Product Selection Guide

The Best Value in Electronic Test & Measurement

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

SDS5000X Series
SDS5104X / SDS5102X (1 GHz)
SDS5054X / SDS5052X (500 MHz)
SDS5034X / SDS5032X (350 MHz)

Features and Benefits:
- 1 GHz, 500 MHz, 350 MHz models with real-time sample rate up to 5 GSa/s
- SPO technology
  - Waveform capture rates up to 110,000 wfm/s (normal mode), and 500,000 wfm/s (sequence mode)
  - Supports 256-level intensity grading and color temperature display modes
  - Record length up to 250 Mpts/ch, 500 Mpts in total for all 4 channels
- Digital trigger system
- Intelligent trigger: Edge, Slope, Pulse, Window, Runt, Interval, Dropout, Pattern, Qualified, nth edge, Setup/Hold, Delay and Video (HDTV supported). Trigger zone helps to simplify advanced triggering
- Serial bus triggering and decoder, supports protocols I2C, SPI, UART, CAN, LIN, CAN FD, FlexRay, 12S and MIL-STD-1553B
- Low background noise, supports 0.5 mV/div to 10 V/div voltage scales
- Segmented acquisition (Sequence) mode, dividing the maximum record length into multiple segments (up to 100,000), according to trigger conditions set by the user, with a very small dead time between segments to capture the qualifying event
- History waveform record (History) function, the maximum recorded waveform length is 100,000 frames
- Automatic measurement function on 50+ parameters, supports statistics with histogram, trend, Gating measurement, Math measurement, History measurement and Ref measurement
- Math function (2 Mpts FFT, addition, subtraction, multiplication, division, integration, differential, square root, etc.), supports formula editor
- Abundant data analysis functions such as Search, Navigate, Digital Voltmeter, Counter, Waveform Histogram, Bode plot and Power Analysis
- High Speed hardware-based Average, ERES (Enhanced Resolution)
- High Speed hardware-based Mask Test function, with Mask Editor tool for creating user-defined masks
- 16 digital channels (optional) with sample rate up to 1.25 GSa/s, record length up to 62.5 Mpts
- 25 MHz function / arbitrary waveform generator, built-in multiple predefined waveforms
- Large 10.1" TFT-LCD display with 1024 * 600 resolution; Capacitive touch screen supports multi-touch gestures
- Supports external mouse and keyboard
- 10 types of one-button shortcuts
- Multiple interfaces: USB Host, USB Device (USBTMC), LAN (VXI-11, telnet, socket, web), Pass/Fail, Trigger Out, 10 MHz In, 10 MHz Out, VGA output
- Built-in web server supports remote control by the LAN port using a web browser
- Supports SCPI remote control commands

SDS2000X Plus Series
SDS2354X Plus (350 MHz)
SDS2204X Plus (200 MHz)
SDS2104X Plus / SDS2102X Plus (100 MHz)

Features and Benefits:
- 350 MHz, 200 MHz, 100 MHz models with real-time sample rate up to 2 GSa/s.
  A 500 MHz bandwidth upgrade option is available for 350 MHz models.
- SPO technology
  - Waveform capture rates up to 120,000 wfm/s (normal mode) and 500,000 wfm/s (sequence mode)
  - Supports 256-level intensity grading and color temperature display modes
  - Record length up to 200 Mpts/ch, 400 Mpts in total for all 4 channels
- Digital trigger system
- Intelligent trigger: Edge, Slope, Pulse, Window, Runt, Interval, Dropout, Pattern and Video (HDTV supported). Trigger zone helps to simplify advanced triggering
- Serial bus triggering and decoder, supports protocols I2C, SPI, UART, CAN, LIN (Standard) and CAN FD, FlexRay, 12S, and MIL-STD-1553B (optional) protocols
- Low background noise, features 0.5 mV/div to 10 V/div voltage scales
- 10-bit mode provides higher resolution and lower noise
- Segmented acquisition (Sequence) mode, dividing the maximum record length into multiple segments (up to 90,000), according to trigger conditions set by the user, with a very small dead time between segments to capture the qualifying event
- History waveform record (History) function for up to 90,000 triggered waveforms (frames)
- Automatic measurement function on 50+ parameters, supports statistics with histogram and trend
- Two Math traces, support 2 Mpts FFT, +, -, x, ÷, d/dt, ∫dt, √, average, ERES, and formula editor
- Abundant data processing and analysis functions such as Search, Navigate, Mask Test, Bode plot, Power Analysis (optional) and Counter
- 16 digital channels (optional)
- Built-in 50 MHz waveform generator (optional)
- Large 10.1" TFT-LCD display with 1024x600 resolution; Capacitive touch screen supports multi-touch gestures
- Multiple interfaces: USB Host, USB Device (USBTMC), LAN(VXI-11/Telnet/Socket), Pass/Fail, Trigger Out
- Built-in web server supports remote control by the LAN port using a web browser; Supports SCPI remote control commands
Super Phosphor Oscilloscope

SDS2000X Series

SDS2302X / SDS2304X (300 MHz)
SDS2202X / SDS2204X (200 MHz)
SDS2102X / SDS2104X (100 MHz)
SDS2072X / SDS2074X (70 MHz)

Features and Benefits:

- 70 MHz, 100 MHz, 200 MHz, 300 MHz models
- Real-time sampling rate up to 2 GSa/s
- New generation of SPO technology
  - Waveform capture rate up to 140,000 wfm/s (normal mode), and 500,000 wfm/s (sequence mode)
  - Supports 256-level intensity grading and color temperature display
  - Record length up to 140 Mpts
- Digital trigger system
- Intelligent trigger: Edge, Slope, Pulse, Window, Runt, Interval, Drop out, Pattern and Video (HDTV supported)
- Serial bus triggering and decoder, supports protocols I²C, SPI, UART, CAN, LIN
- Low background noise, supports 1 mV/div to 10 V/div voltage scales
- 10 types of one-button shortcuts, including Auto Setup, Default, Cursors, Measure, Roll, History, Display/Persist, Clear Sweeps, Zoom and Print
- Segmented acquisition (Sequence) mode, divides the maximum record length into multiple segments (up to 80,000), according to trigger conditions set by the user, with a very small dead time segment to capture qualifying events
- History waveform record (history) function (maximum recorded waveform length is 80,000 frames)
- Automatic measurement function for 38 parameters as well as Measurement Statistics, Zoom, Gating, Math, History and Reference functions
- 1 Mpts FFT
- Math and measurement functions use all sampled data points in memory (up to 28 Mpts)
- Preset key can be customized for user settings or factory "defaults"
- Security Erase mode
- High Speed hardware based Pass / Fail function
- High Speed hardware based Pass / Fail function
- Search and navigate
- Large 7 inch TFT-LCD display with 800 * 480 resolution
- Multiple interface types: USB Host, USB Device (USB-TMC), LAN, Pass / Fail, Trigger Out
- Supports SCPI remote control commands
- VXI-11+SCPI, Telnet (port 5024) +SCPI and Socket (port 5025) +SCPI programming over LAN
- Supports web control and virtual instrument control panel for both PC and mobile terminals
- Web control update rate of up-to 10 times/s provides nearly real-time update rate
- Supports Multi-language display and embedded online help

SDS2000X-E Series

SDS2352X-E (350 MHz)
SDS2202X-E (200 MHz)

Features and Benefits:

- Real-time sampling rate up to 2 GSa/s (1 GSa/s per channel, if both channels active)
- Intelligent trigger: Edge, Slope, Pulse Width, Window, Runt, Interval, Time out (Dropout), Pattern
- Serial bus triggering and decoding (standard), supports protocols IIC, SPI, UART, CAN, LIN
- Video trigger, supports HDTV
- Low background noise with voltage scales from 500 μV/div to 10 V/div
- 10 types of one-button shortcuts, supports Auto Setup, Default, Cursors, Measure, Roll, History, Display/Persist, Clear Sweeps, Zoom and Print
- Segmented acquisition (Sequence) mode, divides the maximum record length into multiple segments (up to 80,000), according to trigger conditions set by the user, with a very small dead time segment to capture qualifying events
- History waveform record (history) function (maximum recorded waveform length is 80,000 frames)
- Automatic measurement function for 38 parameters as well as Measurement Statistics, Zoom, Gating, Math, History and Reference functions
- 1 Mpts FFT
- Math and measurement functions use all sampled data points in memory (up to 28 Mpts)
- Preset key can be customized for user settings or factory "defaults"
- Security Erase mode
- High Speed hardware based Pass / Fail function
- High Speed hardware based Pass / Fail function
- Search and navigate
- Large 7 inch TFT-LCD display with 800 * 480 resolution
- Multiple interface types: USB Host, USB Device (USB-TMC), LAN, Pass / Fail, Trigger Out
- Supports SCPI remote control commands
- VXI-11+SCPI, Telnet (port 5024) +SCPI and Socket (port 5025) +SCPI programming over LAN
- Supports web control and virtual instrument control panel for both PC and mobile terminals
- Web control update rate of up-to 10 times/s provides nearly real-time update rate
- Supports Multi-language display and embedded online help
Super Phosphor Oscilloscope

SDS1000X-E Series
SDS1204X-E / SDS1202X-E (200 MHz)
SDS1104X-E (100 MHz)

Features and Benefits:
- Two channel series have one 1 GSa/s ADC, four channel series have two 1 GSa/s ADCs. When all channels are enabled, each channel has a maximum sample rate of 500 MSa/s. When a single channel per ADC is active, it has sampling rate of 1 GSa/s
- The newest generation of SPO technology
  - Waveform capture rate up to 100,000 wfm/s (normal mode), and 400,000 wfm/s (sequence mode)
  - Supports 256-level intensity grading and color display modes
  - Record length up to 14 Mpts
- Digital trigger system
- Intelligent trigger: Edge, Slope, Pulse Width, Window, Runt, Interval, Time out (Dropout), Pattern
- Serial bus triggering and decoding (Standard), supports protocols IIC, SPI, UART, RS232, CAN, LIN
- Segmented acquisition (Sequence) mode, divides the maximum record length into multiple segments (up to 80,000), according to trigger conditions set by the user, with a very small dead time segment to capture the qualifying event.
- 1 Mpts FFT
- Math and measurement functions use all sampled data points (up to 14 Mpts)
- MSO, 16 digital channels (four channel series only, optional)
- Search and navigate (four channel series only)
- USB AWG module (four channel series only, optional)
- USB WIFI adapter (four channel series only, optional)
- Bode plot (four channel series only)

SDS1000X / SDS1000X+ Series
SDS1202X / SDS1202X+ (200 MHz)
SDS1102X+ (100 MHz)

Features and Benefits:
- 100 MHz, 200 MHz bandwidth models
- Real-time sampling rate up to 1 GSa/s
- New generation of SPO technology
  - Waveform capture rate up to 60,000 wfm/s (normal mode), and 400,000 wfm/s (sequence mode)
  - Supports 256-level intensity grading and color temperature display
  - Record length up to 14 Mpts
- Digital trigger system
- Intelligent trigger: Edge, Slope, Pulse Width, Window, Runt, Interval, Time out (Dropout), Pattern
- Serial bus triggering and decode, supports protocols IIC, SPI, UART, RS232, CAN, LIN
- Video trigger, supports HD TV
- Low background noise, supports 500 μV / div to 10 V / div voltage scales
- 10 types of one-button shortcuts, supports Auto Setup, Default, Cursors, Measure, Roll, History, Display/Persist, Clear Sweep, Zoom and Print
- Segmented acquisition (Sequence) mode, dividing the maximum record length into multiple segments (up to 80,000), according to trigger conditions set by the user, with a very small dead time segment to capture the qualifying event.
- 1 Mpts FFT
- Math and measurement functions use all sampled data points (up to 14 Mpts)
- MSO, 16 digital channels (four channel series only, optional)
- Search and navigate (four channel series only)
- USB AWG module (four channel series only, optional)
- USB WIFI adapter (four channel series only, optional)
- Bode plot (four channel series only)
**Digital Storage Oscilloscope**

**SDS1000DL+ / SDS1000CML+ Series**

SDS1152CML+ (150 MHz)
SDS1102CML+ (100 MHz)
SDS1072CML+ (70 MHz)
SDS1052DL+ (50 MHz)

**Features and Benefits**
- 50 MHz, 70 MHz, 100 MHz, 150 MHz bandwidth models
- Real-time sampling rate up to 1 GSa/s, Equivalent-time sampling rate up to 50 GSa/s
- Memory Depth up to 2 Mpts
- Trigger types: Edge, Pulse, Video, Slope, Alternate
- Waveform math functions: +, -, *, /, FFT
- 6 digits frequency counter
- Supports Multi-language display and embedded online help
- Screensaver from 1 minute to 5 hours
- Digital filter and waveform recorder function
- 7 inch TFT-LCD display with 800 * 480 resolution

**Function/Arbitrary Waveform Generator**

**SDG6000X Series**

SDG6052X (500 MHz)
SDG6032X (350 MHz)
SDG6022X (200 MHz)

**Features and Benefits**
- Innovative TrueArb and EasyPulse technology
- Dual-Channel, 500 MHz maximum bandwidth, 20 Vpp maximum output amplitude, high fidelity output with 80 dB dynamic range
- High-performance sampling system with 2.4 GSa/s sampling rate and 16-bit vertical resolution
- Multi-function signal generator, meeting requirements in wide range, Continuous Wave Generator, Pulse Generator, Function Arbitrary Waveform Generator, IQ Signal Generator (optional), Noise Generator, PRBS Generator
- Sweep and Burst function
- Harmonics function
- Waveform Combining function
- Channel Coupling, Copy and Tracking function
- 196 built-in arbitrary waveforms
- High precision Frequency Counter
- Standard interfaces include: USB Host, USB Device (USBTMC), LAN (VXI-11, Socket, Telnet), GPIB (Optional)
- 4.3” touch screen display for easier operation

**SDG800 Series**

SDG830 (30 MHz)
SDG810 (10 MHz)

**Features and Benefits**
- Advanced DDS technology, 3.5 inch color TFT-LCD
- 125 MSa/s sampling rate, 14 bit vertical resolution, 16 Kpts max wave length
- 5 types of standard waveforms, built-in 46 types of arbitrary waveforms, sync signal output, 1 μHz frequency resolution
- Complete modulation functions: AM,DSB-AM, FM, PM, FSK, ASK, PWM, linear/logarithmic sweep and burst
- Innovative EasyPulse technology, can output pulse of low jitter, quick rising/falling edge
- Support USB-TMC protocol and SCPI programming command control
- Arbitrary waveform edit software, provides lots of painting method, capable of edit complicate waveform quickly and precisely
Function/Arbitrary Waveform Generator

**SDG2000X Series**
- SDG2122X (120 MHz)
- SDG2082X (80 MHz)
- SDG2042X (40 MHz)

**Features and Benefits**
- Dual-channel, 120 MHz maximum bandwidth, 20 Vpp maximum output amplitude, high fidelity output with 80 dB dynamic range
- High-performance sampling system with 1.2 GSa/s sampling rate and 16-bit vertical resolution. No detail in your waveforms will be lost
- Innovative TrueArb technology, based on a point-by-point architecture, supports any 8 pts~8 Mpts Arb waveform with a sampling rate in range of 1 μSa/s~75 MSa/s
- Innovative EasyPulse technology, capable of generating lower jitter Square or Pulse waveforms, brings a wide range and extremely high precision in pulse width and rise/fall time adjustments
- Sweep and Burst function; Harmonics mode supported
- 4.3” touch screen display for easier operation

**SDG1000X Series**
- SDG1062X (60 MHz)
- SDG1032X (30 MHz)

**Features and Benefits**
- 150 MSa/s sampling rate, 14-bit vertical resolution, and 16 kpts waveform length
- Innovative TrueArb and EasyPulse technology
- Special circuit for Square wave function, can generate Square waves up to 60 MHz with jitter less than 300 ps+0.05 ppm of period
- Plenty of analog and digital modulation types: AM, DSB-AM, FM, PM, FSK, ASK, PSK and PWM, Sweep and Burst functions
- Waveform Combining function
- High precision Frequency Counter
- Standard interfaces: USB Host, USB Device (USBTMC), LAN (VXI-11)
- Optional interface: GPIB

Programmable Linear DC Power Supply

**SPD1000X Series**
- SPD1168X (16 V/8 A)
- SPD1305X (30 V/5 A)

**Features and Benefits**
- Single path high-precision programmable voltage output
- 16 V/8 A, total power up to 128 W
- 30 V/5 A, total power up to 150 W
- Stable, reliable, Low ripple and noise: ≤ 350 uVrms/3 mVpp; < 2 mArms
- Fast transient response time: < 50 μs
- 5 digit Voltage, 4 digit Current Display, Minimum Resolution: 1 mV/1 mA
- Supports front panel timing output functions
- 2.8 inch true color TFT- LCD 240 *320 display
- 2 types of output modes: Two-wire output mode, 4-wire compensation output mode, Maximum compensation voltage 1 V
- 100/120/220/230 V compatible design to meet the needs of different power grids
- Intelligent temperature-controlled fan reduces noise
- Clear graphical interface, with the waveform display function
- Internal 5 groups of system parameter save/recall
- Includes PC software: Easypower, supports SCPI, LabView driver

**SPD3303C Series**
- SPD3303C (10 mV,10 mA)

**Features and Benefits**
- 3 independent high precision output: 30 V/3 A*2, 2.5 V/3.3 V/5 V/3 A*1, total 195 W power
- 4 digits voltage and 3 digits current display, min resolution: 10 mV, 10 mA
- Support timing programming and timing output
- Three output modes: independent, series and parallel connect, enhance output power range
- 100 V/120 V/220 V/230 V compatible design, to meet the needs of different power grids
- Smart temperature controlled fan, effectively reduce the noise
- Save/Recall 5 group system specifications, support data storage expansion
- provide EasyPower software to meet the control and communication needs
- Support USB-TMC protocol and SCPI remote command, LabView driver
Programmable Linear DC Power Supply

**SPD3303X Series**

**SPD3303X-E (10 mv, 10 mA)**  
**SPD3303X (1 mv, 1 mA)**

**Features and Benefits**
- 3 independent controlled and isolated outputs, 32 V/3.2 A×2, 2.5 V/3.3 V/5 V/3.2 A×1, total 220 W
- 5 digits Voltage, 4 digits Current Display, Minimum Resolution: 1 mV/1 mA (SPD3303X)
- Supports front panel timing output functions
- 4.3 inch true color TFT-LCD 480x272 display
- 3 types of output modes: independent, series, parallel
- 100 V/120 V/220 V/230 V compatible design to meet the needs of different power grids
- Intelligent temperature-controlled fan, effectively reducing noise
- Clear graphical interface, with the waveform display function
- Internal 5 groups of system parameter save/recall, supports data storage space expansion
- Provides PC software: Easypower, supports SCPI, LabView driver

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Handheld Oscilloscope

**SHS1000 Series**

**SHS1102 (100 MHz)**  
**SHS1062 (60 MHz)**

**Features and Benefits**
- Completely isolated oscilloscope channels, isolated between oscilloscope and multimeter channels
- Oscilloscope isolation level: CAT I 1000 V and CAT II 600 V
- Combines the functions of oscilloscope, multimeter and recorder in one instrument
- Support waveform print and USB storage
- 60/100 MHz bandwidth, 2 input channels, 2 Mpts memory depth
- 1 GSa/s real time sampling rate, 50 GSa/s equivalent sampling rate
- Equipped with high precision multimeter and many usual testing functions
- 3 kinds of cursor mode, 32 kinds of automatic waveform measurements
- 5.7 inch color TFT-LCD
- Support trend plot and long time data recorder function

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**SHS800 Series**

**SHS820 (200 MHz)**  
**SHS810 (100 MHz)**  
**SHS806 (60 MHz)**

**Features and Benefits**
- Combines the functions of oscilloscope, multimeter and recorder in one instrument
- Support waveform print and USB storage
- 60/100/200 MHz bandwidth, 2 input channels, 2 Mpts memory depth
- 1 GSa/s real time sampling rate, 50 GSa/s equivalent sampling rate
- Equipped with high precision multimeter and many usual testing functions
- 3 kinds of cursor mode, 32 kinds of automatic waveform measurements
- 5.7 inch color TFT-LCD
- Support trend plot and long time data recorder function
**SDL1000X Series**

SDL1020X/X-E (200W)
SDL1030X/X-E (300W)

**Features and Benefits**
- SDL1020X (Single channel): DC 150 V/30 A, total power up to 200 W
- SDL1030X (Single channel): DC 150 V/30 A, total power up to 300 W
- 4 static modes / Dynamic mode: CC/CV/CR/CP
- CC Dynamic mode: Continuous, pulsed, toggled
- CC Dynamic mode: 25 kHz, CP Dynamic mode: 12.5 kHz, CV Dynamic mode: 0.5 Hz
- Measuring speed of voltage and current: up to 500 kHz
- Adjustable current rise time range: 0.001 A/us~2.5 A/us
- Short-circuit, Battery test, CR-LED mode, and factory test functions
- 4-wire SENSE compensation mode function
- List function supports editing as many as 100 steps
- Program function supports 50 groups of steps
- OCP, OVP, OPP, OTP and LRV protection
- External analog control
- Voltage, Current monitoring via 0-10 V
- 3.5 inch TFT-LCD display, capable of displaying multiple parameters and states simultaneously
- Built-in RS232/USB/LAN communication interface, USB-GPIB module (optional)
- Waveform trend chart and ease-to-use file storage and call functions
- Includes PC software: Supports SCPI, LabView driver

**SDM3065X Series**

SDM3065X
SDM3065X-SC (with Scanner Card)

**Features and Benefits**
- 4.3” TFT-LCD, 480*272
- Real 6½ digits readings resolution (2,200,000 counts)
- True-RMS AC Voltage and AC Current measuring
- Supports double display, Chinese and English Menu
- File management (support for U-disc and local storage)
- Built-in cold terminal compensation for thermocouple
- Comes with easy, convenient and flexible any sensor measurement control software: EasyDMM
- Standard interfaces: USB Device, USB Host, LAN (Optional Accessories: USB-GPIB Adapter)
- Scanner Card SC1016 (Only for SDM3065X-SC)
- Built-in Help system makes information acquisition easier
- Support remote control operation via SCPI commands. Compatible with commands of other main stream multimeters
- Supports intelligent management system for laboratory based on BS framework and LAN

**SDM3055 Series**

SDM3055
SDM3055-SC (with Scanner Card)

**Features and Benefits**
- Real 5½ digits readings resolution (240, 000 counts)
- Up to 150 rdgs/s measurement speed
- True-RMS AC Voltage and AC Current measuring
- 1 Gb Nand flash size, Mass storage configuration files and data files
- Built-in cold terminal compensation for thermocouple temperature measurements
- With easy, convenient and flexible PC software: EasyDMM
- standard interfaces: USB Host, LAN (Optional Accessories USB-GPIB Adapter)
- Scanner Card SC1016 ( Only for SDM3055-SC )
- Support remote control operation via SCPI commands. Compatible with commands of main stream multimeters
**Digital Multimeter**

**SDM3045X Series**

**SDM3045X**

**Features and Benefits**
- Real 4½ digit (60000 count) readings resolution
- Up to 150 rdgs/s measurement speed
- True-RMS AC Voltage and AC Current measuring
- 1 Gb NAND flash size, Mass storage configuration files and data files
- Built-in cold terminal compensation for thermocouple
- With easy, convenient and flexible PC software: EasyDMM
- Standard interface: USB Device, USB Host, LAN (Optional Accessories: USB-GPIB Adapter)
- USB & LAN remote interfaces support common SCPI command set. Compatible with other popular DMMs on the market

**RF Signal Generator**

**SSG5000X Series**

**SSG5040X (CW MODE 9 kHz ~ 4 GHz)**
**SSG5060X (CW MODE 9 kHz ~ 6 GHz)**
**SSG5040X-V (CW MODE 9 kHz ~ 4 GHz / IQ MODE 10 MHz ~ 4 GHz)**
**SSG5060X-V (CW MODE 9 kHz ~ 6 GHz / IQ MODE 10 MHz ~ 6 GHz)**

**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
- Single pulse, double pulse and Pulse train generator (option)
- USB-power meter measurement
- Single pulse, double pulse and Pulse train generator (option)
- USB-power meter measurement
- Standard interface included USB Host, USB Device (USB TMC), LAN (VXI-11, Socket, Telnet). Optional interface: GPIB

**SSG3000X Series**

**SSG3032X (CW MODE 9 kHz~3.2 GHz)**
**SSG3021X (CW MODE 9 kHz~2.1 GHz)**
**SSG3032X-IQE (IQ MODE 10 MHz~3.2 GHz)**
**SSG3021X-IQE (IQ MODE 10 MHz~2.1 GHz)**

**Features and Benefits**
- 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
**Real-Time Spectrum Analyzer**

**SSA3000X-R Series**

**SSA3050X-R (9 kHz~5.0 GHz)**
**SSA3075X-R (9 kHz~7.5 GHz)**

**Features and Benefits:**
- -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
- Up to 40 MHz Real Time Analysis Bandwidth
- 100% POI 7.20 μs, Dynamic Range 60 dB
- Multi-view for Density, Spectrogram, PVT, and multi trigger and FMT
- Modulation Analysis up to 40 MHz BW (Opt.)
- Reflection Measurement Kit (Opt.)
- EMI Filter and Quasi-Peak Detector Kit (Opt.)
- 10.1 Inch Multi-Touch Screen, Mouse and Keyboard supported
- Web Browser Remote Control on PC and Mobile Terminals and File Operation

**SSA3000X Plus Series**

**SSA3021X Plus (9 kHz~2.1 GHz)**
**SSA3032X Plus (9 kHz~3.2 GHz)**
**SSA3075X Plus (9 kHz~7.5 GHz)**

**Features and Benefits:**
- -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 (Opt.)
- Analog and Digital Signal Modulation Analysis Mode (Opt.)
- Reflection Measurement Kit (Opt.)
- EMI Filter and Quasi-Peak Detector Kit (Opt.)
- 10.1 Inch Multi-Touch Screen, Mouse and Keyboard supported
- Web Browser Remote Control on PC and Mobile Terminals and File Operation

**Spectrum & Vector Network Analyzer**

**SSA3000X Series**

**SSA3032X (9 kHz~3.2 GHz)**
**SSA3021X (9 kHz~2.1 GHz)**

**Features and Benefits:**
- -165 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 (Standard)
- Reflection Measurement Kit (Opt.)
- Advanced Measurement Kit (Opt.)
- EMI Pre-compliance Measurements Kit (Opt.)
- 10.1 Inch WVGA (1024x600) Display

**SVA1000X Series**

**SVA1015X (9 kHz~1.5 GHz)**
**SVA1032X (9 kHz~3.2 GHz)**
**SVA1075X (9 kHz~7.5 GHz)**

**Features and Benefits:**
- 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.)
- Analog and Digital Signal Modulation Analysis Mode (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
## Probes and Accessories

<table>
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<tr>
<th>Type</th>
<th>Model</th>
<th>Picture</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive Probe</td>
<td>PB470</td>
<td><img src="https://via.placeholder.com/150" alt="PB470" /></td>
<td>PB470, 70 MHz bandwidth&lt;br&gt;PP510, 100 MHz bandwidth&lt;br&gt;PP215, 200 MHz bandwidth&lt;br&gt;PP430, 300 MHz bandwidth&lt;br&gt;1 X/10 X decay, 1 M/10 Mohm, 300 V/600 V</td>
</tr>
<tr>
<td></td>
<td>PB925</td>
<td><img src="https://via.placeholder.com/150" alt="PB925" /></td>
<td>Bandwidth 250 MHz, fixed 10 X decay, the rise time of about 1.2 ns, input capacitance: 16 pF, compensation range: 10 pF-35 pF, input impedance 10 MΩ, length 120 cm, safe voltage levels: CAT II 1000 V, CAT III 600 V</td>
</tr>
<tr>
<td></td>
<td>PB830</td>
<td><img src="https://via.placeholder.com/150" alt="PB830" /></td>
<td>Bandwidth 300 MHz, fixed 10 X decay, the rise time of about 1 ns, input capacitance: 16 pF, compensation range: 10 pF-20 pF, input impedance 10 MΩ, length 140 cm, safe voltage levels: CAT II 1000 V, CAT III 600 V</td>
</tr>
<tr>
<td>Current Probe</td>
<td>CPL5100</td>
<td><img src="https://via.placeholder.com/150" alt="CPL5100" /></td>
<td>Bandwidth: DC-600 kHz; Current range L, H; Maximum operation current 10 A/L/100 A/H; Max operation voltage 600 V; DC Accuracy: 3%±50 mA (L); 1500 mA-40 A Peak: 4%±50 mA; 40 A-100 A Peak: ±15% Maximum (H); 9 V alkaline layer-built battery/15 H</td>
</tr>
<tr>
<td></td>
<td>CP4020</td>
<td><img src="https://via.placeholder.com/150" alt="CP4020" /></td>
<td>Bandwidth: 100 kHz; Maximum continuous current 20 Arms; Peak current 60 A; Switching ratio: 50 mV/A; 5 mV/A; DC measurement accuracy: 50 mV/A (0.4 A-10 Apk) ±2%; 5 mV/A (1 A-60 Apk)±2%; 9 V battery-powered</td>
</tr>
<tr>
<td></td>
<td>CP4050</td>
<td><img src="https://via.placeholder.com/150" alt="CP4050" /></td>
<td>Bandwidth: 1 MHz; Maximum continuous current 50 Arms; Peak current 140 A; Switching ratio: 500 mV/A; 50 mV/A; DC measurement accuracy: 500 mV/A (20 mA-14 Apk) ±3%±20 mA; 50 mV/A (200 mA-100 Apk) ±4%±200 mA; 50 mV/A (100 A-140 Apk)±15% max; 9 V battery-powered</td>
</tr>
<tr>
<td></td>
<td>CP4070</td>
<td><img src="https://via.placeholder.com/150" alt="CP4070" /></td>
<td>Bandwidth: 150 KHz; Maximum continuous current 70 Arms; Peak current 200 A; Switching ratio: 50 mV/A; 5 mV/A; DC measurement accuracy: 50 mV/A (0.4 A-10 Apk) ±2%; 5 mV/A (1 A-200 Apk)±2%; 9 V battery-powered</td>
</tr>
<tr>
<td></td>
<td>CP4070A</td>
<td><img src="https://via.placeholder.com/150" alt="CP4070A" /></td>
<td>Bandwidth: 300 KHz; Maximum continuous current 70 Arms; Peak current 200 A; Switching ratio: 100 mV/A; 10 mV/A; DC measurement accuracy: 100 mV/A (50 mA-10 Apk) ±3%±50 mA; 10 mV/A (500 mA-40 Apk) ±4%±50 mA; 10 mV/A (40 A-200 Apk) ±15% max; 9 V battery-powered</td>
</tr>
<tr>
<td></td>
<td>CP5030</td>
<td><img src="https://via.placeholder.com/150" alt="CP5030" /></td>
<td>Bandwidth: 50 MHz; Maximum continuous current 30 Arms; Peak current 50 A; Switching ratio: 100 mV/A; 1 V/A; AC/DC measurement accuracy: 1 A (±1%±1 mA); 100 mV/A (±1%±10 mA); Standard DC12 V/1.2 A power adapter</td>
</tr>
<tr>
<td></td>
<td>CP5030A</td>
<td><img src="https://via.placeholder.com/150" alt="CP5030A" /></td>
<td>Bandwidth: 100 MHz; Maximum continuous current 30 Arms; Peak current 50 A; Switching ratio: 100 mV/A; 1 V/A; AC/DC measurement accuracy: 1 A (±1%±1 mA); 100 mV/A (±1%±10 mA); Standard DC12 V/1.2 A power adapter</td>
</tr>
<tr>
<td></td>
<td>CP5150</td>
<td><img src="https://via.placeholder.com/150" alt="CP5150" /></td>
<td>Bandwidth: 12 MHz; Maximum continuous current 150 Arms; Peak current 300 A; Switching ratio: 100 mV/A; 1 V/A; AC/DC measurement accuracy: 100 mV/A (±1%±1 mA); 10 mV/A (±1%±10 mA); Standard DC 12 V/1.2 A power adapter</td>
</tr>
<tr>
<td></td>
<td>CP5500</td>
<td><img src="https://via.placeholder.com/150" alt="CP5500" /></td>
<td>Bandwidth: 5 MHz; Maximum continuous current 500 Arms; Peak current 750 A; Switching ratio: 100 mV/A; 10 mV/A; AC/DC measurement accuracy: 100 mV/A (±1%±1 mA); 10 mV/A (±1%±10 mA); Standard DC 12 V/1.2 A power adapter</td>
</tr>
<tr>
<td>Type</td>
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</tr>
<tr>
<td>High Voltage Differential Probe</td>
<td>DPB1300</td>
<td><img src="image1.png" alt="Picture" /></td>
<td>Bandwidth: DC-50 MHz; Rise time ≤7 ns; DC Accuracy ±2%; Attenuation Ratio 50 X/500 X; Max Differential Test Voltage (DC + Peak AC) 50 X: ±130 V, 500 X:±1300 V; DC 12 V/1.2 A Power</td>
</tr>
<tr>
<td></td>
<td>DPB4080</td>
<td><img src="image2.png" alt="Picture" /></td>
<td>Bandwidth: 50 MHz; Maximum input differential voltage 800 V (DC + Peak AC); Range selection (attenuation ratio):10 X/100 X; Accuracy: ±1%; Standard DC 9 V/1 A power adapter</td>
</tr>
<tr>
<td></td>
<td>DPB5150</td>
<td><img src="image3.png" alt="Picture" /></td>
<td>Bandwidth: 70 MHz; Maximum input differential voltage 1500 V (DC + Peak AC); Range selection (attenuation ratio): 50 X/500 X; Accuracy: ±2%; Standard 5 V/1 A USB power adapter</td>
</tr>
<tr>
<td></td>
<td>DPB5150A</td>
<td><img src="image4.png" alt="Picture" /></td>
<td>Bandwidth: 100 MHz; Maximum input differential voltage 1500 V (DC + Peak AC); Range selection (attenuation ratio): 50 X/500 X; Accuracy: ±2%; Standard 5 V/1 A USB power adapter</td>
</tr>
<tr>
<td></td>
<td>DPB5700</td>
<td><img src="image5.png" alt="Picture" /></td>
<td>Bandwidth: 70 MHz; Maximum input differential voltage 7000 V (DC + Peak AC); Range selection (attenuation ratio): 100 X/1000 X; Accuracy: ±2%; Standard 5 V/1 A USB power adapter</td>
</tr>
<tr>
<td></td>
<td>DPB5700A</td>
<td><img src="image6.png" alt="Picture" /></td>
<td>Bandwidth: 100 MHz; Maximum input differential voltage 7000 V (DC + Peak AC); Range selection (attenuation ratio): 100 X/1000 X; Accuracy: ±2%; Standard 5 V/1 A USB power adapter</td>
</tr>
<tr>
<td>High Voltage Probe</td>
<td>HPB4010</td>
<td><img src="image7.png" alt="Picture" /></td>
<td>Bandwidth: 40 MHz; Maximum measurement voltage DC: 10 KV; AC(rms): 7 KV (sine); AC (Vpp): 20 KV (Pulse); attenuation ratio1:1000; Accuracy: ≤3%</td>
</tr>
<tr>
<td>Logic Probe</td>
<td>SPL1016</td>
<td><img src="image8.png" alt="Picture" /></td>
<td>Logic Probe for SDS1000X+ series, 16-channel, 500 MSa/s</td>
</tr>
<tr>
<td></td>
<td>SPL2016</td>
<td><img src="image9.png" alt="Picture" /></td>
<td>Logic Probe for SDS2000X and SDS5000X series , 16-channel, 500 MSa/s</td>
</tr>
<tr>
<td>Logic Analyzer</td>
<td>SLA1016</td>
<td><img src="image10.png" alt="Picture" /></td>
<td>16 logic analyzer hardware module, suitable for SDS1000X-E 4 channel series and SDS2000X-E oscilloscope.</td>
</tr>
<tr>
<td>Near-Field Probe</td>
<td>SRF5030T</td>
<td><img src="image11.png" alt="Picture" /></td>
<td>Near Field: 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</td>
</tr>
<tr>
<td>Isolated Front End</td>
<td>ISFE</td>
<td><img src="image12.png" alt="Picture" /></td>
<td>Realize isolation among ordinary oscilloscope channels, isolation between the measured signal and ground, use USB 5 V power supply, plug and play, the maximum input voltage of up to ± 600 Vpk</td>
</tr>
<tr>
<td>GPIB</td>
<td>USB-GPIB Adapter</td>
<td><img src="image13.png" alt="Picture" /></td>
<td>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</td>
</tr>
<tr>
<td>Demo Board</td>
<td>STB3</td>
<td><img src="image14.png" alt="Picture" /></td>
<td>Output signals include square waves, sine, AM, pulse, PWM, fast edge, I2C, CAN, LIN signal etc</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td><strong>Model</strong></td>
<td><strong>Picture</strong></td>
<td><strong>Specifications</strong></td>
</tr>
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</tr>
<tr>
<td>Deskew Fixture</td>
<td>DF2001A</td>
<td><img src="image1" alt="DF2001A" /></td>
<td>Supporting power analysis software for calibration phase voltage and current probes generated during transmission</td>
</tr>
<tr>
<td>Cable</td>
<td>N-BNC-2L</td>
<td><img src="image2" alt="N-BNC-2L" /></td>
<td>N-BNC cable for SSA3000X Series; 2 GHz bandwidth</td>
</tr>
<tr>
<td></td>
<td>N-N-6L</td>
<td><img src="image3" alt="N-N-6L" /></td>
<td>N-N cable for SSA3000X Series; 6 GHz bandwidth</td>
</tr>
<tr>
<td></td>
<td>N-SMA-6L</td>
<td><img src="image4" alt="N-SMA-6L" /></td>
<td>N-SMA cable for SSA3000X Series; 6 GHz bandwidth</td>
</tr>
<tr>
<td></td>
<td>N-N-18L</td>
<td><img src="image5" alt="N-N-18L" /></td>
<td>N(N)-N(M) cable for SSA3000X, SSA3000X Plus, SSA3000X-R, SVA1000X series, 100cm, 18 GHz bandwidth</td>
</tr>
<tr>
<td></td>
<td>N-SMA-18L</td>
<td><img src="image6" alt="N-SMA-18L" /></td>
<td>N(M)-SMA(M) cable for SSA3000X, SSA3000X Plus, SSA3000X-R, SVA1000X series, 100cm, 18 GHz bandwidth</td>
</tr>
<tr>
<td>Reflection Bridge</td>
<td>RB3X25</td>
<td><img src="image7" alt="RB3X25" /></td>
<td>VSWR bridge: (1 MHz~2.5 GHz), N (M) -N (M) adaptor (2 pcs)</td>
</tr>
<tr>
<td>SSA3000X Utility Kit</td>
<td>UKitSSA3X</td>
<td><img src="image8" alt="UKitSSA3X" /></td>
<td>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;</td>
</tr>
<tr>
<td>WIFI Adapter</td>
<td>TL_WN725N</td>
<td><img src="image9" alt="TL_WN725N" /></td>
<td>USB-WIFI adapter; suitable for SDS1000X-E 4 channel series oscilloscope</td>
</tr>
<tr>
<td>USB AWG Module</td>
<td>SAG1021I</td>
<td><img src="image10" alt="SAG1021I" /></td>
<td>Output Sine, Square, Ramp, pulse, Noise, DC and 45 built-in waveforms. The arbitrary waveforms can be accessed and edited by the EasyWave PC software. Isolated voltage ±42 Vpk.</td>
</tr>
<tr>
<td>Carry Bag</td>
<td>BAG-S1</td>
<td><img src="image11" alt="BAG-S1" /></td>
<td>Soft Carry Case for SDS1000DL+/CML+, SDS1000X, SDS1000X-E, SDS2000X-E Series</td>
</tr>
<tr>
<td></td>
<td>BAG-S2</td>
<td><img src="image12" alt="BAG-S2" /></td>
<td>Soft Carry Case for SDS2000X, SDS5000X, SSA3000X, SVA1000X, SSA3000X Plus</td>
</tr>
<tr>
<td>Type</td>
<td>Model</td>
<td>Picture</td>
<td>Specifications</td>
</tr>
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</tr>
<tr>
<td>Rack Mount</td>
<td>SDG-2-RMK</td>
<td><img src="https://example.com/image1.png" alt="Image" /></td>
<td>Rackmount kit for two instruments, compatible with the SDG800, SDG1000, SDG1000X, SDG2000X, SDG5000 and SDG6000X series function generator and SDM3045X, SDM3055, SDM3065X digital multimeter</td>
</tr>
<tr>
<td></td>
<td>SDS1X-E-RMK</td>
<td><img src="https://example.com/image2.png" alt="Image" /></td>
<td>The height is 4U, suitable for SDS1000X-E oscilloscope</td>
</tr>
<tr>
<td></td>
<td>SDG-RMK</td>
<td><img src="https://example.com/image3.png" alt="Image" /></td>
<td>Single instrument rack mount kit 19&quot; shelf design is compatible with the SDG800, SDG1000, SDG1000X, SDG2000X, SDG6000X, and SDG5000 series function generators as well as the SDM3000 series of DMMs</td>
</tr>
<tr>
<td></td>
<td>SSA-RMK</td>
<td><img src="https://example.com/image4.png" alt="Image" /></td>
<td>Single Instrument rack mount kit, suit for SSA3000X, SVA1000X</td>
</tr>
<tr>
<td></td>
<td>SPD3000-RMK</td>
<td><img src="https://example.com/image5.png" alt="Image" /></td>
<td>Compatible with SPD3000X / X-E / D / S / C models. 4U rack height</td>
</tr>
<tr>
<td></td>
<td>SDS2000-RMK</td>
<td><img src="https://example.com/image6.png" alt="Image" /></td>
<td>19&quot; rack mount kit for a single SDS2000 or SDS2000X series oscilloscopes</td>
</tr>
</tbody>
</table>
| Amplifier    | SPA1010     | ![Image](https://example.com/image7.png) | Increase the voltage and current output capabilities to generators like the SIGLENT SDG family.  
Typical Input Impedance: 15kΩ  
Input:  
+/- 6.5V Vpp (Gain: X1)  
+/- 1.3 V (Gain: X10)  
Gain: Switched 10V/1V and 10V/10V  
Output Voltage: 25.4 Vpp  
Output Current: 1.12 A  
Slew Rate: ≥ 90 V/μs  
Overshoot: ≤ 4%  
Compatible with all SIGLENT SDG series generators |
| VNA Calibration Kit | F503ME | ![Image](https://example.com/image8.png) | Mechanical Calibration Kit: Open(M), Short(M), Match(M,50), Through(F-F), 4.5 GHz                                                               |
|              | F503FE      | ![Image](https://example.com/image9.png) | Mechanical Calibration Kit: OSLT, DC - 4.5 GHz, N-Female connector                                                                          |
|              | F504MS      | ![Image](https://example.com/image10.png) | Mechanical Calibration Kit: OSLT, DC - 9 GHz, N-Male connector                                                                                |
|              | F504FS      | ![Image](https://example.com/image11.png) | Mechanical Calibration Kit: OSLT, DC - 9 GHz, N-Female connector                                                                                |
|              | F603ME      | ![Image](https://example.com/image12.png) | Mechanical Calibration Kit: OSLT, DC - 4.5 GHz, 3.5mm SMA-Male connector                                                                       |
|              | F603FE      | ![Image](https://example.com/image13.png) | Mechanical Calibration Kit: Open(M), Short(M), Match(M,50), Through(F-F), 4.5 GHz, SMA-type                                                  |
|              | F604MS      | ![Image](https://example.com/image14.png) | Mechanical Calibration Kit: OSLT, DC - 9 GHz, 3.5mm SMA-Male connector                                                                       |
|              | F604FS      | ![Image](https://example.com/image15.png) | Mechanical Calibration Kit: OSLT, DC - 9 GHz, 3.5mm SMA-Female connector                                                                       |