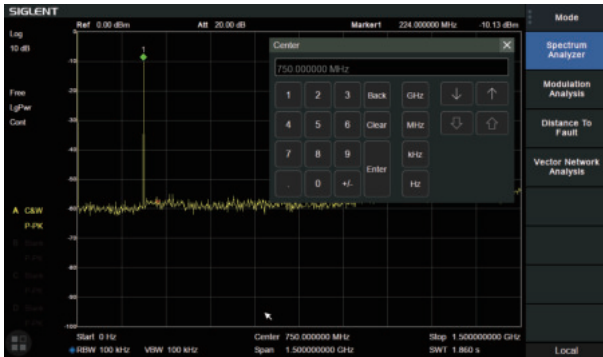
Features and Benefits

- Spectrum Analyzer Frequency Range from 9 kHz up to 7.5 GHz
- Vector Network Analyzer Frequency Range from 100 kHz up to 7.5 GHz
- -165 dBm/Hz Displayed Average Noise Level (Typ.)
- -98 dBc/Hz.@10 kHz Offset Phase Noise (1 GHz, Typ.)
- Level Measurement Uncertainty < 0.7 dB (Typ.)
- 1 Hz Minimum Resolution Bandwidth (RBW)
- Preamplifier and Tracking Generator Standard
- Up to 40 MHz Real Time Analysis Bandwidth (Opt.)
- 100% POI 7.20 μ s, Dynamic Range 60 dB, Multi-view for Density, Spectrogram, PVT and 3D
- Distance To Fault
- Advanced Measurement Kit (Opt.)
- Modulation Analysis Mode (Opt.)
- EMI Measurement Mode (Opt.)
- 10.1 inch Multi-Touch Screen , Mouse and Keyboard supported
- Web Browser Remote Control on PC and Mobile Terminals and File Operation

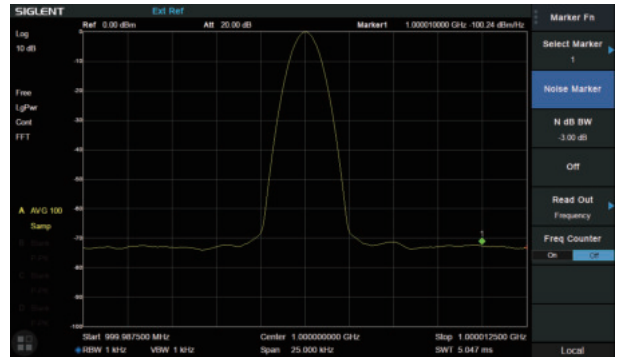


Design features

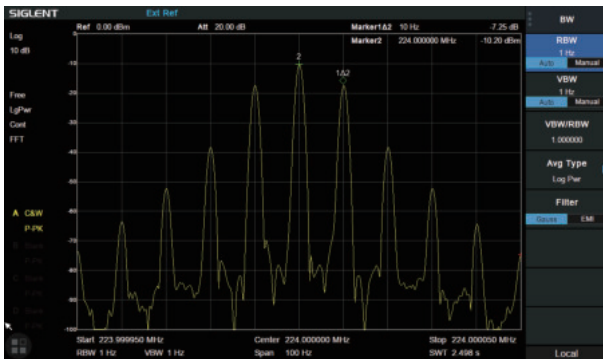
• 10.1 Inch Display with Multi-Touch Screen



• Phase noise <math>< -98 \text{ dBc/Hz}@1 \text{ GHz}</math>



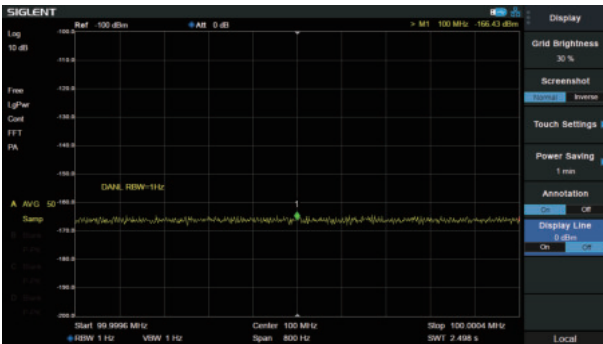
• Minimum 1 Hz Resolution Bandwidth (RBW)



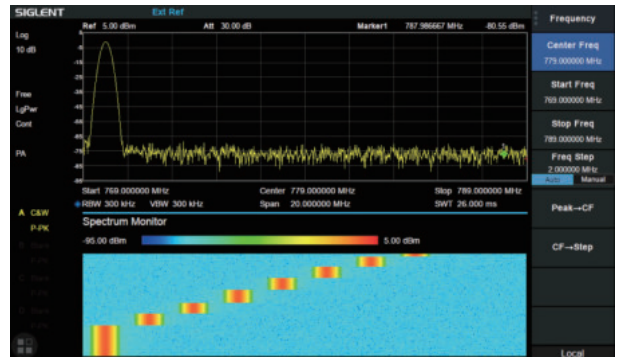
• ACPR in Advanced Measurement Kit



• -165 dBm/Hz Displayed Average Noise Level

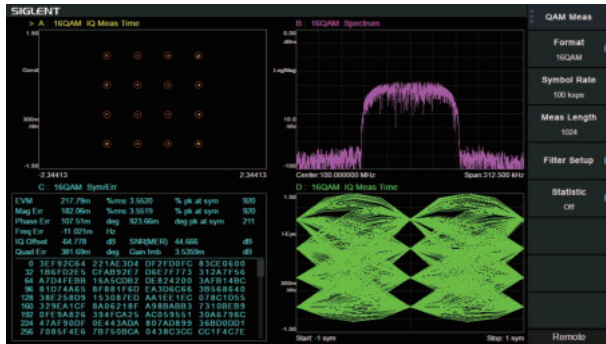


• Monitor in Advanced Measurement Kit



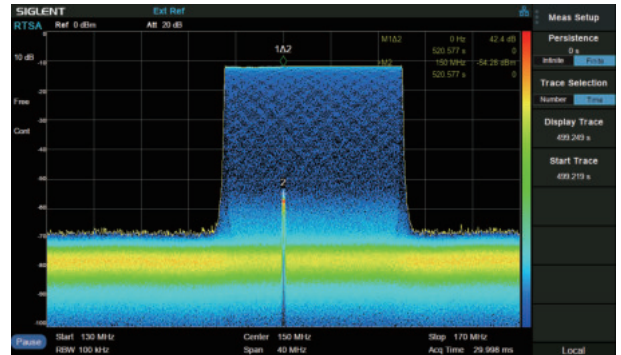
• Modulation Analysis Mode

AM/FM, ASK/FSK/PSK/MSK/QAM Vector Signal Modulation Analysis and EVM evaluation. The analysis BW is same with real-time BW in RTSA mode



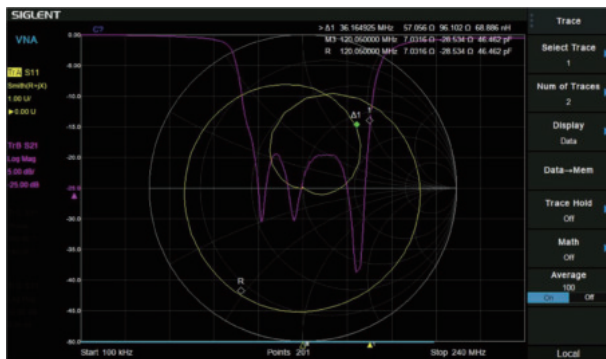
• Real Time Analysis Mode

Density, 3D, Spectrogram, PvT, Multi-view and dimensions to monitor complex signals



• Vector Network Analyzer Mode

100 kHz~7.5 GHz Vector S11 and S21 measurement, Multi Formats Overlay Display



• EMI Measurement Mode

EMI Measurement with CISPR 16-1-1 EMI filter, Quasi-peak Detector, and pre-stored standards



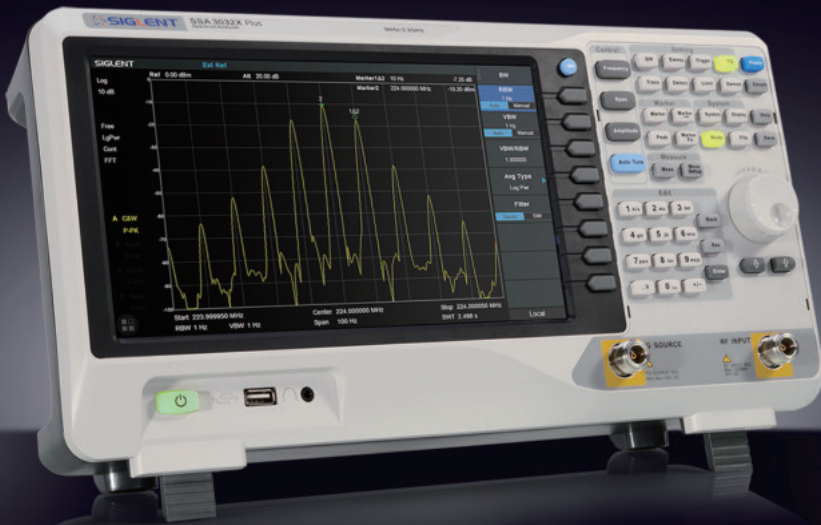
Model and Main index

| Model | SSA3032X-R | SSA3050X-R | SSA3075X-R |
|-------------------------------|--|-----------------|-----------------|
| Frequency Range | 9 kHz~3.2 GHz | 9 kHz~5.0 GHz | 9 kHz~7.5 GHz |
| Resolution Bandwidth | 1 Hz~3 MHz | 1 Hz~3 MHz | 1 Hz~3 MHz |
| Displayed Average Noise Level | -165 dBm/Hz | -165 dBm/Hz | -165 dBm/Hz |
| SSB Phase Noise | <-98 dBc/Hz | <-98 dBc/Hz | <-98 dBc/Hz |
| Third-order intercept(TOI) | +14 dbm | +14 dbm | +14 dbm |
| Total Amplitude Accuracy | < 0.7 dB | < 0.7 dB | < 0.7 dB |
| Tracking Generator | 100 kHz~3.2 GHz | 100 kHz~5.0 GHz | 100 kHz~7.5 GHz |
| Real Time Band Width | 25 MHz, 40 MHz (Option) | | |
| RTSA SFDR | 60 dB | | |
| 100% POI | 7.20 μs | | |
| RTSA Measurement | Density, Spectrogram, 3D, PvT | | |
| VNA measurement | Vector S11, Vector S21 | | |
| VNA Dynamic Range | 90 dB | | |
| Distance to Fault | Timing Domain Analysis Locator | | |
| Touch Screen | Multi Touch, Mouse and Keyboard supported | | |
| Advanced Measurement | CHP, ACPR, OBW, CNR, Harmonic, TOI, Monitor | | |
| Modulation Analysis | AM, FM, ASK, FSK, MSK, PSK, QAM | | |
| EMI Measurement | EMI Filter and Quasi-Peak Detector, Log Scale and Limit Line | | |
| Communication Interface | LAN, USB Device, USB Host (USB-GPIB) | | |
| Remote Control Capability | SCPI/Labview/IVI based on USB-TMC/VXI-11/Socket/Telnet | | |
| Remote Controller | NI-MAX, Web Browser, Easy Spectrum software, File Explorer | | |



Ordering Information

| Product | Description | Order Number |
|--------------------------------|--|----------------|
| Product Code | Real Time Spectrum Analyzer, 9 kHz~3.2 GHz, Preamp and TG standard, VNA standard | SSA3032X-R |
| | Real Time Spectrum Analyzer, 9 kHz~5.0 GHz, Preamp and TG standard, VNA standard | SSA3050X-R |
| | Real Time Spectrum Analyzer, 9 kHz~7.5 GHz, Preamp and TG standard, VNA standard | SSA3075X-R |
| Standard Accessories | Quick Start, USB Cable, Power Cord | |
| Common Options and Accessories | Advanced Measurement Kit | SSA3000XR-AMK |
| | 40 MHz Analysis BandWidth | SSA3000XR-RT40 |
| | Utility Kit: N(M)-SMA(M) cable(6 GHz), N(M)-N(M) cable(6 GHz), N(M)-BNC(F) adaptor x2, N(M)-SMA(F) adaptor x2, 10 dB 1W attenuator | UKitSSA3X |
| | N(M)-BNC(M) cable, 70 cm, 2 GHz | N-BNC-2L |
| | N(M)-SMA(M) cable, 70 cm, 6 GHz | N-SMA-6L |
| | N(M)-N(M) cable, 70 cm, 6 GHz | N-N-6L |
| | N(M)-SMA(M) cable, 100 cm, 18 GHz | N-SMA-18L |
| | N(M)-N(M) cable, 100 cm, 18 GHz | N-N-18L |
| | SMA(M)-SMA(M) cable, 100 cm, 18 GHz | SMA-SMA-18L |
| | USB-GPIB Adaptor | USB-GPIB |
| | Soft carrying bag | BAG-S2 |
| | 6U Rack Mount Kit | SSA-RMK |
| VNA Options | N type Economic Calibration Kit, DC~4.5 GHz, 50 Ω | F503ME |
| | N type Economic Calibration Kit, DC~4.5 GHz, 50 Ω | F503FE |
| | 3.5 mm type Economic Calibration Kit, DC~4.5 GHz, 50 Ω | F603ME |
| | 3.5 mm type Economic Calibration Kit, DC~4.5 GHz, 50 Ω | F603FE |
| | N type Standard Calibration Kit, DC~9 GHz, 50 Ω | F504MS |
| | N type Standard Calibration Kit, DC~9 GHz, 50 Ω | F504FS |
| | 3.5 mm type Standard Calibration Kit, DC~9 GHz, 50 Ω | F604MS |
| | 3.5 mm type Standard Calibration Kit, DC~9 GHz, 50 Ω | F604FS |
| EMI Measurement Options | EMI Measurement Mode | SSA3000XR-EMI |
| | 300 kHz~3 GHz Near Field Probe Kit: 3 H-probes (20/10/5 mm), 1 E-probe (5 mm) | SRF5030T |
| Modulation Analysis Options | Analog Modulation Analysis: AM, FM | SSA3000XR-AMA |
| | Digital Modulation Analysis: ASK, FSK, MSK, PSK, QAM | SSA3000XR-WDMA |



SSA3000X Plus

Spectrum Analyzer



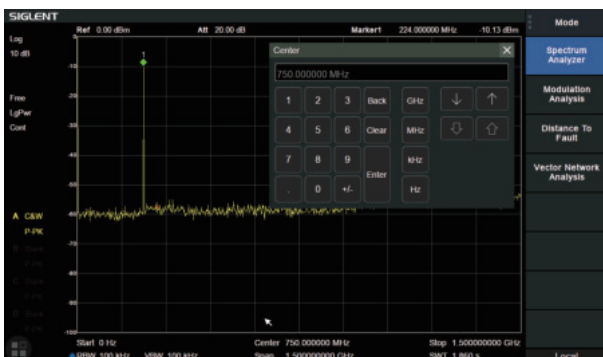
Features and Benefits

- Frequency Range from 9 kHz up to 7.5 GHz
- -165 dBm/Hz Displayed Average Noise Level (Typ.)
- -98 dBc/Hz.@10 kHz Offset Phase Noise (1 GHz, Typ.)
- Level Measurement Uncertainty < 0.7 dB (Typ.)
- 1 Hz Minimum Resolution Bandwidth (RBW)
- Preamplifier Standard
- Tracking Generator included at no charge
- Vector Signal Modulation Analysis (Opt.)
- EMI Filter and Quasi-Peak Detector (Opt.)
- Advanced Measurement Kit (Opt.)
- 10.1 Inch Multi-Touch Screen , Mouse and Keyboard supported
- Web Browser Remote Control on PC and Mobile Terminals and File Operation

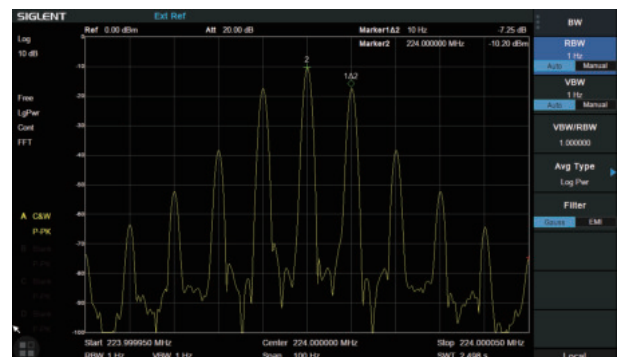


Design features

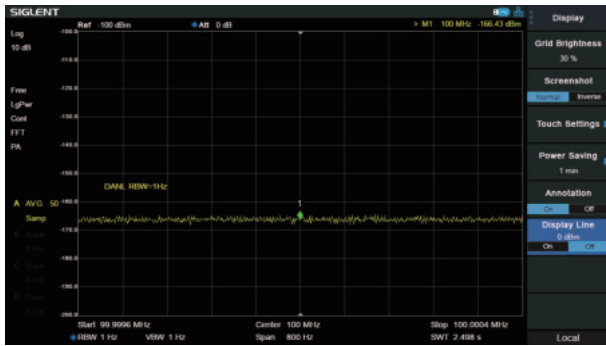
• 10.1 Inch (1024x600) Touch Screen



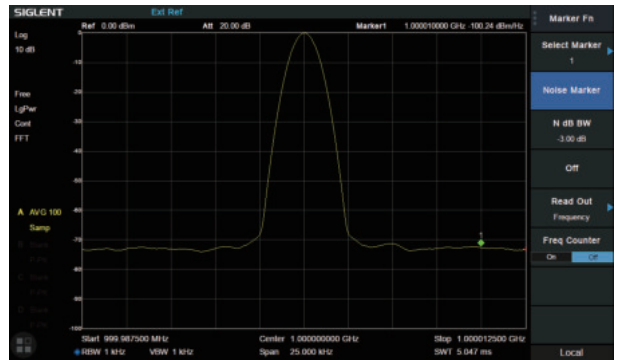
• Minimum 1 Hz Resolution Bandwidth (RBW)



• -165 dBm/Hz Displayed Average Noise Level



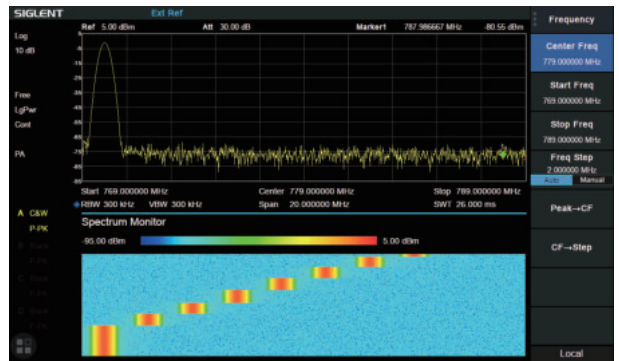
• Phase noise <math>< -98 \text{ dBc/Hz}@1 \text{ GHz}</math>



• Advanced Measurement Kit

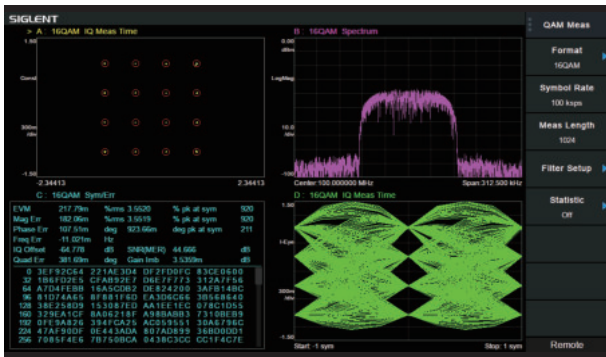


• Spectrum Monitor in Advanced Measurement Kit



• Modulation Analysis Mode

AM/FM, ASK/FSK/PSK/MSK/QAM Vector Signal Modulation Analysis, EVM evaluation



• EMI Measurement Mode

EMI Measurement with CISPR 16-1-1 EMI filter, Quasi-peak Detector, and pre-stored standards





Model and Main Index

| Model | SSA3015X Plus | SSA3021X Plus | SSA3032X Plus | SSA3075X Plus |
|-------------------------------|--|-----------------|-----------------|-----------------|
| Frequency Range | 9 kHz~1.5 GHz | 9 kHz~2.1 GHz | 9 kHz~3.2 GHz | 9 kHz~7.5 GHz |
| Resolution Bandwidth | 1 Hz~1 MHz | 1 Hz~1 MHz | 1 Hz~1 MHz | 1 Hz~3 MHz |
| Displayed Average Noise Level | -156 dBm/Hz | -161 dBm/Hz | -161 dBm/Hz | -165 dBm/Hz |
| SSB Phase Noise | < -99 dBc/Hz | < -98 dBc/Hz | < -98 dBc/Hz | < -98 dBc/Hz |
| Third-order intercept | +10 dBm | +10 dBm | +10 dBm | +14 dBm |
| Total Amplitude Accuracy | < 1.2 dB | < 0.7 dB | < 0.7 dB | < 0.7 dB |
| Tracking Generator | 100 kHz~1.5 GHz | 100 kHz~2.1 GHz | 100 kHz~3.2 GHz | 100 kHz~7.5 GHz |
| Touch Screen | Multi Touch, Mouse and Keyboard supported | | | |
| Advanced Measurement | CHP, ACPR, OBW, CNR, Harmonic, TOI, Monitor | | | |
| Reflection Measurement | VSWR measurement using Reflection Bridge | | | |
| EMI Test | EMI Filter and Quasi-Peak Detector, Log Scale and Limit Line | | | |
| Modulation Analysis | AM, FM; ASK, FSK, MSK, PSK, QAM | | | |
| Communication Interface | LAN, USB Device, USB Host (USB-GPIB) | | | |
| Remote Control Capability | SCPI/Labview/IVI based on USB-TMC/VXI-11/Socket/Telnet | | | |
| Remote Controller | NI-MAX, Web Browser, Easy Spectrum software, File Explorer | | | |



Ordering Information

| Product | Description | Order Number |
|--------------------------------|---|---------------|
| Product Code | Spectrum Analyzer, 9 kHz ~ 1.5 GHz | SSA3015X Plus |
| | Spectrum Analyzer, 9 kHz ~ 2.1 GHz | SSA3021X Plus |
| | Spectrum Analyzer, 9 kHz ~ 3.2 GHz | SSA3032X Plus |
| | Spectrum Analyzer, 9 kHz ~ 7.5 GHz | SSA3075X Plus |
| Standard Accessories | Quick Start, USB Cable, Power Cord | |
| Common Options and Accessories | Tracking Generator | SSA3000XP-TG |
| | Advanced Measurement Kit | SSA3000XP-AMK |
| | Utility Kit: N (M)-SMA (M) cable (6 GHz), N (M)-N (M) cable (6 GHz), N (M)-BNC (F) adaptor x2, N (M)-SMA (F) adaptor x2, 10 dB 1W attenuator | UKitSSA3X |
| | N (M)-BNC (M) cable, 70 cm, 2 GHz | N-BNC-2L |
| | N (M)-SMA (M) cable, 70 cm, 6 GHz | N-SMA-6L |
| | N (M)-N (M) cable, 70 cm, 6 GHz | N-N-6L |
| | N (M)-SMA (M) cable, 100 cm, 18 GHz | N-SMA-18L |
| | N (M)-N (M) cable, 100 cm, 18 GHz | N-N-18L |
| | SMA (M)-SMA (M) cable, 100 cm, 18 GHz | SMA-SMA-18L |
| | USB-GPIB Adaptor | USB-GPIB |
| | Soft carrying bag | BAG-S2 |
| | 6U Rack Mount Kit | SSA-RMK |
| Reflection Measurement Options | Tracking Generator | SSA3000XP-TG |
| | Reflection Measurement | SSA3000-RefI |
| | Reflection Bridge Kit: Reflection Bridge (1 MHz~2.5 GHz), N(M)-N(M) adaptors x2 | RB3X25 |
| | 50 Ω, N type Male, 4.5 GHz Economic Calibration Kit: Open(M), Short(M), Match(M), Through Adapter(F-F) | F503ME |
| EMI test Options | EMI Measurement Mode | SSA3000XP-EMI |
| | 300 kHz~3 GHz Near Field Probe Kit: 3 H-probes (20/10/5 mm), 1 E-probe (5 mm) | SRF5030T |
| Modulation Analysis Options | Digital Modulation: ASK, FSK, MSK, PSK, QAM | SSA3000XP-DMA |
| | Analog Modulation: AM, FM | SSA3000XP-AMA |



SSA3000X

Spectrum Analyzer



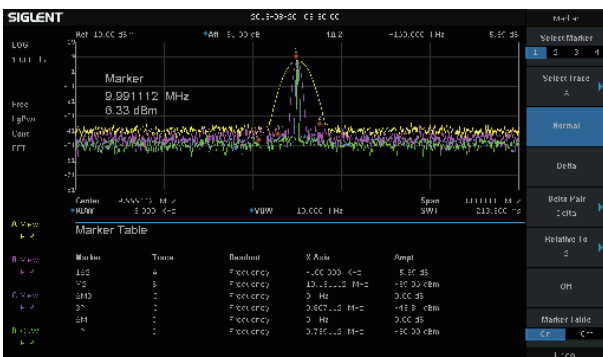
Features and Benefits

- All-Digital IF Technology
- Frequency Range from 9 kHz up to 3.2 GHz
- -161 dBm/Hz Displayed Average Noise Level (Typ.)
- -98 dBc/Hz @10 kHz Offset Phase Noise (1 GHz, Typ.)
- Total Amplitude Accuracy < 0.7 dB
- 1 Hz Minimum Resolution Bandwidth (RBW)
- Preamplifier Standard
- Up to 3.2 GHz Tracking Generator Kit
- Reflection Measurement Kit (Opt.)
- Advanced Measurement Kit (Opt.)
- EMI Pre-compliance Measurements Kit (Opt.)
- 10.1 Inch WVGA (1024x600) Display

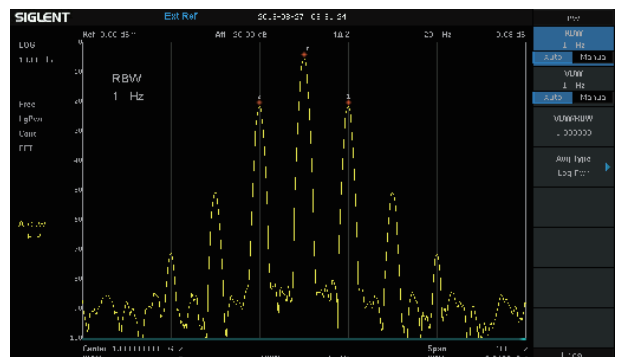


Design features

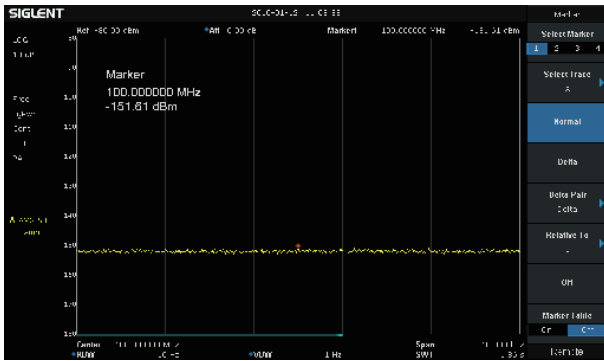
- Support four traces and cursors independently



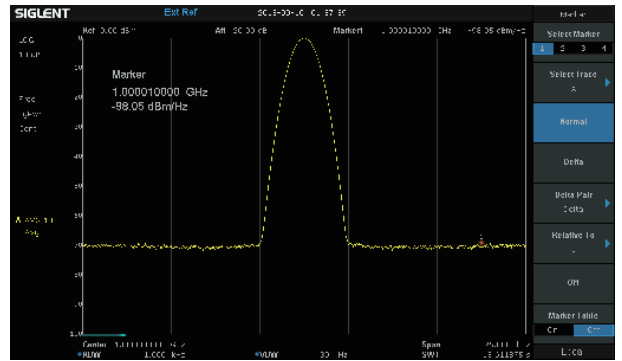
- 1 Hz Minimum Resolution Bandwidth (RBW)



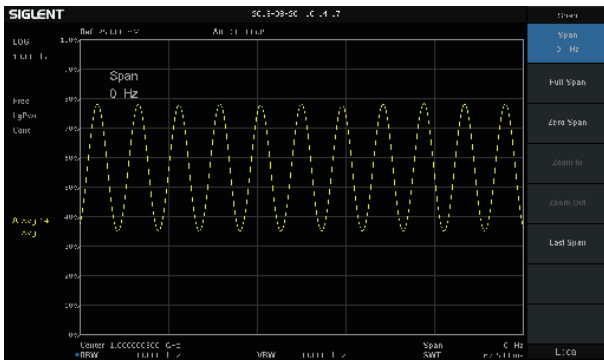
- 151 dBm Displayed Average Noise Level (RBW=10 Hz)



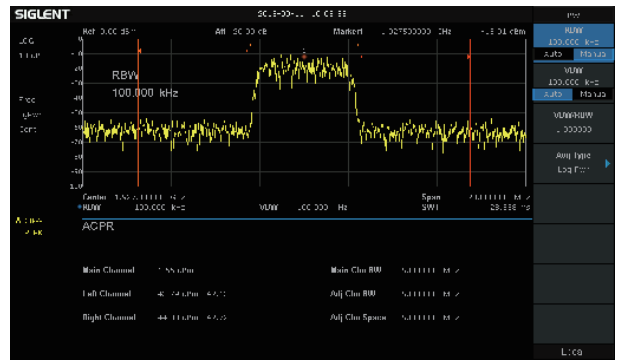
- Phase noise -98 dBc/Hz@1 GHz, offset 10 kHz



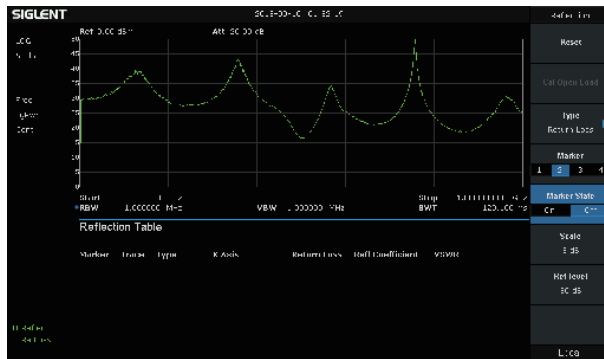
- Demodulation at the zero span



- Advanced power measurement, calculate the ACPR parameters



- Reflection measurement, acquire characteristic curve of the Return Loss



- EMI filter, Quasi-Peak detector following CISPR 16



Model and Main index

| Model | SSA3021X | SSA3032X |
|-------------------------------|---------------------------------------|---------------------------------------|
| Frequency Range | 9 kHz~2.1 GHz | 9 kHz~3.2 GHz |
| Resolution Bandwidth | 1 Hz~1 MHz, in 1-3-10 sequence | 1 Hz~1 MHz, in 1-3-10 sequence |
| Displayed Average Noise Level | -161 dBm/Hz, Normalize to 1 Hz (typ.) | -161 dBm/Hz, Normalize to 1 Hz (typ.) |
| Phase Noise | <-98 dBc/Hz@1 GHz, 10 kHz offset | <-98 dBc/Hz@1 GHz, 10 kHz offset |
| Amplitude Precision | < 0.7 dB | < 0.7 dB |



Ordering Information

| Product Description | SSA3000X Spectrum Analyzer | Order Number |
|--|--|---|
| Product code | Spectrum Analyzer, 9 kHz~3.2 GHz | SSA3032X |
| | Spectrum Analyzer, 9 kHz~2.1 GHz | SSA3021X |
| Standard configurations | A Quick Start, A USB Cable, A Power Cord, A Calibration Certificate | QG-SSA3000X |
| Utility Options | Tracking Generator Kit | TG-SSA3000X |
| | Advanced Measurement Kit | AMK-SSA3000X |
| | Utility Kit: N(M)-SMA(M) cable N(M)-N(M) cable N(M)-BNC(F) adaptor(2 pcs) N(M)-SMA(F) adaptor(2 pcs) 10 dB attenuator | UKitSSA3X |
| | N(M)-SMA(M) cable | N-SMA-6L |
| | N(M)-N(M) cable | N-N-6L |
| | N(M)-BNC(M) cable | N-BNC-2L |
| | Soft carrying bag | BAG-SCC |
| | Rack Mount Kit | SSA-RMK |
| | EMI Options | EMI Measurement Kit: EMI Filter and Quasi Peak Detector, EMI test option in EasySpectrum Software |
| Near Field Probe:H field probe sets(25 mm, 10 mm, 5 mm, 2mm), 30 MHz~3.0 GHz | | SRF5030 |
| Near Field Probe:H field probe sets(20 mm, 10 mm, 5 mm) , E field probe (5 mm), 300 kHz~3.0 GHz | | SRF5030T |
| Reflect Measurement Options | Tracking Generator Kit | TG-SSA3000X |
| | Reflect Measurement Kit | Refl-SSA3000X |
| | VSWR Bridge Kit: including Refl-SSA3000X VSWR Bridge(1 MHz~2 GHz) N(M)-N(M) adaptor(2 pcs) | RBSSA3X20 |



SHA850A

Portable Spectrum Analyzer



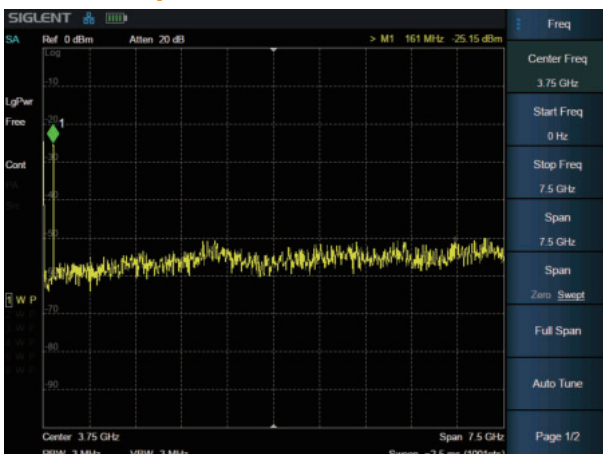
Features and Benefits

- Spectrum Analyzer Frequency Range from 9 kHz up to 7.5 GHz, -165 dBm/Hz Displayed Average Noise Level (Typ.), -104 dBc/Hz.@10 kHz Offset Phase Noise (1 GHz, Typ.), 1 Hz up to 10 MHz Minimum Resolution Bandwidth (RBW), Preamplifier and independent signal source up to 7.5 GHz, GPS positioning and logging
- Cable and Antenna Test Frequency Range from 100 kHz up to 7.5 GHz, Distance To Fault and Time Domain Analysis
- Vector Network Analyzer, Bias out up to 32VDC
- Typical working time 4 hours, 3.2 kg net weight, 8.4 Inch Multi-Touch Screen , Mouse and Keyboard supported



Design features

- **Spectrum Analyzer 8.4 inch multi-touch screen and full keyboard control**

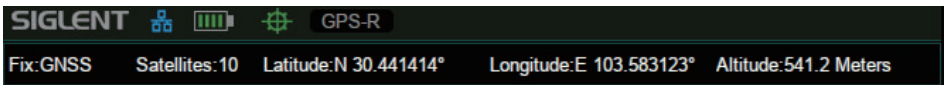


- **Channel Power and ACPR measurement**



SHA850A Handheld Spectrum Analyzer

- GPS Location and trace log recorder, sync 10MHz reference clock

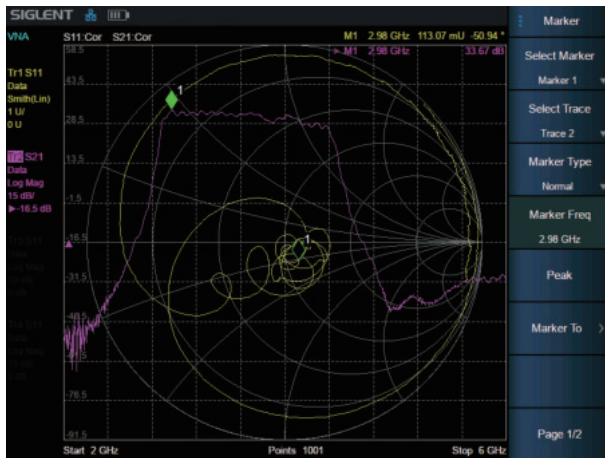


- Interference analysis with directional antenna



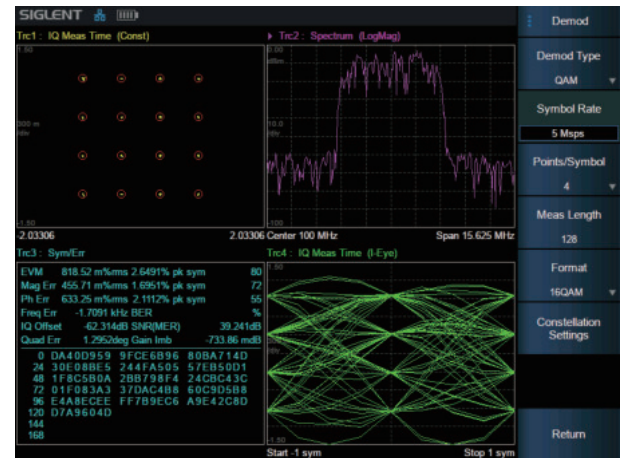
- Vector Network Analyzer

100 kHz-7.5 GHz Vector S11 and S21 measurement, Multi Formats Overlay Display



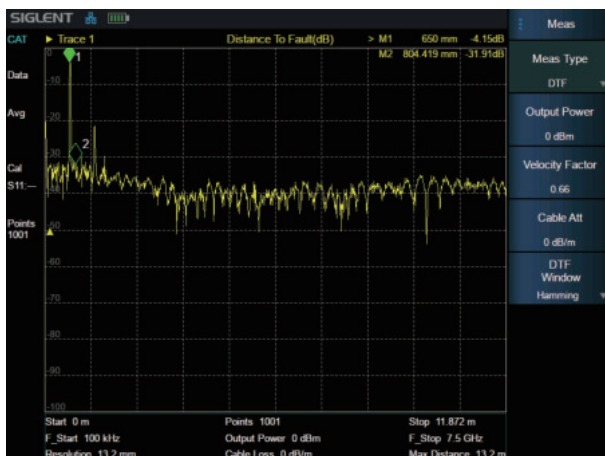
- Modulation Analysis

AM/FM/PM analog modulation, and ASK/FSK/PSK/MSK/QAM digital modulation analysis



- Cable and Antenna Test

Cable and Antenna Test based on Timing Domain Analysis





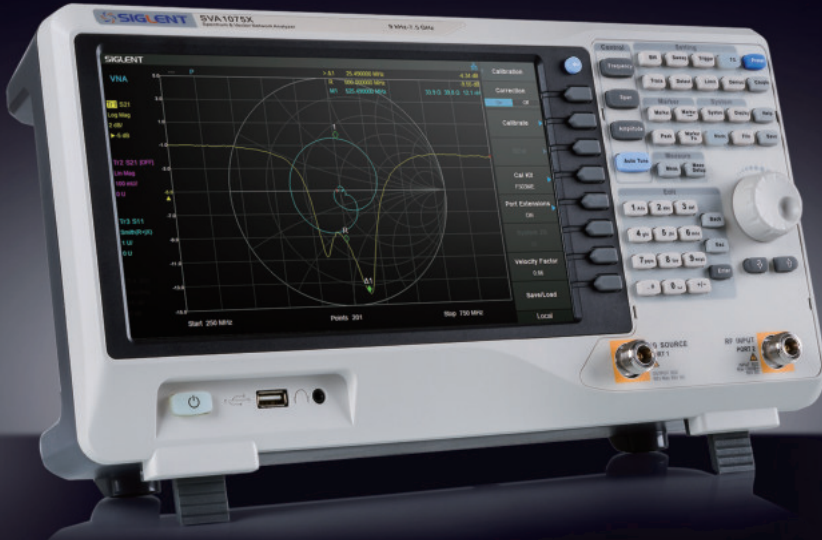
Model and Main index

| Model | SHA851A | SHA852A |
|------------------------|-----------------|-----------------|
| Spectrum Analyzer | 9 kHz~3.6 GHz | 9 kHz~7.5 GHz |
| Cable and Antenna Test | 100 kHz~3.6 GHz | 100 kHz~7.5 GHz |



Ordering Information

| Product | Description | Order Number |
|--|---|--|
| Product code | Spectrum & Vector Network Analyzer, 9 kHz~3.6 GHz | SHA851A |
| | Spectrum & Vector Network Analyzer, 9 kHz~7.5 GHz | SHA852A |
| Standard Accessories | Quick Start, USB type-C cable, Power cord, AC-DC adapter, Rechargeable lithium battery, Portable bag | |
| Options | SHA851A to SHA852A | SHA850-F2 |
| | Source | SHA850-SOR |
| | Vector Network Analysis | SHA850-VNA |
| | Advanced Measurement Kit | SHA850-AMK |
| | Analog Modulation Analysis | SHA850-AMA |
| | Digital Modulation Analysis | SHA850-DMA |
| | DC Bias Out | SHA850-BIAS |
| | GPS Receiver | SHA850-GPS |
| | GPS Logging(need GPS Receiver) | SHA850-GPSM |
| General Accessories | Rechargeable lithium battery | 10V8_BAT |
| | AC-DC adapter | 12V_AP_4A |
| | Portable bag | BAG-H2 |
| | GPS antenna, SMA(M), 100 cm | ANT-GPS1 |
| | S5000 Directional Antenna Suit: S5001-VHF (10 MHz~200 MHz), S5001-UHF (200 MHz~500 MHz), S5001-LP (500 MHz~8 GHz), Preamp (10 dB, 9 kHz~8 GHz) | ANT-DA1 |
| | Near field probe kit: 300 kHz~3 GHz, H-field probes (20 mm,10 mm,5 mm), E-field probe (5 mm) | SRF5030T |
| | Utility Kit: N(M)-SMA(M) cable(6 GHz), N(M)-N(M) cable(6 GHz), N(M)-BNC(F) adaptor x2, N(M)-SMA(F) adaptor x2, 10 dB 1W attenuator | UKitSSA3X |
| | N(M)-BNC(M) cable, DC~2 GHz, 700 mm | N-BNC-2L |
| | N(M)-SMA(M) cable, DC~6 GHz, 700 mm | N-SMA-6L |
| | N(M)-N(M) cable, DC~6 GHz, 700 mm | N-N-6L |
| | N(M)-N(M) cable ,DC~18 GHz, 1000 mm | N-N-18L |
| | N(M)-SMA(M) cable ,DC~18 GHz, 1000 mm | N-SMA-18L |
| | SMA(M)-SMA(M) cable ,DC~18 GHz, 1000 mm | SMA-SMA-18L |
| | CAT&VNA Accessories | N type Integrated Calibration Kit, Male, DC~9 GHz,50 Ω |
| N type Integrated Calibration Kit, Female, DC~9 GHz,50 Ω | | Y504FS |
| N type Precision Calibration Kit, DC~9 GHz, 50 Ω | | F504TS |
| 3.5 mm type Precision Calibration Kit, DC~9 GHz, 50 Ω | | F604TS |
| VNA Options | 2 ports, 9 kHz ~ 4.5 GHz, SMA female | SEM5002A |
| | 2 ports, 9 kHz ~ 9 GHz, SMA female | SEM5012A |
| | 2 ports, 100 kHz ~ 13.5 GHz, 3.5 mm female | SEM5022A |
| | 2 ports, 100 kHz ~ 26.5 GHz, 3.5 mm female | SEM5032A |
| | 4 ports, 9 kHz ~ 4.5 GHz, SMA female | SEM5004A |
| | 4 ports, 9 kHz ~ 9 GHz, SMA female | SEM5014A |
| | 4 ports, 100 kHz ~ 13.5 GHz, 3.5 mm female | SEM5024A |
| | 4 ports, 100 kHz ~ 26.5 GHz, 3.5 mm female | SEM5034A |



SVA1000X

Spectrum & Vector Network Analyzer

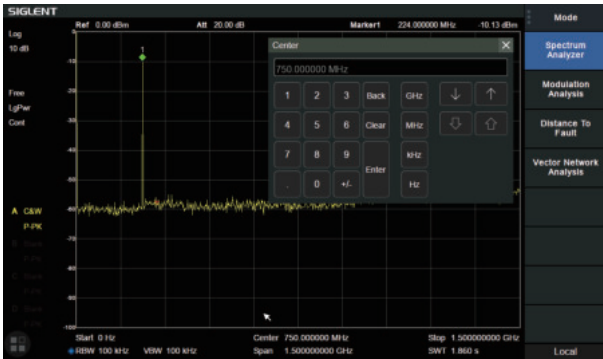


Features and Benefits

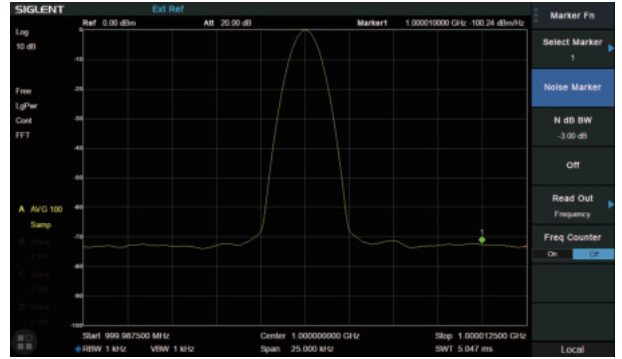
- Spectrum Analyzer Frequency Range from 9 kHz up to 7.5 GHz
- Vector Network Analyzer Frequency Range from 100 kHz up to 7.5 GHz
- -165 dBm/Hz Displayed Average Noise Level (Typ.)
- -98 dBc/Hz.@10 kHz Offset Phase Noise (1 GHz, Typ.)
- Level Measurement Uncertainty < 0.7 dB (Typ.)
- 1 Hz Minimum Resolution Bandwidth (RBW)
- Preamplifier Standard
- Tracking Generator Standard
- Distance To Fault (Opt.)
- Vector Signal Modulation Analysis (Opt.)
- EMI Filter and Quasi-Peak Detector Kit (Opt.)
- Advanced Measurement Kit (Opt.)
- 10.1 Inch Multi-Touch Screen , Mouse and Keyboard supported
- Web Browser Remote Control on PC and Mobile Terminals and File Operation

Design features

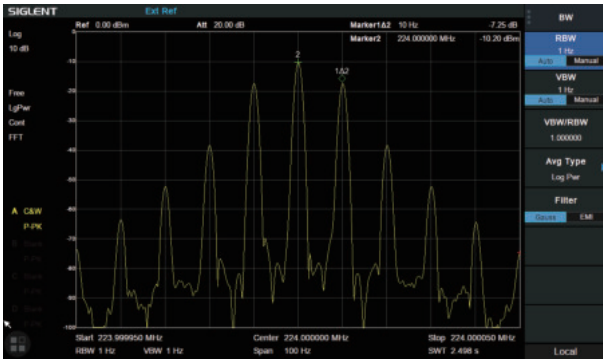
• 10.1 Inch Display with Multi-Touch Screen



• Phase noise <-98 dBc/Hz@1 GHz, offset 10 kHz



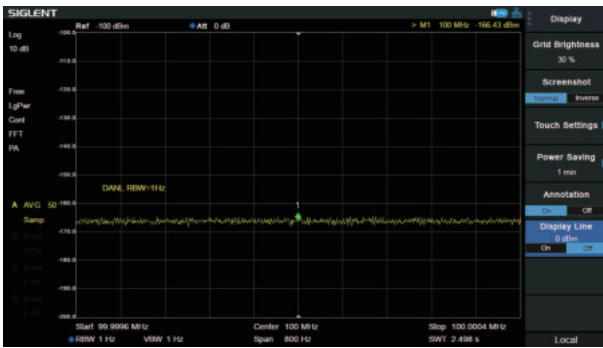
• Minimum 1 Hz Resolution Bandwidth (RBW)



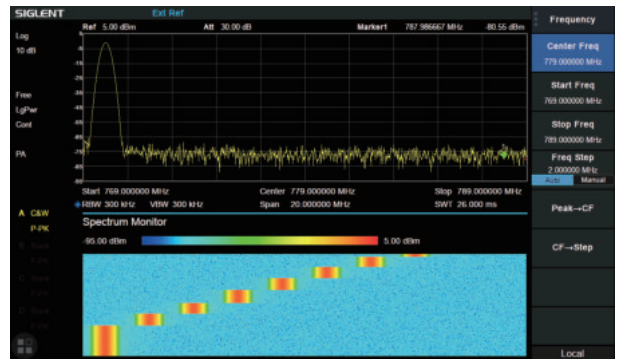
• ACPR in Advanced Measurement Kit



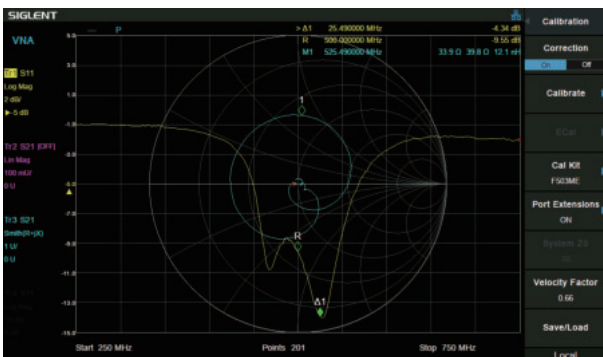
• -165 dBm/Hz Displayed Average Noise Level



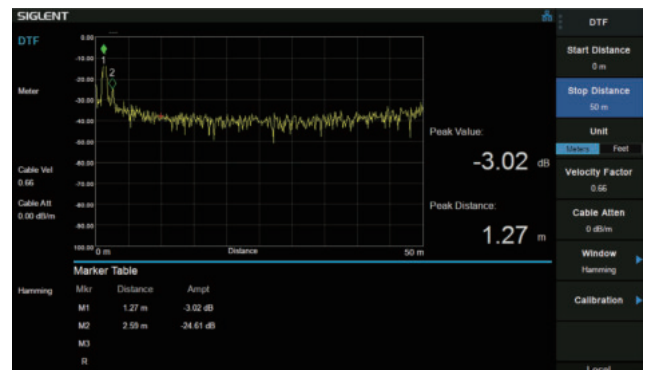
• Monitor in Advanced Measurement Kit



• 100 k-7.5 GHz Vector S11 and S21 measurement, Multi Formats Overlay Display

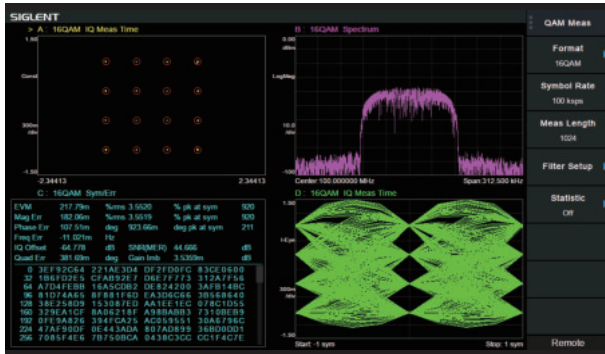


• Cable and Antenna Test based on Timing Domain Analysis



• Modulation Analysis Mode

AM/FM, ASK/FSK/PSK/MSK/QAM Vector Signal Modulation Analysis, EVM evaluation



• EMI Measurement Mode

EMI Measurement with CISPR 16-1-1 EMI filter, Quasi-peak Detector, and pre-stored standards



Model and Main index

| Model | SVA1015X | SVA1032X | SVA1075X |
|---|--|-----------------|-----------------|
| Spectrum Analyzer Frequency Range | 9 kHz~1.5 GHz | 9 kHz~3.2 GHz | 9 kHz~7.5 GHz |
| Vector Network Analyzer Frequency Range | 100 kHz~1.5 GHz | 100 kHz~3.2 GHz | 100 kHz~7.5 GHz |
| Resolution Bandwidth | 1 Hz~1 MHz | 1 Hz~1 MHz | 1 Hz~3 MHz |
| Displayed Average Noise Level | -156 dBm/Hz | -161 dBm/Hz | -165 dBm/Hz |
| SSB Phase Noise | <-99 dBc/Hz | <-98 dBc/Hz | <-98 dBc/Hz |
| Total Amplitude Accuracy | < 1.2 dB | < 0.7 dB | < 0.7 dB |
| Tracking Generator | 100 kHz~1.5 GHz | 100 kHz~3.2 GHz | 100 kHz~7.5 GHz |
| VNA measurement | Vector S11, Vector S21 | | |
| Distance to Fault | VNA Timing Domain Analysis Locator | | |
| Touch Screen | Multi Touch, Mouse and Keyboard supported | | |
| Advanced Measurement | CHP, ACPR, OBW, CNR, Harmonic, TOI, Monitor | | |
| Reflection Measurement | VSWR measurement using Reflection Bridge | | |
| EMI Test | EMI Filter and Quasi-Peak Detector, Log Scale and Limit Line | | |
| Modulation Analysis | AM, FM; ASK, FSK, MSK, PSK, QAM | | |
| Communication Interface | LAN, USB Device, USB Host (USB-GPIB) | | |
| Remote Control Capability | SCPI/Labview/IVI based on USB-TMC/VXI-11/Socket/Telnet | | |
| Remote Controller | NI-MAX, Web Browser, Easy Spectrum software, File Explorer | | |



Ordering Information

| Product | Description | Order Number |
|--|---|-------------------|
| Product Code | Spectrum & Vector Network Analyzer, 1.5 GHz | SVA1015X |
| | Spectrum & Vector Network Analyzer, 3.2 GHz | SVA1032X |
| | Spectrum & Vector Network Analyzer, 7.5 GHz | SVA1075X |
| Standard Accessories | Quick Start, USB Cable, Power Cord | |
| Common Options and Accessories | Advanced Measurement Kit | SVA1000X-AMK |
| | Utility Kit: N (M)-SMA (M) cable (6 GHz), N (M)-N (M) cable (6 GHz), N (M)-BNC (F) adaptor x 2, N (M)-SMA (F) adaptor x 2, 10 dB 1W attenuator | UKitSSA3X |
| | N (M)-SMA (M) cable, 70 cm, 6 GHz | N-SMA-6L |
| | N (M)-N (M) cable, 70 cm, 6 GHz | N-N-6L |
| | N (M)-BNC (M) cable, 70 cm, 2 GHz | N-BNC-2L |
| | N (M)-N (M) cable, 100 cm, 18 GHz | N-N-18L |
| | N (M)-SMA (M) cable, 100 cm, 18 GHz | N-SMA-18L |
| | SMA(M)-SMA(M) cable, 100 cm, 18 GHz | SMA-SMA-18L |
| | USB-GPIB Adaptor | USB-GPIB |
| | Soft carrying bag | BAG-S2 |
| | 6U Rack Mount Kit | SSA-RMK |
| | VNA Options | Distance To Fault |
| Mechanical Calibration Kit: Open (M), Short (M), Match (M,50), Through (F-F), 4.5 GHz, N-Male connector | | F503ME |
| Mechanical Calibration Kit: OSLT, DC - 4.5 GHz, N-Female connector | | F503FE |
| Mechanical Calibration Kit: OSLT, DC - 4.5 GHz, 3.5mm SMA-Male connector | | F603ME |
| Mechanical Calibration Kit: Open (M), Short (M), Match (M,50), Through (F-F), 4.5 GHz, SMA-Female connector | | F603FE |
| Mechanical Calibration Kit: OSLT, DC - 9 GHz, N-Male connector | | F504MS |
| Mechanical Calibration Kit: OSLT, DC - 9 GHz, N-Female connector | | F504FS |
| Mechanical Calibration Kit: OSLT, DC - 9 GHz, 3.5 mm SMA-Male connector | | F604MS |
| Mechanical Calibration Kit: OSLT, DC - 9 GHz, 3.5 mm SMA-Female connector | | F604FS |
| N-type, Male and Female, 50 Ω Calibration Kit, 0~9 GHz | | F504TS |
| 3.5 mm, Male and Female, 50 Ω Calibration Kit, 0~9 GHz | | F604TS |
| EMI test Options | EMI Measurement Kit: EMI Filter and Quasi Peak Detector, EMI Receiver Mode in EasySpectrum Software | SVA1000X-EMI |
| | 300 kHz~3 GHz Near Field Probe Kit: 3 H-probes (20/10/5 mm), 1 E-probe (5 mm) | SRF5030T |
| Modulation Analysis Options | Digital Modulation: ASK, FSK, MSK, PSK, QAM | SVA1000X-DMA |
| | Analog Modulation: AM, FM | SVA1000X-AMA |
| VNA Options | 2 ports, 9 kHz ~ 4.5 GHz, SMA female | SEM5002A |
| | 2 ports, 9 kHz ~ 9 GHz, SMA female | SEM5012A |
| | 2 ports, 100 kHz ~ 13.5 GHz, 3.5 mm female | SEM5022A |
| | 2 ports, 100 kHz ~ 26.5 GHz, 3.5 mm female | SEM5032A |
| | 4 ports, 9 kHz ~ 4.5 GHz, SMA female | SEM5004A |
| | 4 ports, 9 kHz ~ 9 GHz, SMA female | SEM5014A |
| | 4 ports, 100 kHz ~ 13.5 GHz, 3.5 mm female | SEM5024A |
| | 4 ports, 100 kHz ~ 26.5 GHz, 3.5 mm female | SEM5034A |



SSG6000A

RF Signal Generator



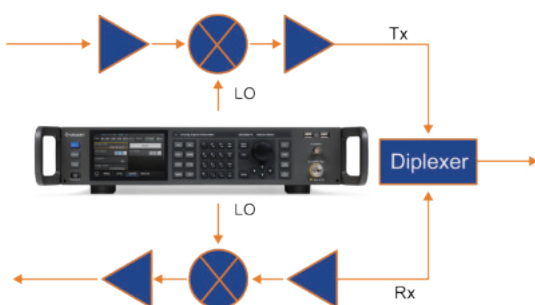
Features and Benefits

- Frequency up to 13.6 GHz/ 20 GHz/ 40GHz
- 0.001 Hz frequency setting resolution
- Level setting range: -130 dBm ~ 24 dBm
- Phase Noise: -135 dBc / Hz @ 1 GHz, 20 kHz offset (typ.)
- Level error ≤ 0.7 dB (typ.)
- Provides AM/PM/FM analog modulation with internal, external or Int+Ext source
- Single pulse, double pulse and pulse train generator (option)
- The power meter control kit can easily use the power meter to measure power, control power output and correct line loss
- 5 inch TFT capacitive touch screen, mouse and keyboard supported
- Web browser remote control on PC and mobile terminals
- Standard interface includes USB Host, USB Device (USB TMC), LAN (VXI-11, Socket, Telnet). Optional interface: GPIB

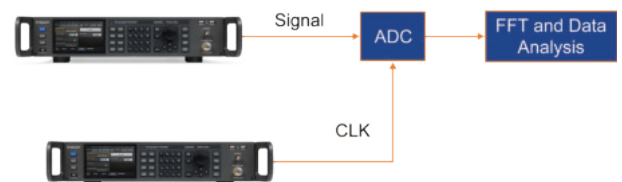


Design features

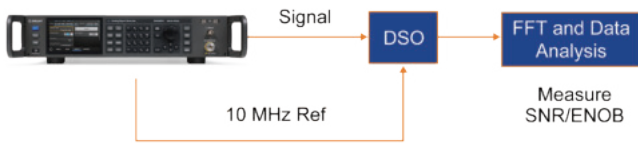
• LO in Up/Down Converter Measurement



• ADC Measurement



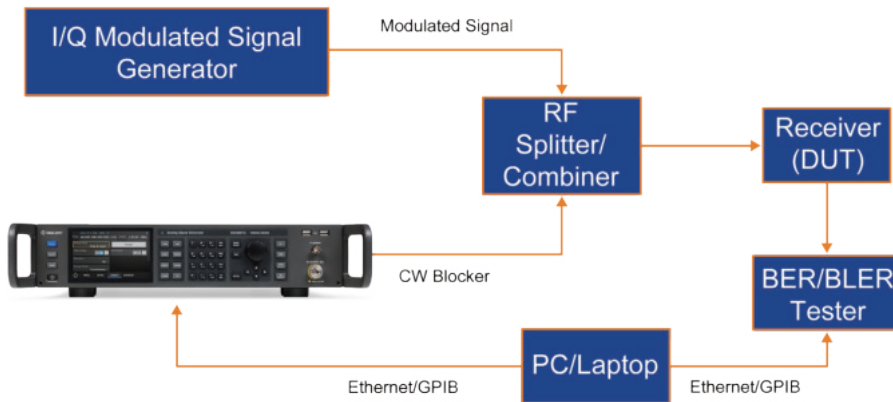
• DSO Measurement



• DAC Measurement



• Receiver Blocking Test



 Model and Main index

| Model | SSG6083A | SSG6085A | SSG6087A |
|----------------------|--|---------------------------|---------------------------|
| Frequency Range | CW MODE 100 kHz~13.6 GHz | CW MODE 100 kHz~20 GHz | CW MODE 100 kHz~40 GHz |
| Frequency Resolution | 0.001 Hz | | |
| Amplitude Resolution | 0.01 dB | | |
| Level error | ≤ 0.7 dB(typ.) | | |
| Phase noise | -135 dBc/Hz @1 GHz, offset 20 kHz (typ.) | | |
| Display | 5 inch capacitance touch screen, RGB (800*480) | | |



Ordering Information

| Product Description | SSG6000A Signal Generator | Order Number |
|-------------------------|--|--------------|
| Product code | Analog Signal Generator 100 kHz~13.6 GHz | SSG6083A |
| | Analog Signal Generator 100 kHz~20 GHz | SSG6085A |
| | Analog Signal Generator 100 kHz~40 GHz | SSG6087A |
| Standard configurations | Quick start, an USB cable, calibration certificate, power cord, 2.92 mm female to female adapter | |
| option | Pulse modulation | SSG6080A-PU |
| | Pulse train generator | SSG6080A-PT |
| | Rack mount kit | SSG6000A-RMK |
| | USB-GPIB adapter | USB-GPIB |
| | Upgrade 13.6 GHz to 20 GHz | SSG6080A-F85 |



SSG5000A

RF Signal Generator



Features and Benefits

- Frequency up to 13.6 GHz / 20 GHz
- 0.001 Hz frequency setting resolution
- Level setting range: -130 dBm ~ 25 dBm
- Phase Noise: -120 dBc / Hz @ 1 GHz, 20 kHz offset (typ.)
- Level error ≤ 0.7 dB (typ.)
- Provides AM, FM, PM analog modulation with internal, external or Int+Ext source
- Single pulse, double pulse and pulse train generator (option)
- The power meter control kit can easily use the power meter to measure power, control power output and correct line loss
- 5 inch TFT capacitive touch screen, mouse and keyboard supported
- Web browser remote control on PC and mobile terminals
- Standard interface includes USB Host, USB Device (USB TMC), LAN (VXI-11, Socket, Telnet). Optional interface: GPIB



Model and Main index

| Model | SSG5083A | SSG5085A |
|----------------------|--|----------------------|
| Frequency Range | CW MODE 9 kHz~13.6 GHz | CW MODE 9 kHz~20 GHz |
| Frequency Resolution | 0.001 Hz | |
| Amplitude Resolution | 0.01 dB | |
| Level error | ≤ 0.7 dB(typ.) | |
| Phase noise | -120 dBc/Hz @1 GHz, offset 20 kHz (typ.) | |
| Display | 5 inch capacitance touch screen, RGB (800*480) | |



Ordering Information

| Product Description | SSG5000A Signal Generator | Order Number |
|-------------------------|--|--------------|
| Product code | Analog Signal Generator 9 kHz~13.6 GHz | SSG5083A |
| | Analog Signal Generator 9 kHz~20 GHz | SSG5085A |
| Standard configurations | Quick start, an USB cable, calibration certificate, power cord | |
| option | Pulse modulation | SSG5080A-PU |
| | Pulse train generator | SSG5080A-PT |
| | 110 dB Attenuator module ^[1] | SSG5080A-LP |
| | Rack mount kit | SSG-RMK |
| | USB-GPIB adapter | USB-GPIB |
| | Upgrade 13.6 GHz to 20 GHz | SSG5080A-F85 |

[1] Assembled and calibrated in factory only



SSG5000X

RF Signal Generator

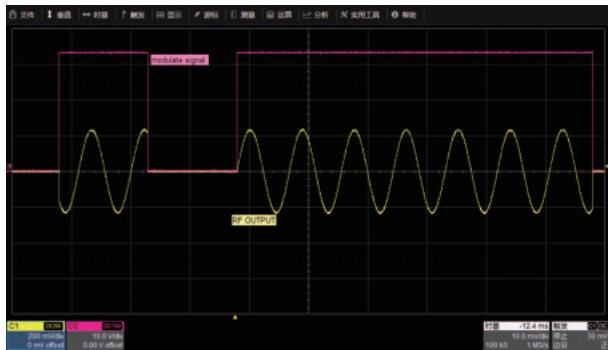


Features and Benefits

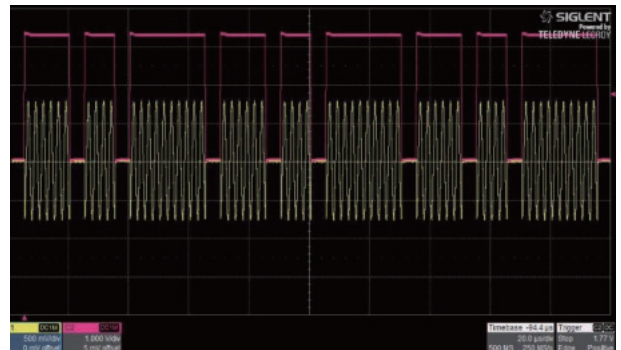
- Frequency up to 4 GHz/6 GHz
- 0.001 Hz frequency setting resolution
- High output power up to +26 dBm (typ.)
- Phase Noise: -120 dBc/ Hz @ 1 GHz, 20 kHz offset (typ.)
- User flatness correction with power sensor to correct the cable loss
- Provides AM, FM, PM analog modulation with internal, external or Int+Ext source
- Single pulse, double pulse and Pulse train generator (option)
- Internal IQ modulation with 150 MHz modulation bandwidth with perfect in-factory calibration
- Internal include some digital communication stand file such as 5G-NR, LTE, WCDMA, WLAN, and playback them
- Internal Custom mode generate common IQ signal such as QAM, FSK, ASK, MSK
- Analog differential I/Q outputs
- External analog I/Q input
- USB-power meter measurement
- 5 inch TFT capacitive touch screen, mouse and keyboard supported
- Web browser remote control on PC and mobile terminals
- Standard interface included USB Host, USB Device (USB TMC), LAN (VXI-11, Socket, Telnet). Optional interface: GPIB

Design features

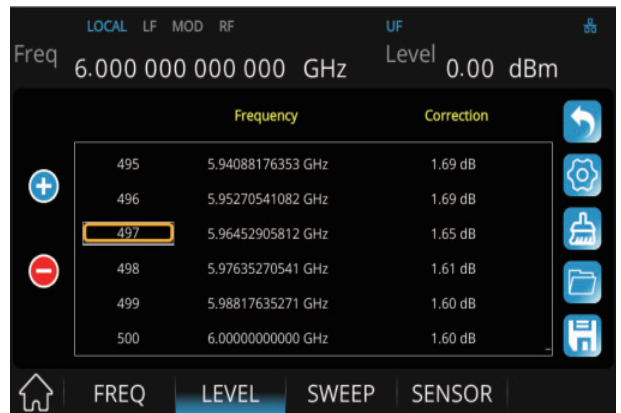
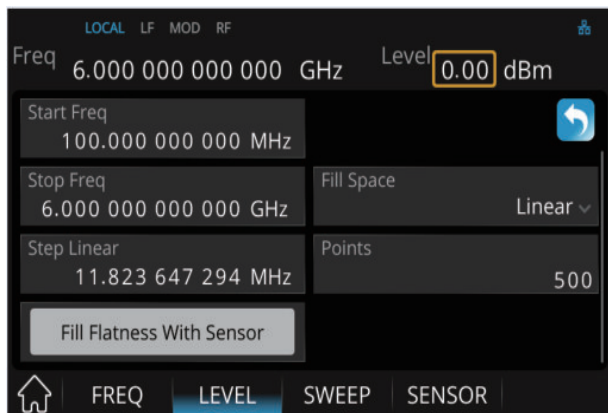
- Double pulse modulation



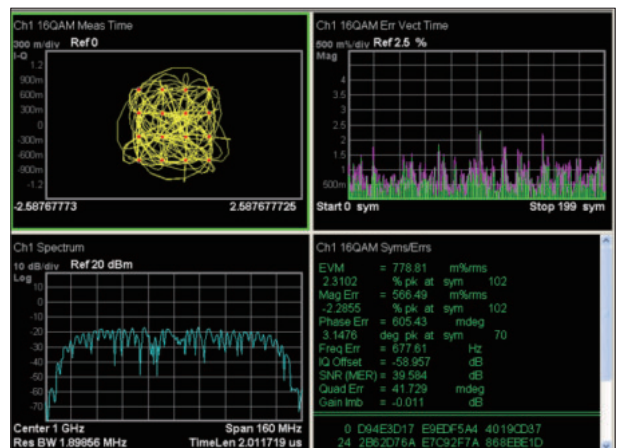
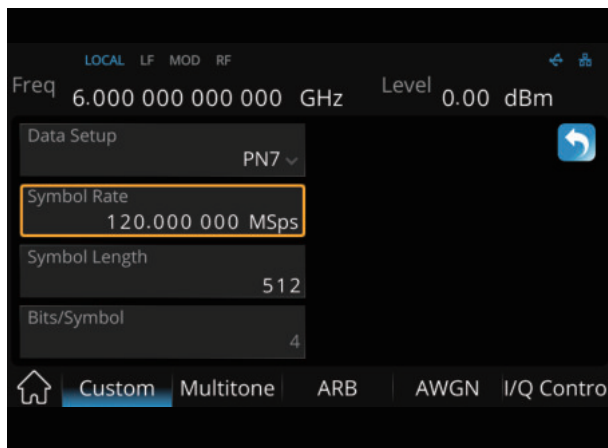
- Pulse train generator



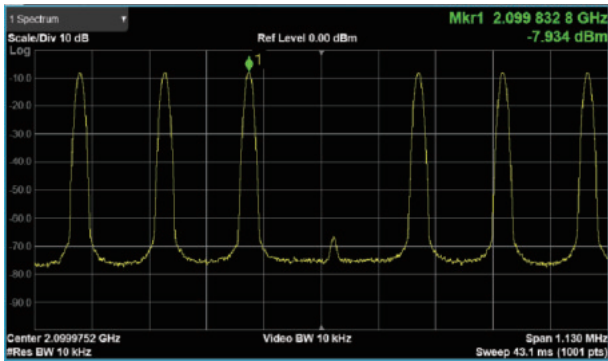
- Works with Power sensor to use the measured values to compensate the cable losses with internal control functions



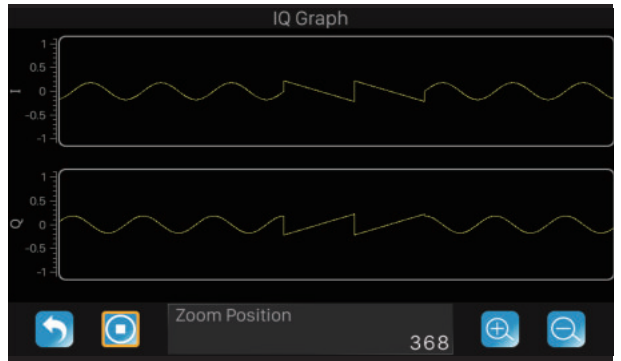
- Custom mod can generate IQ modulated signal such as QAM, PSK, ASK, FSK, the maximum sample rate is 120 Msps/s



• Multi-tone mode to output multi-signal



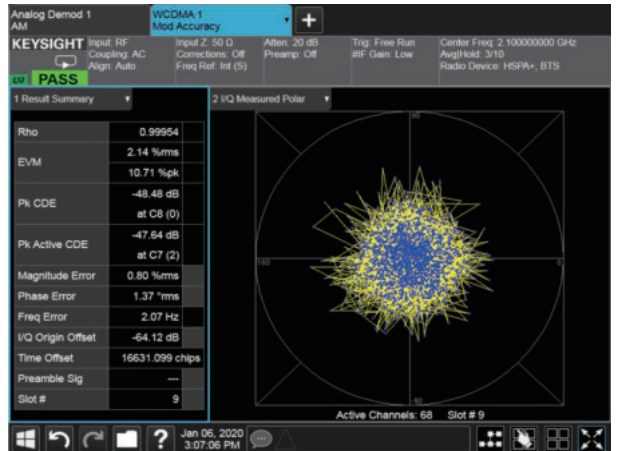
• ARB mode to build and replay waveform sequence



• Arb mode to replay back communication stand files

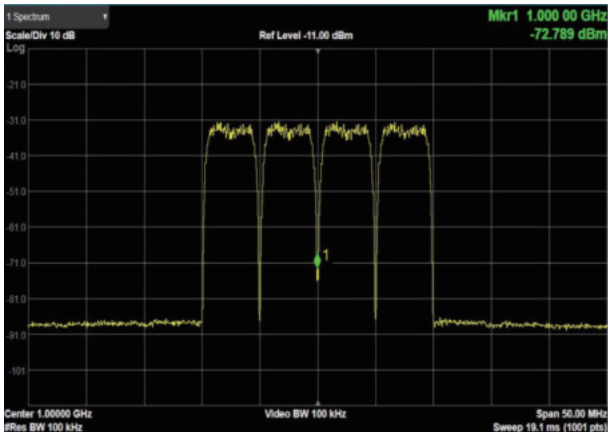


3 GPP WCDMA TM 1-64 DPCH ACPR

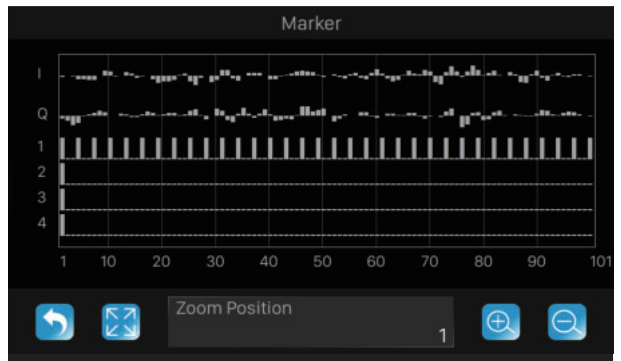


3 GPP WCDMA TM 1-64 DPCH EVM

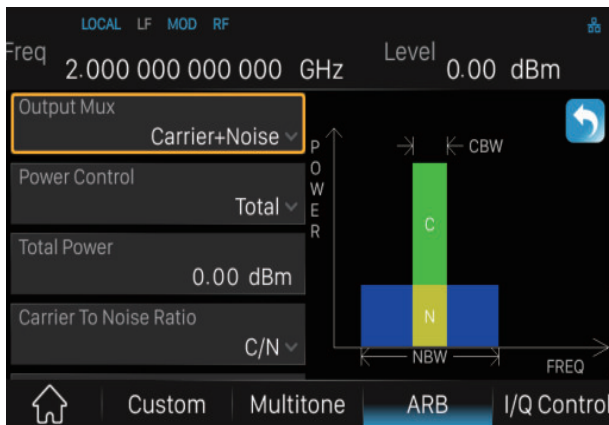
• ARB mod to generate multi-carrier



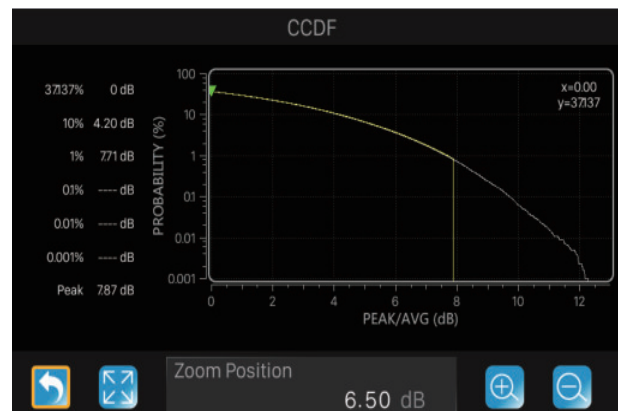
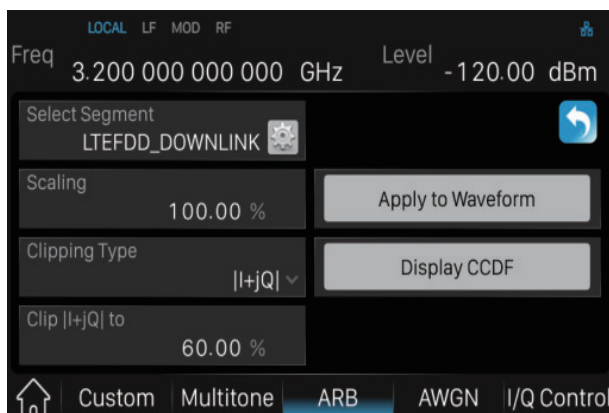
• ARB mod to use the marker to label symbol of the waveform files and simultaneously output a pulse from the invent interface, this can synchronize another device.



- ARB mode to add real time AWGN to the digital IQ to satisfy the receiver performance tests of receiver



- ARB mod to clip the signal of the peak power and display the CCDF (cytotoxic cell differentiation factor)



- SigIQPro Signal Generation Software (Optional)

SigIQPro is a flexible PC-based signal generation software that takes signal generation to a whole new level, making it easy to generate complex signals that are fully compliant with Bluetooth, IoT and other communication standards. SIGLENT instruments and SigIQPro signal generation software integrate simulation, design and test to easily meet the needs of users at all stages of design, R&D, and production



Model and Main index

| Model | SSG5040X | SSG5060X | SSG5040X-V | SSG5060X-V |
|----------------------|--|---------------------|----------------------|----------------------|
| Frequency Range | CW MODE 9 kHz~4 GHz | CW MODE 9 kHz~6 GHz | CW MODE 9 kHz~4 GHz | CW MODE 9 kHz~6 GHz |
| | | | IQ MODE 10 MHz~4 GHz | IQ MODE 10 MHz~6 GHz |
| Frequency Resolution | 0.001 Hz | | | |
| Amplitude Resolution | 0.01 dB | | | |
| Phase noise | -120 dBc/Hz @1 GHz, offset 20 kHz (typ.) | | | |
| Display | 5 inch capacitance touch screen, RGB (800*480) | | | |



Ordering Information

| Product Description | SSG5000X Signal Generator | Order Number |
|---|---|---------------------------|
| Product code | Analog Signal Generator 9 kHz ~ 4 GHz | SSG5040X |
| | Analog Signal Generator 9 kHz ~ 6 GHz | SSG5060X |
| | Vector Signal Generator 10 MHz ~ 4 GHz | SSG5040X-V |
| | Vector Signal Generator 10 MHz ~ 6 GHz | SSG5060X-V |
| Standard configurations | Quick start, an USB cable, calibration certificate, power cord | |
| option | Pulse train generator | SSG5000X-PT |
| | Rack mount kit | SSG-RMK |
| | USB-GPIB adapter | USB-GPIB |
| | Upgrade 4 GHz to 6 GHz | SSG5000X_F60 |
| | Upgrade IQ bandwidth from 75 MHz to 150 MHz | SSG5000XV_B150 |
| | Precision Frequency Reference | 10M_OCXO_L ^[1] |
| | Generate IOT waveform at device | SSG5000XV-IOT |
| | SigIQPro for Bluetooth waveform playback license ^[2] | SigIQPro-BT |
| | SigIQPro for IOT waveform playback license | SigIQPro-IOT |
| SigIQPro for OFDM waveform playback license | SigIQPro-OFDM | |

[1] Assembled and calibrated in factory only

[2] See the SigIQPro User Manual for details



SSG3000X

RF Signal Generator



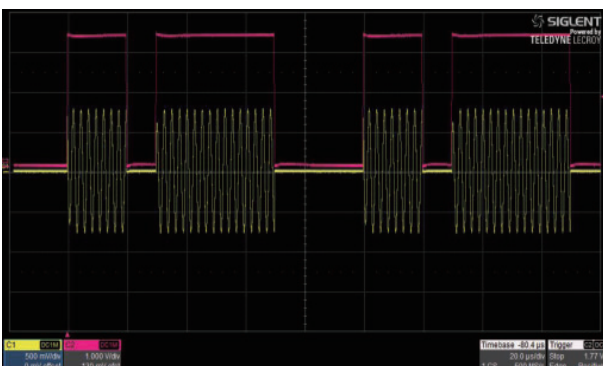
Features and Benefits

- Frequency up to 2.1 GHz/3.2 GHz
- 0.01 Hz frequency setting resolution
- Level output from -110 dBm to +13 dBm
- Maximum level up to +20 dBm (typ.)
- Phase Noise: -110 dBc/ Hz @ 1 GHz , 20 kHz offset (typ.)
- Level accuracy ≤ 0.7 dB (typ.)
- Provides AM, FM & PM analog modulation with internal, external or Int+Ext source
- Pulse modulation, on/off ratio ≥ 70 dBc
- Pulse train generator (option)
- External IQ modulation with SDG6000X as the baseband IQ signal
- USB-power meter measurement
- 5 inch TFT capacitive touch screen, mouse and keyboard supported
- Web browser remote control on PC and mobile terminals
- Standard interface include USB Host, USB Device (USB TMC), LAN (VXI-11, Socket, Telnet). Optional interface: GPIB

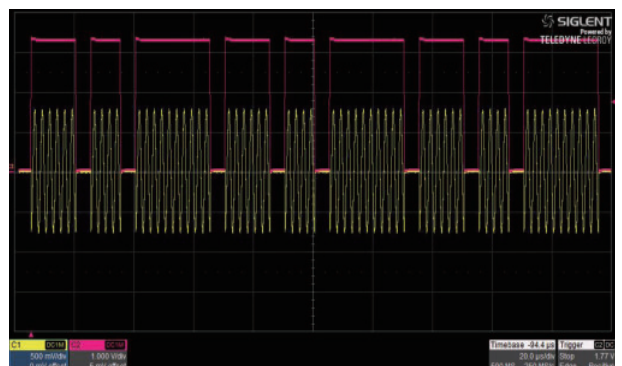


Design features

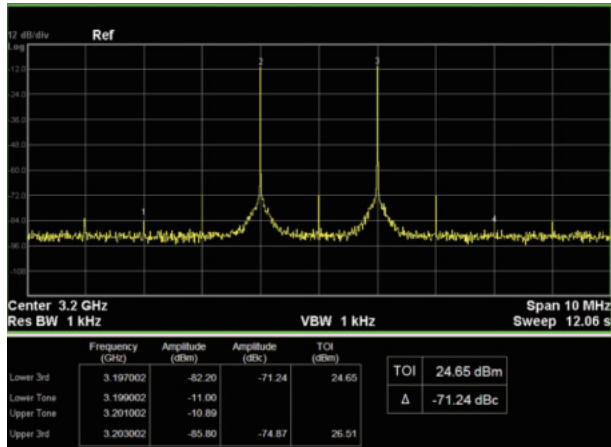
• Double pulse modulation



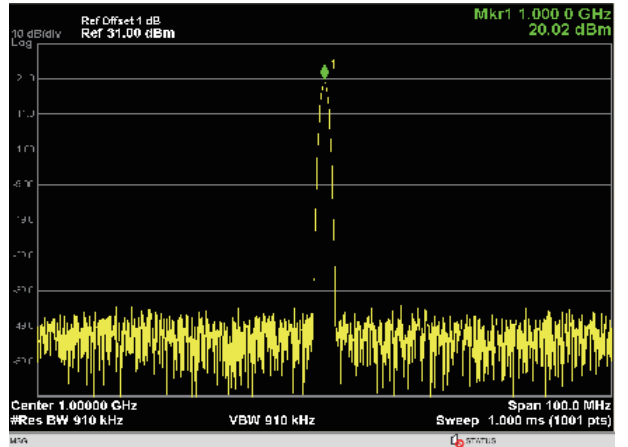
• Pulse train generator



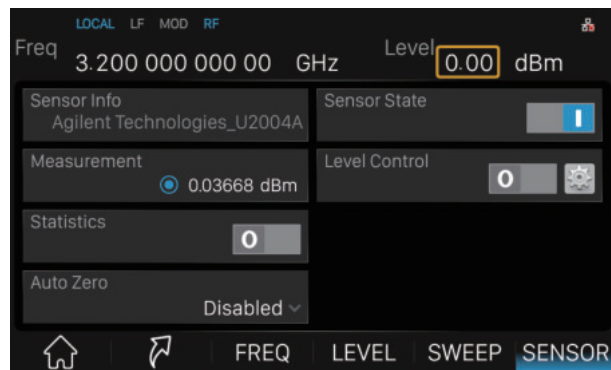
- Provides double-tone signal with IQ modulation, easily do TOI testing



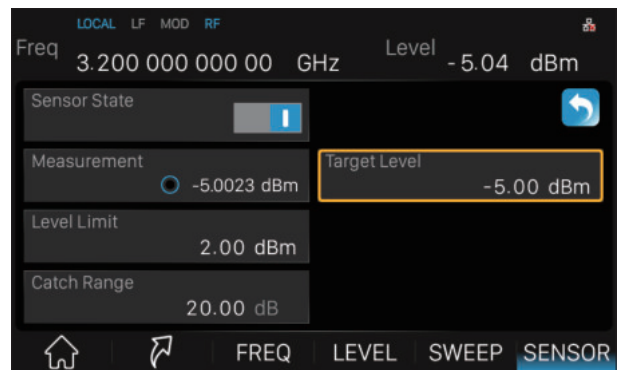
- Maximum output level up to +20 dBm



- Power output display using USB power sensor



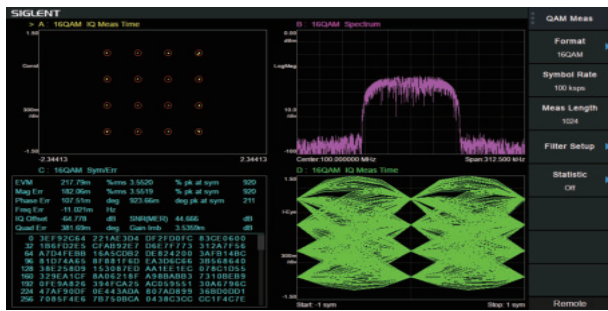
- Power output control using USB power sensor



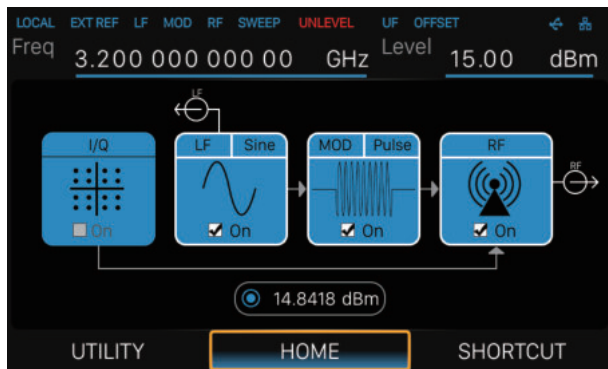
- Example for auto level control



- External IQ modulation using the SDG6000X as the baseband source



- 5 inch touch screen, keyboard and mouse support



Specifications

Specifications are valid under the following condition: The instrument is within the calibration period, has been stored between 0 and 50°C for at least 2 hours prior to use, and has been powered on and warmed up for at least 40 minutes. The specifications include the measurement uncertainty, unless otherwise noted.

Specifications: All products are guaranteed to meet published specifications when operating temperatures from 5 to 45°C, unless otherwise noted.

Typical(typ.): Performance deemed typical implies that 80 percent of the measurement results will meet the typical published performance with a 95th percentile confidence level at room temperature (approximately 25°C). Typical performance is not warranted and does not include measurement uncertainty.

Nominal(nom.): This value indicate the expected mean or average performance, or an attribute whose performance is by design, such as the 50 ohm connector.
















Model and Main index







| Model | SSG3021X | SSG3032X | SSG3021X-IQE | SSG3032X-IQE |
|----------------------|--|-----------------------|---|---|
| Frequency Range | CW MODE 9 kHz~2.1 GHz | CW MODE 9 kHz~3.2 GHz | CW MODE 9 kHz~2.1 GHz IQ MODE 10 MHz~2.1 GHz | CW MODE 9 kHz~3.2 GHz IQ MODE 10 MHz~3.2 GHz |
| Frequency Resolution | 0.01 Hz | | | |
| Amplitude Resolution | 0.01 dB | | | |
| Level accuracy | 0.7 dB (typ.) | | | |
| Phase noise | -110 dBc/Hz @1 GHz ,offset 20 kHz (typ.) | | | |
| Display | 5 inch capacitance touch screen, RGB (800*480) | | | |



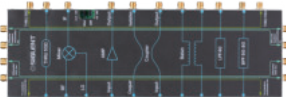










Ordering Information




| Product Description | SSG3000X Signal Generator | Order Number |
|-------------------------|--|---------------------|
| Product code | Signal Generator 9 kHz~2.1 GHz | SSG3021X |
| | | SSG3021X-IQE |
| | Signal Generator 9 kHz~3.2 GHz | SSG3032X |
| | | SSG3032X-IQE |
| Standard configurations | quick start, an USB cable, calibration certificate, power cord | |
| option | pulse train generator | SSG3000X-PT |
| | rack mount kit | SSG-RMK |
| | USB-GPIB adapter | USB-GPIB |
| | Upgrade 2.1 GHz to 3.2 GHz | SSG3000X-21BW32 |
| | Upgrade 2.1 GHz to 3.2 GHz (with external IQ) | SSG3000X-IQE-21BW32 |

| Type | Model | Picture | Specifications |
|-------------------------|---|---|---|
| Near-field Probe | SRF5030T |  | Near Field Probe: H field probe sets (20 mm, 10 mm, 5 mm) , E field probe (5 mm), 300 kHz~3.0 GHz; distinguished within 10 cm range of the magnetic field; for EMI radiation interference and the intensity detector |
| GPIB | USB-GPIB Adapter |  | The USB Device interface extends into the GPIB interface, USB-GPIB adapter can more easily complete the task of the operation command through the GPIB, USB follow the USB2.0 specification, GPIB follow the IEEE488.2 standard |
| Cable | N-BNC-2L |  | N-BNC cable for SSA3000X Series; 2 GHz bandwidth |
| | N-N-6L |  | N-N cable for SSA3000X, SSA3000X Plus, SSA3000X-R, SVA1000X Series; 6 GHz bandwidth |
| | N-SMA-6L |  | N-SMA cable for SSA3000X, SSA3000X Plus, SSA3000X-R, SVA1000X Series; 6 GHz bandwidth |
| | N-N-18L |  | N(M)-N(M) cable for SSA3000X, SSA3000X Plus, SSA3000X-R, SVA1000X series, 100 cm, 18 GHz bandwidth |
| | N-SMA-18L |  | N(M)-SMA(M) cable for SSA3000X, SSA3000X Plus, SSA3000X-R, SVA1000X series, 100 cm, 18 GHz bandwidth |
| | SMA-SMA-18L |  | SMA(M)-SMA(M) cable, 18 GHz |
| | SMA-SMA-26L |  | SMA(M)-SMA(M) cable, 26 GHz |
| | SMAF-SMA-26L |  | SMA(F)-SMA(M) cable, 26 GHz |
| | 2.92F-2.92F-40A |  | 2.92 mm Female - 2.92 mm Female adaptor, 40 GHz |
| | V26-N35MN35F-25IN |  | NMD 3.5 mm(M) – NMD 3.5 mm(F), 26.5 GHz |
| V26-N35FA35F-25IN |  | NMD 3.5 mm(F) – APC 3.5 mm(F), 26.5 GHz | |

| Type | Model | Picture | Specifications |
|---------------------|-----------|---|---|
| Reflection Bridge | RB3X25 |  | VSWR bridge: (1 MHz~2.5 GHz), N (M) -N (M) adaptor (2 pcs) |
| Utility Kit | UKitSSA3X |  | Utility Kit for SSA3000X Series: N (M) -SMA (M) cable, N (M) -N (M) cable, N (M) -BNC (F) adaptor (2 pcs), N (M) -SMA (F) adaptor (2 pcs), 10 dB attenuator |
| VNA Calibration Kit | F503ME |  | Mechanical Calibration Kit: Open (M), Short (M), Match (M,50), Through (F-F), 4.5 GHz |
| | F503FE | | Mechanical Calibration Kit: OSLT, DC - 4.5 GHz, N-Female connector |
| | F504MS | | Mechanical Calibration Kit: OSLT, DC - 9 GHz, N-Male connector |
| | F504FS | | Mechanical Calibration Kit: OSLT, DC - 9 GHz, N-Female connector |
| | F504TS | | N-type, Male and Female, 50 Ω Calibration Kit, 0~9 GHz |
| | F505TS | | Mechanical Calibration Kit: OSLT, DC - 18 GHz, N-Male and Female connector |
| | F603ME |  | Mechanical Calibration Kit: OSLT, DC - 4.5 GHz, 3.5 mm SMA-Male connector |
| | F603FE | | Mechanical Calibration Kit: Open (M), Short (M), Match (M,50), Through (F-F), 4.5 GHz, SMA-type |
| | F604MS | | Mechanical Calibration Kit: OSLT, DC - 9 GHz, 3.5 mm SMA-Male connector |
| | F604FS | | Mechanical Calibration Kit: OSLT, DC - 9 GHz, 3.5 mm SMA-Female connector |
| | F604TS | | 3.5 mm, Male and Female, 50 Ω Calibration Kit, 0~9 GHz |
| | F606TS | | Mechanical Calibration Kit: OSLT, DC - 27 GHz, 3.5 mm-Male and Female connector |
| | Y504MS | |  |
| | Y504FS | Integrated Mechanical Calibration Kit: OSLT, DC - 9 GHz, N-Female | |
| | KWR42A |  | 50 Ω Waveguide Calibration kit, 18~26.5 GHz |

| Type | Model | Picture | Specifications |
|------------------------------|--------------|---|--|
| Rack Mount | SSA-RMK |  | Rackmount kit , compatible with the SSA3000X,SSA3000X Plus, SVA1000X,SSA3000X-R model; Height 6U |
| | SSG-RMK |  | Rack Mount kit; SSG3000X, SSG5000X, SSG5000A, SDG7000A; Height 3U |
| | SSG6000A-RMK |  | Rack Mount kit; SSG6000A; Height 2U |
| RF Test board | SNA-TB01 |  | Board integrated with RF components like amplifier, mixer, filter for vector network analyzer demonstration |
| Rechargeable lithium battery | 10V8_BAT |  | 10.8V, 74 Wh |
| Antenna | ANT-GPS1 |  | GPS antenna, SMA(M), 100 cm |
| | ANT-DA1 |  | Directional Antenna Suit, N type, ANT-DA11 antenna (10 MHz~200 MHz), ANT-DA12 antenna (200 MHz~500 MHz), ANT-DA13 antenna (500 MHz~8 GHz), Amplifier handle 12dB@1GHz(typ.) |
| | ANT-DA11 |  | Contains amplifier handle and 10 MHz ~ 200 MHz antenna. Antenna gain 10 dB (typical value); SWR <1:1.9 (typical value); 50 Ω/N type, female; polarization direction horizontal and vertical |
| | ANT-DA12 |  | Contains amplifier handle and 200 MHz ~ 500 MHz antenna. Antenna gain 10 dB (typical value); SWR <1:1.9 (typical value); 50 Ω/N type, female; polarization direction horizontal and vertical |
| | ANT-DA13 |  | Contains amplifier handle and 500 MHz ~ 8 GHz antenna. Antenna gain 10 dB (typical value); SWR <1:1.9 (typical value); 50 Ω/N type, female; polarization direction horizontal and vertical |
| TDR Probe | ADP-18 |  | Adjustable differential TDR probe DC~18 GHz |
| | ADP-26 |  | Adjustable differential TDR probe DC~26.5 GHz |
| | ASP-18 |  | Adjustable single-end TDR probe DC~18 GHz |
| | ASP-26 |  | Adjustable single-end TDR probe DC~26.5 GHz |

| Type | Model | Picture | Specifications |
|---------------------|-----------|---|---|
| AC-DC adapter | 12V_AP_4A |  | 12V, 4A |
| Carry Bag | BAG-S2 |  | Soft Carry Case for SDS2000X, SDS5000X, SSA3000X, SVA1000X, SSA3000X Plus |
| | BAG-H2 |  | Soft Carry Case for SHA850A, SHN900A |
| VNA Calibration Kit | SEM5002A |  | 2 ports, 9 kHz ~ 4.5 GHz, SMA female |
| | SEM5012A | | 2 ports, 9 kHz ~ 9 GHz, SMA female |
| | SEM5022A | | 2 ports, 100 kHz ~ 13.5 GHz, 3.5 mm female |
| | SEM5032A | | 2 ports, 100 kHz ~ 26.5 GHz, 3.5 mm female |
| | SEM5004A | | 4 ports, 9 kHz ~ 4.5 GHz, SMA female |
| | SEM5014A | | 4 ports, 9 kHz ~ 9 GHz, SMA female |
| | SEM5024A | | 4 ports, 100 kHz ~ 13.5 GHz, 3.5 mm female |
| | SEM5034A | | 4 ports, 100 kHz ~ 26.5 GHz, 3.5 mm female |
| Switch Matrix | SSM5122A |  | 2 input ports, 12 output ports, 3.5 mm female, 9 kHz ~ 9 GHz |
| | SSM5124A | | 2 input ports, 24 output ports, 3.5 mm female, 9 kHz ~ 9 GHz |
| | SSM5142A | | 4 input ports, 12 output ports, 3.5 mm female, 9 kHz ~ 9 GHz |
| | SSM5144A | | 4 input ports, 24 output ports, 3.5 mm female, 9 kHz ~ 9 GHz |
| | SSM5321A | | 2 input ports, 6 output ports, 3.5 mm female, 100 kHz ~ 26.5 GHz |
| | SSM5342A | | 4 input ports, 12 output ports, 3.5 mm female, 100 kHz ~ 26.5 GHz |

| Type | Model | Picture | Specifications |
|----------------------------|----------|---|---|
| Mechanical Switch | SSU5181A |  | DC ~ 18 GHz, including one SPDT mechanical switch, SMA female |
| | SSU5182A | | DC ~ 18 GHz, including two SPDT mechanical switches, SMA female |
| | SSU5183A | | DC ~ 18 GHz, including three SPDT mechanical switches, SMA female |
| | SSU5184A | | DC ~ 18 GHz, including four SPDT mechanical switches, SMA female |
| | SSU5261A | | DC ~ 26.5 GHz, including one SPDT mechanical switch, SMA female |
| | SSU5262A | | DC ~ 26.5 GHz, including two SPDT mechanical switches, SMA female |
| | SSU5263A | | DC ~ 26.5 GHz, including three SPDT mechanical switches, SMA female |
| | SSU5264A | | DC ~ 26.5 GHz, including four SPDT mechanical switches, SMA female |
| | SSU5265A | | DC ~ 26.5 GHz, including one SP6T mechanical switch, SMA female |
| | SSU5266A | | DC ~ 26.5 GHz, including two SP6T mechanical switches, SMA female |
| | SSU5501A | | DC ~ 50 GHz, including one SPDT mechanical switch, 2.4 mm female |
| | SSU5502A | | DC ~ 50 GHz, including two SPDT mechanical switches, 2.4 mm female |
| | SSU5503A | | DC ~ 50 GHz, including three SPDT mechanical switches, 2.4 mm female |
| | SSU5504A | | DC ~ 50 GHz, including four SPDT mechanical switches, 2.4 mm female |
| PC Software | SigIQPro |  | A comprehensive PC-based software for general and standards-based signals creation, supporting Bluetooth, IoT, Custom OFDM, etc |
| Noise Source Driver | NSD28 |  | Noise source driver, connect spectrum analyzer to noise source |

Other Products Overview

SIGLENT also provides other instruments like Oscilloscopes, AWG, Multimeters, Electronic loads, power supplies.

※ Oscilloscopes ※



| | SDS7000A | SDS6000A | SDS6000L | SDS5000X | SDS3000X HD | SDS2000X HD | SDS2000X plus |
|----------------------|---|------------------------|------------------------|-----------------|-----------------|-------------------|-------------------|
| Bandwidth | 3 GHz ~ 6 GHz | 350 MHz ~ 2 GHz | 500 MHz ~ 2 GHz | 350 MHz ~ 1 GHz | 350 MHz ~ 1 GHz | 200 MHz ~ 350 MHz | 100 MHz ~ 500 MHz |
| Sample rate | 20 GSa/s | 5 GSa/s (10 GSa/s ESR) | 5 GSa/s (10 GSa/s ESR) | 5 GSa/s | 4 GSa/s | 2 GSa/s | 2 GSa/s |
| Analog channel | 4 | 4 | 4/8 | 4 | 4 | 4 | 2/4 |
| Memory depth | 1 Gpts | 500 Mpts | 500 Mpts | 250 Mpts | 400 Mpts | 200 Mpts | 200 Mpts |
| Waveform update Rate | 1,100,000 wfm/s | 750,000 wfm/s | 750,000 wfm/s | 500,000 wfm/s | 890,000 wfm/s | 500,000 wfm/s | 500,000 wfm/s |
| Protocol analysis | Standard: I2C, SPI, UART, CAN, LIN Optional: CAN FD, FlexRay, I2S, MIL-STD-1553B, SENT, Manchester (decode only), ARINC429(only SDS7000A, SDS6000A, SDS5000A, SDS3000X HD) | | | | | | |
| Sequence | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| History | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Math traces | 4 | 4 | 4 | 2 | 4 | 2 | 2 |
| FFT points | 32 Mpts | 8 Mpts | 8 Mpts | 2 Mpts | 4 Mpts | 2 Mpts | 2 Mpts |
| Search and Navigate | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| DVM | Yes | Yes | Yes | Yes | Yes | Yes | |
| Counter | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Histogram | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Bode plot | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Power analysis | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Eye/Jitter analysis | Yes | Yes | Yes | | | | |
| Compliance Test | Yes | | | | | | |
| Digital channels | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| AWG | 50 MHz | 25 MHz | 25 MHz | 25 MHz | 50 MHz | 25 MHz | 50 MHz |
| Zone Trigger | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Webserver | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| HDMI output | Yes | Yes | Yes | | | | |
| Porbe Adapters | Yes | Yes | Yes | Yes | Yes | | |
| Screen | 15.6" touch | 12.1" touch | None | 10.1" touch | 10.1" touch | 10.1" touch | 10.1" touch |

| | SDS2000X-E | SDS1000X HD | SDS800X HD | SDS1000X-E | SDS1104X-U | SDS1000CML+ | |
|----------------------|--------------------------|---|--------------------------|-------------------|---------------|------------------|--|
| Bandwidth | 200 MHz ~ 350 MHz | 100 MHz ~200 MHz | 70 MHz ~200 MHz | 100 MHz ~ 200 MHz | 100 MHz | 70 MHz ~ 150 MHz | |
| Sample rate | 2 GSa/s | 2 GSa/s | 2 GSa/s | 1 GSa/s | 1 GSa/s | 1 GSa/s | |
| Analog channel | 2 | 2/4 | 2/4 | 2/4 | 4 | 2 | |
| Memory depth | 28 Mpts | 100 Mpts | 100/50 Mpts | 14 Mpts | 14 Mpts | 2 Mpts | |
| Waveform update Rate | 400,000 wfm/s | 500,000 wfm/s | 500,000 wfm/s | 400,000 wfm/s | 400,000 wfm/s | | |
| Protocol analysis | I2C, SPI, UART, CAN, LIN | I2C, SPI, UART, CAN, LIN, CAN FD(Decode Only), FlexRay(Decode Only) | I2C, SPI, UART, CAN, LIN | | | | |
| Sequence | Yes | Yes | Yes | Yes | Yes | | |
| History | Yes | Yes | Yes | Yes | Yes | | |
| Math traces | 1 | 4 | 4 | 1 | 1 | 1 | |
| FFT points | 1 Mpts | 2 Mpts | 2 Mpts | 1 Mpts | 128 kpts | | |
| Search and Navigate | Yes | Yes | Yes | Yes | Yes | | |
| DVM | | | | | | | |
| Counter | | Yes | Yes | | | | |
| Histogram | | | | | | | |
| Bode plot | Yes | Yes | Yes | Yes | | | |
| Power analysis | | Yes | Yes | | | | |
| Eye/Jitter analysis | | | | | | | |
| Digital channels | Yes | Yes | Yes | Yes | | | |
| AWG | 25 MHz | 25 MHz | 25 MHz | 25 MHz | | | |
| Zone Trigger | | | | | | | |
| Webserver | Yes | Yes | Yes | Yes | | | |
| HDMI output | | | | | | | |
| Porbe Adapters | | | | | | | |
| Screen | 7" LCD | 10.1" touch | 7" touch | 7" LCD | 7" LCD | 7" LCD | |

※ Arbitrary Waveform Generator ※



| | SDG7000A | SDG6000X | SDG2000X | SDG1000X Plus | SDG1000X | SDG800 |
|---------------------------|--|---------------------------------|---------------------------------|--|---------------------------------------|-----------------------------------|
| Bandwidth | 350/500 MHz, 1 GHz | 200/300/500 MHz | 40/80/120 MHz | 30/60 MHz | 30/60 MHz | 5/10/30 MHz |
| Number of channels | 2 Differential/ Single-ended | 2 Single-ended | 2 Single-ended | 2 Single-ended | 2 Single-ended | 1 Single-ended |
| Output range | ± 24 V (48 V) | ±10V | ±10V | ±10V | ±10V | ±10V |
| Digital bus(Optional) | 16-bit, LVTTTL or LVDS output Bit rate 1μbps ~ 1 Gbps | | | | | |
| Sampling rate | 5 GSa/s | 2.4 GSa/s (2X Interpolation) | 1.2 GSa/s (4X Interpolation) | 1 GSa/s (4X Interpolation) | 150 MSa/s | 125MSa/s |
| Vertical resolution | 14-bit | 16-bit | 16-bit | 16-bit | 14-bit | 14-bit |
| Arbitrary waveform length | 24 pts ~ 512 Mpts/ch | 2 ~ 20 Mpts | 8 ~ 8 Mpts | 8 Mpts/CH | 16 kpts | 16 kpts |
| Modulation types | AM, FM, PM, PWM, FSK, PSK, ASK, QAM | AM,FM,PM,ASK,FSK, PSK,PWM, QAM | AM,FM,PM,ASK, FSK,PSK,PWM | AM, DSB-AM, FM, PM, FSK, ASK, PSK, PWM | AM, DSB-AM, FM,PM, FSK, ASK, PSK, PWM | AM, DSB-AM, FM, PM, FSK, ASK, PWM |
| Harmonic output | 16 | 10 | 10 | 16 | 16 | |
| Sweep & Burst | Yes | Yes | Yes | Yes | Yes | Yes |
| IQ Signal Generator | Yes | Yes | | | | |
| PRBS Generator | Yes | Yes | | Yes | | |
| Display | 5" touch screen , 800*480 | 4.3" touch screen, 480*272 | 4.3" touch screen, 480*272 | 4.3" LCD, 480*272 | 4.3" LCD, 480*272 | 3.5" LCD, 320*240 |



※ Power Supply ※

| | SPS5000X | SPD4000X | SPD3000X | SPD3303C | SPD1000X |
|----------------|---------------------------|---------------|-----------|-------------|-------------|
| Output Channel | 1/2/3 | 4 | 3 | 3 | 1 |
| Max. Voltage | 40/50/80/160 V | 15/30/32 V | 32 V | 32 V | 16/30 V |
| Max. Current | 7.5/15/22.5/30/45/60/90 A | 3.2/6/10 A | 3.2 A | 3.2 A | 5/ 8 A |
| Max. Power | 180/360/720/1080 W | 240/285/400 W | 220 W | 220 W | 128/150 W |
| Resolution | 1 mV/1 mA | 1 mV/1 mA | 1 mV/1 mA | 10 mV/10 mA | 1 mV / 1 mA |
| Screen | 2.4" OLED | 4.3" LCD | 4.3" LCD | LED | 2.8" LCD |

※ DC Electronic Load ※

| | SDL1020X | SDL1020X-E | SDL1030X | SDL1030X-E |
|---------------------------|--------------------------|------------|----------------|------------|
| Min. readback resolution | 0.1 mV, 0.1 mA | 1 mV, 1 mA | 0.1 mV, 0.1 mA | 1 mV, 1 mA |
| Input power | 200 W | | 300 W | |
| Input current | 30 A | | | |
| Input voltage | 150 V | | | |
| CC Dynamic mode frequency | 25 kHz | | | |
| Current slew rate | 0.001 A/us~2.5 A/us | | | |
| Display | 3.5 inch TFT-LCD display | | | |

※ Digital Multimeter ※

| | SDM3045X | SDM3055 | SDM3065X |
|--------------------|-----------------------|--------------------|--------------------|
| Reading resolution | 4 1/2 | 5 1/2 | 6 1/2 |
| DC voltage | 600 mV ~ 1000 V | 200 mV ~ 1000 V | 200 mV ~ 1000 V |
| AC voltage | 600 mV ~ 750 V | 200 mV ~ 750 V | 200 mV ~ 750 V |
| DC current | 600 μ A ~ 10 A | 200 μ A ~ 10 A | 200 μ A ~ 10 A |
| AC current | 60 mA ~ 10 A | 20 mA ~ 10 A | 200 μ A ~ 10 A |
| Scanner card | Not support | Support | Support |
| Display | 4.3" TFT-LCD, 480*272 | | |



Service Promise:

Since the date of purchase, we offer three year’s warranty for the main unit:

- During the warranty period, if the products cause any hardware or software failure because of the quality, Siglent's after-sales service center or Siglent's designated maintenance points will offer the maintenance of the fault products for the user.
- Because of improper use or any other artificial reason, the damage won't be included in the free maintenance.

1. Extension after-sales service

Extension service is based on the main unit (not including accessories) as an object. During the extension service, Siglent still offer free maintenance after the standard warranty period.

1.1 Three advantages:

- Guarantee investment. To extend the life cycle of the products.
- Save money. To prevent the high cost of maintenance after the warranty period.
- Avoid the repeated investment. To prevent buying new equipments because it can't be repaired after the warranty period.

1.2 The content of the extension service

You can buy the following extension service according to your demand:

| Solution | Viability | Instruction |
|----------|-------------------------------------|--|
| ES4 | One year after the warranty period | According to the service terms, Siglent will offer another one year for the after-sales maintenance service |
| ES5 | Two years after the warranty period | According to the service terms, Siglent will offer another two years for the after-sales maintenance service |

2. Calibration services

After long-term use, oscilloscope will cause the deviation of measured value and waveform display, because of its work temperature and humidity. Siglent will restore the original performance and accuracy of factory setting to calibrate the deviation.

- Eliminate the error of measurement
- Restore the original performance and accuracy of the factory setting to the “new” state
- The upgrade of the firmware and the software
- Make the instruments comply with the standard of the ISO9001 quality management process
- Traceable calibration certificates



**Follow us on Facebook:
SiglentTech**

modification date: 2024-11

Headquarters:

SIGLENT Technologies Co., Ltd
Add: Bldg No.4 & No.5, Antongda Industrial
Zone, 3rd Liuxian Road, Bao'an District,
Shenzhen, 518101, China
Tel: + 86 755 3688 7876
Fax: + 86 755 3359 1582
Email: sales@siglent.com
Website: int.siglent.com

USA:

SIGLENT Technologies America, Inc
6557 Cochran Rd Solon, Ohio 44139
Tel: 440-398-5800
Toll Free: 877-515-5551
Fax: 440-399-1211
Email: info@siglent.com
Website: www.siglentna.com

Europe:

SIGLENT Technologies Germany GmbH
Add: Staetzlinger Str. 70
86165 Augsburg, Germany
Tel: +49(0)-821-666 0 111 0
Fax: +49(0)-821-666 0 111 22
Email: info-eu@siglent.com
Website: www.siglenteu.com

Every Bench. Every Engineer. Every Day.