

# CONTENT

01

**Company Info** 

02

Marketing

03

**Applications** 

04

**Products** 





# Siglent Profile

#### Global leader in electronic test and measurement

Products include digital oscilloscopes, signal generators, digital multimeters, power supplies, spectrum analyzers, vector network analyzers, DC loads and other general purpose test instrumentation.

#### The 1st one listed on A-share market in China

Siglent has become the first company in the general electronic test and measurement instrument industry to list on the A-share market in China.

#### Exports to 80+ countries & regions

The leading manufacturer of general purpose test & measurement instrumentation in China.















Siglent **established** in Shenzhen, China

## 2017

Siglent's SDS1000X-E was chosen as **Best Seller** on Amazon

# History

2002

Siglent began a **preliminary study** of digital oscilloscopes

2014

Siglent **America** & Siglent **Europe** established.



## 2021

Siglent, as the **first one** in the general electronic test and measurement industry listed on the **A-share** market in China.

## 2023

Siglent introduced the **40 GHz** RF signal analyzer SSG6000A series and the **4 GHz**, **12-bit** high-resolution oscilloscope SDS7000A series

# 2024

## 2019

Siglent's SDS5000X oscilloscope earned the World Electronics
Achievement Award(WEAA)

2022

Siglent Introduced **the first 12bit** high-resolution oscilloscope SDS2000X HD series Siglent introduced three new 12-bit oscilloscopes, SDS800X HD, SDS1000X HD, SDS3000X HD and a new portable Vector Network Analyzer, SHN900A



## Distribution System



Siglent headquartered in Shenzhen, China, and R&D Center Branch located in Chengdu, China.

There are three international branch offices in Ohio, United States, Augsburg, Germany and Tokyo, Japan.



## R&D Center



15% | About 15% of annual revenue invested into R&D every year

**50%** Professional engineers in the R&D team account for about half of the company's total staff.

**35%** More than 1/3 of engineers have master's degree or above

More than 500 employees worldwide



## Quality of Products





















- SIGLENT is ISO9001 : 2015 and ISO14001 : 2015 certified for its product quality and environmental management programs.
- CE & TUV certificated for SIGLENT product family.
- CNAS accredited for SIGLENT Test & Measurement laboratory.

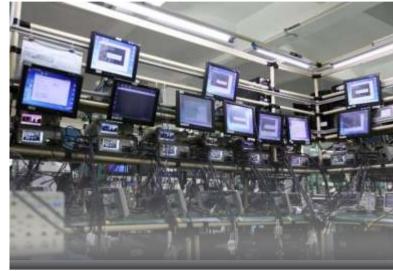


# **Quality of Products**

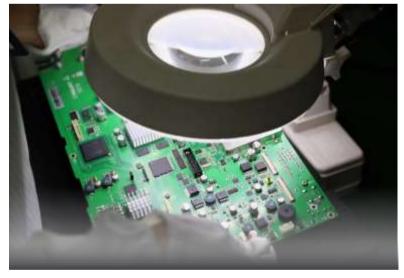
#### Standardized management

Modern standard automation workshop Integrated supply chain system Professional production system









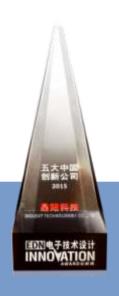
#### **Rigorous testing**

Reliability testing Functional testing Temperature testing



## Honors











**Best Application** Award

Video / Visual Internet of Things Conference

**TOP 5 Innovative** Company

EDN Magazine

**World Electronics** Achievement

**ASPENCORE** 

**ACE Awards Finalist** 

**EE Times and EDN** 

R&D 100 Finalist

R & D 100 Awards

Ceremony and Technical Conference





## Sales Data

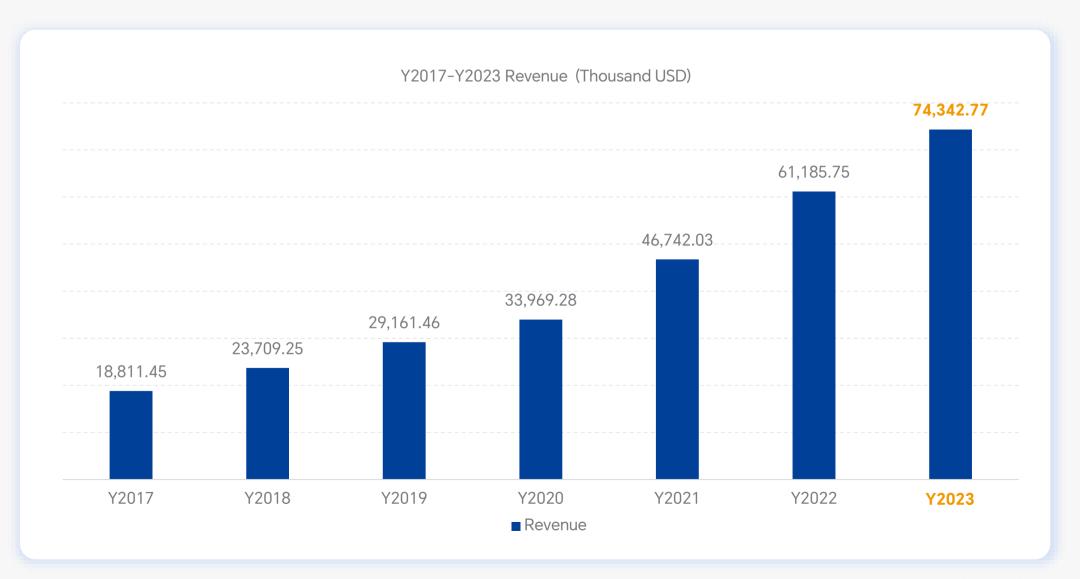
SIGLENT has the fastest growth rate of any major competitor in the world over the last 5 years of published data.

Sales growth rate in 2023 as compared to 2022

21.50% †

Sales compound growth rate in 2017-2023

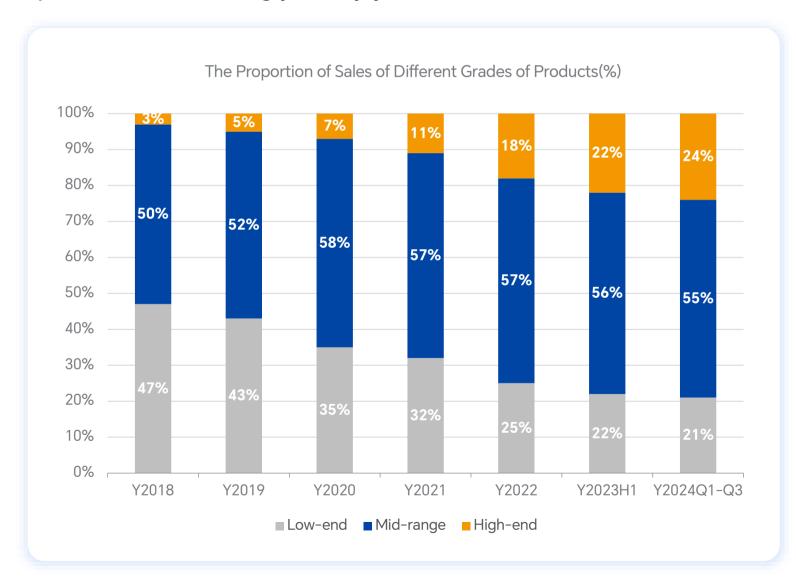
25.80% †

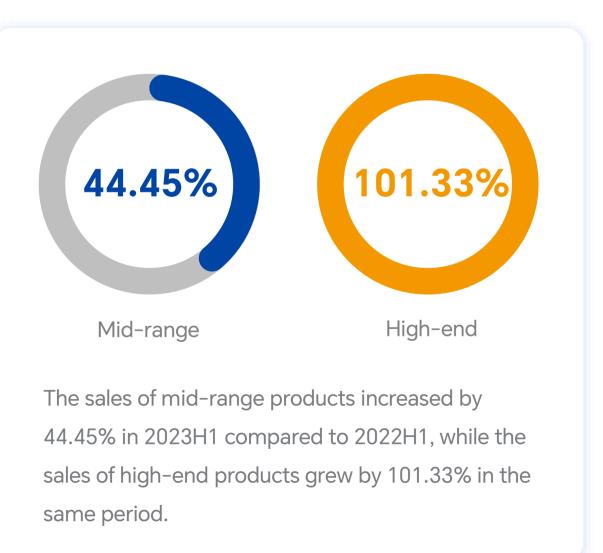




## Sales Data

SIGLENT has launched more mid- to high-end products in recent years, with the proportion of mid- to high-end products increasing year by year.







## **Shows & Seminars**

SIGLENT attends more than **80** international Exhibitions & Seminars each year.



















## Communication

SIGLENT provides test and measurement solutions including Bluetooth, WIFI, 4G, 5G, ZigBee analysis, custom ARB waveforms for receiver testing, and 5G, 4G signal OTA analysis.

5G Signal Test →

- Signal quality and beam performance verification
- Interference Troubleshooting
- Antenna and feeder testing

**Bluetooth Test** 

- Transmit Power Test
- Frequency Error Test
- Frequency Hopping Pattern Test

**WIFI Test** 

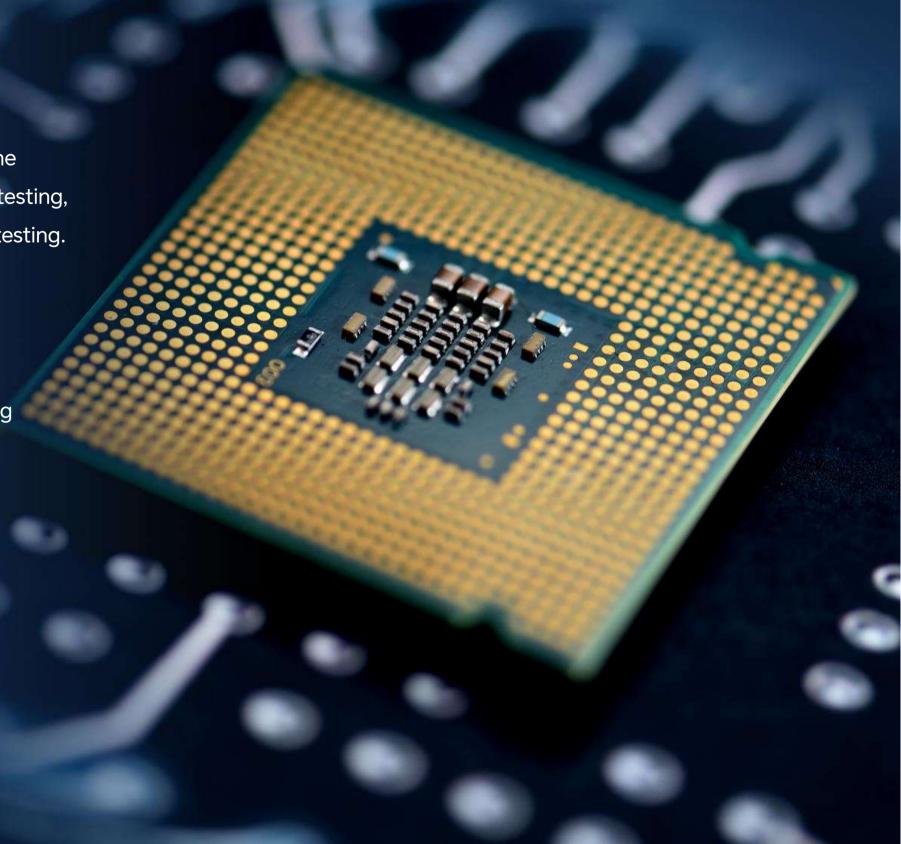
- Modulation Quality Test
- Transmit Template Test
- Adaptive frequency conversion test



## **Semi-conductor**

SIGLENT provides solutions for all aspects of testing in the semiconductor industry, such as material testing, wafer testing, package testing, chip parameter testing and functional testing.

- Wafer Testing
- Silicon Carbide (SiC)/Gallium Nitride (GaN) Switching Characteristics Testing
- MOSFET/IGBT Switching Characteristics Testing
- IV Test
- USB Tx Conformance Test
- Material Test
- MIPID-PHY conformance test





SIGLENT provides comprehensive solutions for the automotive industry, ranging from sensors, in-vehicle radar, in-vehicle networks, power semiconductors, motors, batteries, smart cockpits to charging piles, EMI/EMC, and V2X.

- Automotive Sensor Testing
- Smart Cockpit Testing
- In-vehicle Network Test
- Charging Post Test
- Automotive Power
   Semiconductor Testing

- EMI/EMC Testing
- Tyre Pressure Test
- In-vehicle Radar Test
- Automotive Battery Testing
- **Automotive Motor Testing**



## **New Energy**

SIGLENT provides high-efficiency solutions for the new energy industry, from battery management systems to motor control, from intelligent driving to connected car technology, from motors to photovoltaic inverters to frequency converters.

- Power Battery Testing
- Drive Motor Testing
- On-Board Charger OBC Testing
- Portable Energy Storage Testing
- Photovoltaic Inverter IV
   Characteristics/Efficiency Testing

- AC/DC charging post testing
- IEC Harmonics Testing
- High and Low Voltage Ride
  Through Testing
- Electromagnetic Compatibility EMC Testing







## End User (partial)

































































## Products



#### **OSCILLOSCOPES**

SDS (HD) series oscilloscopes SHS series handheld oscilloscopes



#### **SIGNAL GENERATORS**

SSG series RF generators
SDG series waveform generators



#### **NETWORK ANALYZERS**

SNA series vector network analyzers
SVA series vector network analyzers
SHN series handheld VNA

#### **SPECTRUM ANALYZERS**

SSA series spectrum analyzers
SVA series spectrum analyzers
SHA series handheld spectrum analyzers



#### **OTHER INSTRUMENTS**

SPD/SPS series power supplies
SDM series digital multi-meters
SDL series electronic loads



# SDS (HD) series oscilloscopes SHS series handheld oscilloscopes

#### SSG series RF generators SDG series waveform generators





70/100/150 MHz

100/200 MHz

SDS1000CML+/DL+

SHS800X/1000X



5/10/30 MHz



| SDS7000A                          | 3/4/6 GHz, <b>12-bit</b>      | SSG6000A      | 13.6/20/40 GHz    | SNA6000A | 100 k - 13.5/26.5 GHz                       |
|-----------------------------------|-------------------------------|---------------|-------------------|----------|---|
| SDS6000A                          | 500 M/1 GHz/2 GHz             | SSG5000A      | 13.6/20 GHz       | SNA5000A | 9 k - 4.5/8.5 GHz,<br>100 k - 13.5/26.5 GHz |
| SDS6000L                          | 500 M/1 GHz/2 GHz, 8 CH       | SSG5000X      | 4/6 GHz           | SVA1000X | 9 k -1.5/3.2/7.5 GHz                        |
| SDS5000X                          | 350/500 M/1 GHz               | SSG3000X      | 2.1/3.2 GHz       | SHN900A  | 30 kHz~14/20/26.5 GHz                       |
| SDS3000 / 2000<br>1000 / 800 X HD | 70 MHz ~ 1 GHz, <b>12-bit</b> | SDG7000A      | 350/500 MHz/1 GHz |          |   |
| SDS2000X Plus                     | 100/200/350 MHz               | SDG6000X      | 200/350/500 MHz   |          | <br>  |
| SDS2000X-E                        | 200/350 MHz                   | SDG2000X      | 40/80/120 MHz     |          |   |
| SDS1000X-E                        | 100/200 MHz                   | SDG1000X Plus | 25/30/60 MHz      |          | <br> <br> <br> <br>                         |
| SDS1000X-U                        | 100 MHz                       | SDG1000X      | 30/60 MHz         |          |   |

SDG800

#### SSA/SVA series spectrum analyzers SHA series handheld spectrum analyzers

#### SPD/SPS series power supplies









| arms war wa   |                           |  |  |
|---------------|---------------------------|--|--|
| E C           | <u>●</u> EE               |  |  |
| SSA5000A      | 9 k - 13.6/26.5 GHz       |  |  |
| SSA3000X Plus | 9 k - 1.5/2.1/3.2/7.5 GHz |  |  |
| SSA3000X-R    | 9 k - 3.2/5.0/7.5 GHz     |  |  |

SSA3000X

SPD4000X SPD3303X / X-E SPD3303C

SPD1000X

180W,360W,720W,1080W 15V, 30V, 32V (Max.) 3.2A, 6A, 10A (Max.) 32 V/3.2 A \* 2 2.5 V/3.3 V/5 V/3.2 A 220W 30 V/3.2 A \* 2 2.5 V/3.3 V/5 V/3.2 A 220 W 16 V/8 A, 128 W 30 V/5 A 150 W

SDM3065X 6½ digits reading resolution SDM3055 5½ digits reading resolution SDM3045X 4½ digits reading resolution SDL1000X 150 V/30 A, 200/300 W

SVA1000X 9 k -1.5/3.2/7.5 GHz SHA850A 9 k - 3.6/7.5 GHz

9 k - 2.1/3.2 GHz







## **SDS7000A**

- Bandwidth up to 6 GHz, 12-bit ADC resolution
- Real-time sampling rate up to 20 GSa/s
- Record Length up to 1 Gpts
- Waveform capture rate up to 1,000,000 wfm/s
- Eye diagram, Jitter analysis, Compliance Test, Power analysis, Bode plot, decode, MSO, AWG
- SAP5000D, 5 GHz High-speed differential probe





## **SDS6000A**

### Digital Storage Oscilloscope

- 500 MHz, 1 GHz, 2 GHz models
- 5 GSa/s (10 GSa/s ESR) ADC per analog channel
- Record Length up to 500 Mpts
- Waveform capture rate up to 750,000 wfm/s (Sequence mode)
- Eye diagram, Jitter analysis, Power analysis, Bode plot, decode, MSO, AWG
- SAP2500, SAP2500D, 2.5 GHz active single ended and differential probes





## **SDS6000L**

#### Low Profile Oscilloscope

- 2 GHz, 1 GHz, 500 MHz models
- 8/4 analog channels + 1 external trigger
- 5 GSa/s (10 GSa/s ESR) per channel
- Record Length up to 500 Mpts
- SYNC-64 to Synchronize 64 x SDS6000L
- Waveform capture rate up to 750,000 wfm/s (Sequence mode)



Product





- 350 MHz, 500 MHz, 1GHz models
- 12-bit high resolution
- Sampling rate up to 4 GSa/s
- Memory depth up to 400 Mpts
- Waveform capture rate up to 890,000 wfm/s (Sequence mode)
- $\bullet$  Noise floor as low as 125  $\mu Vrms$  at 1 GHz full bandwidth





## SDS2000X HD

- 200, 350 MHz models
- 12-bit High Resolution
- Record Length up to 200 Mpts
- Waveform capture rate up to 500,000 wfm/s (Sequence mode)
- Sampling rate up to 2 GSa/s (interleaving mode)
- Serial bus triggering and decoder, supports protocols I2C, SPI, UART, CAN, LIN, CAN FD, FlexRay, I2S, MIL-STD-1553B, SENT and Manchester



Product





- 100 MHz, 200 MHz bandwidth models
- 12-bit high resolution
- Sampling rate up to 2 GSa/s
- Memory depth up to 100 Mpts
- Waveform capture rate up to 500,000 wfm/s (Sequence mode)
- $\bullet$  Noise floor as low as 70  $\mu$ Vrms at 200 MHz full bandwidth







## SDS800X HD

- 70 MHz, 100 MHz, 200 MHz bandwidth models
- 12-bit high resolution
- Real-time sampling rate up to 2 GSa/s
- Memory depth up to 50/100 Mpts
- Waveform capture rate up to 500,000 wfm/s (Sequence mode)
- 7-inch touch screen, support for external mouse and keyboard





# **SDG7000A**

## **Arbitrary Waveform Generator**

- 1 GHz maximum bandwidth
- Dual channel differential/single-ended output
- 5 GSa/s sample rate and 14 -bit vertical resolution
- Memory depth of 512 Mpts
- Segment editing /playback functions
- 16-bit LVDS/LVTTL digital bus output
- 5 inch touch screen







#### Function/Arbitrary Waveform Generators

- Dual output channels, maximum 60 MHz output frequency, maximum 20 Vpp output amplitude
- 1 GSa/s Sampling rate, 16-bit vertical resolutio
- Arbitrary wave length 8 Mpts/CH
- Maximum 40 Mbps PRBS output
- Multi-pulse output function
- 4.3-inch display







## **SNA6000A**

#### Vector Network Analyzer

• Frequency Range: 100 kHz to 13.5 GHz and 100 kHz to 26.5 GHz

• Range of IFBW: 1 Hz to 10 MHz

• Dynamic Range: 135 dB

• Setting Range of Output Level: -55 dBm to +10 dBm

• Standard Bias-Tee connection and pulse hardware

• 4-port models include standard second source

• Jumpers / DRA (Source, Ref and Meas) standard on SNA61xxA models







## SHN900A

### Portable Vector Network Analyzer

• Standard VNA and CAT mode, Optional SA mode

• Frequency Range: 30 kHz~26.5 GHz

• Range of IFBW: 10 Hz~3 MHz

• Dynamic Range: 110 dB (typ.)

• Standard Bias-Tee, 4h Working Time

• Standard GPS, Time and Location Information Saving

• 2ports: S-parameters, Time Domain, Pulse Measurement





## **SSA5000A**

## Spectrum Analyzer

- Frequency Range from 9 kHz up to 13.6 /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
- Analog Modulation Analysis and Vector Digital Modulation
   Analysis





## SSA3000X-R

### Real-time Spectrum Analyzer

- Frequency Range from 9 kHz up to 3.2 GHz / 5.0 GHz / 7.5 GHz
- VNA and DTF functions
- -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.)
- Up to 40 MHz Real Time Analysis Bandwidth Option





## **SVA1000X**

### Spectrum & Vector Network Analyzer

- Vector Network Analysis from 100 kHz ~ 7.5 GHz (Standard)
- Distance-to-fault (Optional)
- Frequency Range from 9 kHz to 7.5 GHz
- -165 dBm/Hz Displayed Average Noise Level (Typ.)
- -98 dBc/Hz @10 kHz Offset Phase Noise (1 GHz, Typ.)
- 1 Hz Minimum Resolution Bandwidth (RBW)





## SHA850A

# Handheld Spectrum & Vector Network Analyzer

- Standard SA and CAT mode, optional VNA mode
- Frequency Range from 9 kHz up to 7.5 GHz
- -165 dBm/Hz Displayed Average Noise Level (Typ.)
- -104 dBc/Hz @1 GHz,10 kHz offset SSB Phase Noise (Typ.)
- 114 dB Dynamic Range in VNA mode (Typ.)





## **SPS5000X**

# wide range programmable Switching DC Power Supply

• Rated Output Voltage: 40V, 50V, 80V, 160V

• Rated Output Power: 180W, 360W, 720W, 1080W

 Wide range of output voltage and current, high efficiency power supply

• CV, CC priority mode selection, better protection of equipment under test

• Load transient recovery time (Load change from 50~100%) <1ms







# **SPD4000X**

# Programmable Linear DC Power Supply

• Four independent outputs

• Max. Voltage: 15V, 30V, 32V, Max. Current: 3.2A, 6A, 10A

Rated output power: 240W, 285W, 400W

• 5-digit voltage and current display with minimum resolution of 1mV, 1mA

• Clear graphical interface with waveform and timer display modes

• Support remote voltage compensation sense function





## **SDM3065X**

### 6 ½ Digital Multimeters

- Real 6½ digits readings resolution (2,200,000 counts)
- 1 Gb Nand flash size, Mass storage configuration files and data files
- True-RMS AC Voltage and AC Current measuring
- Standard interfaces: USB Device, USB Host, LAN (Optional Accessories: USB-GPIB Adapter)
- Optional Scanner for multipoint measurements (-SC part number)





## SDL1000X/X-E

## Programmable DC Electronic Load

- DC 150 V/30 A, maximum total power 300 W/200 W
- 4 static modes / Dynamic mode: CC/CV/CR/CP
- Min. readback resolution: 0.1 mV, 0.1 mA
- Adjustable current rise time range: 0.001 A/us~2.5 A/us



# THANKS

EVERY BENCH. EVERY ENGINEER. EVERY DAY.









LinkedIn

Twitter

YouTube

Facebook