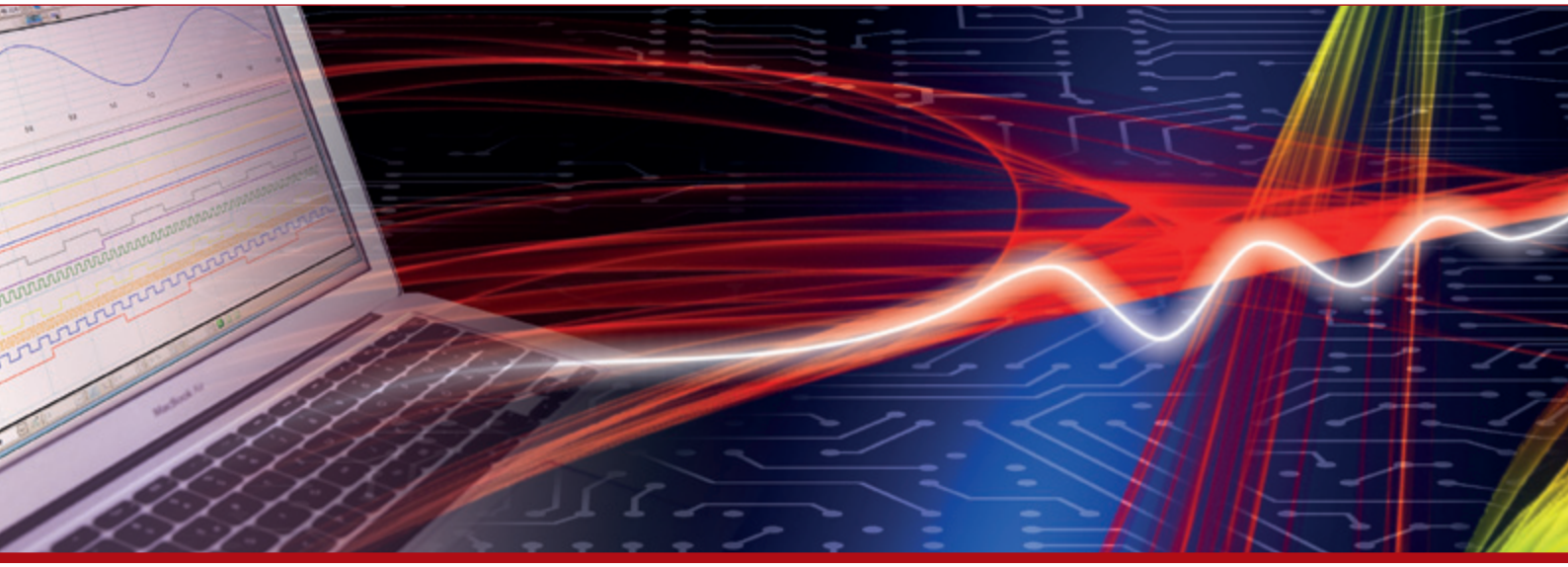
# Product Datasheet - Technical Specifications



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RIGOL

# SUA8000 Series

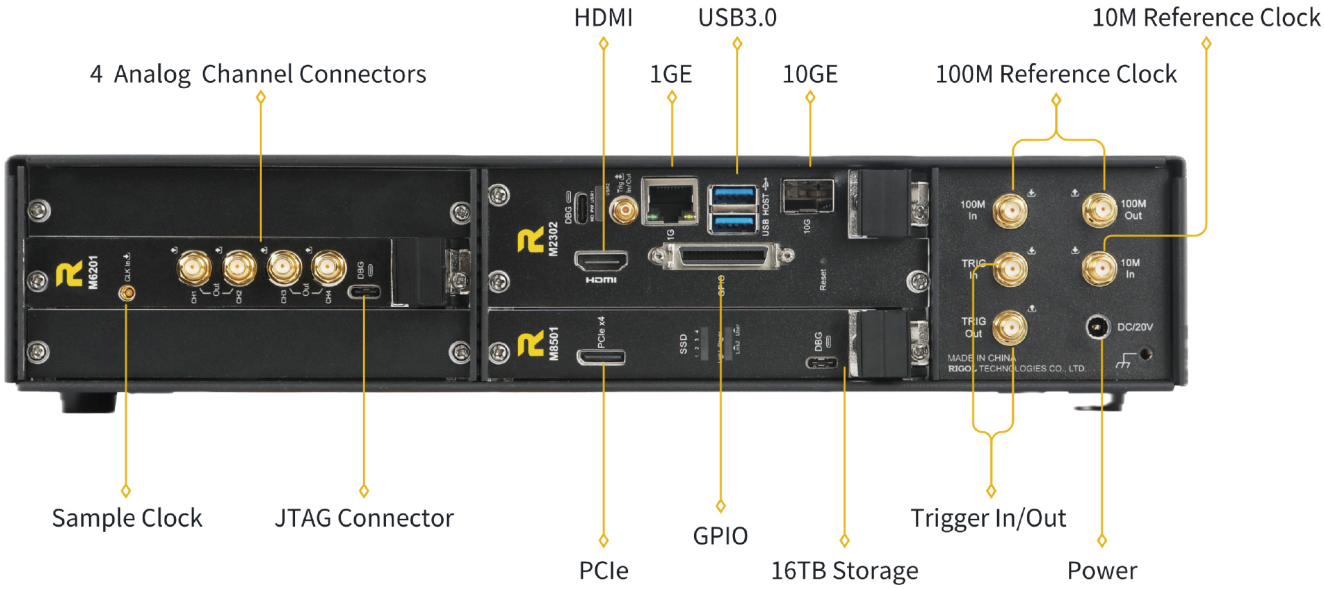
## Digital Transceiver

## Data Sheet

DSK01100-1110

Jun. 2025

# SUA8000 Series
## Multi-channel Digital Transceiver


## Specifications

**Transmit**
**8GSa/s** Sample Rate
**14bit** Vertical Resolution

**Receive**
**4GSa/s** Sample Rate
**14bit** Vertical Resolution

**Stability**
**≤1ps** In-device
**≤10ps** Inter-device

**Control Type Selectable**
**CPU** High Performance
**GPU** High Computing Power

**8 Channels**
For a single device

**1Gpts/ch**
Memory Depth

**10 Gigabit Ethernet**
Standard

**16TB**
Waveform Recording

# Benefits

### Multi-channel, Multi-function

Supports up to 8 channels for a single device and is equipped with multiple functions such as AWG, digitizer, and waveform recorder

### High-Rate Interface

Standard 10 Gigabit Ethernet control and digital transmission interface for high-bandwidth digital transmission

### High-stability Synchronization

Supports more than 100 devices with hundreds of channels working synchronously to enable highly stable waveform acquisition and generation

### Advanced Sequence Play

Supports up to 3,000 waveform segments, fast loading via high-speed interface, complex waveform sequences such as loops, jumps, nesting, etc.

### Array Operating Console

User remote control available on the array operating console, such as multi-device management, waveform editing and waveform display storage

### User-customized Development

Provides a variety of device-driven interface functions, supporting remote and local customized/secondary development to get it quickly integrated into the user's business system

### CPU/GPU-Controlled Selectable

CPU-controlled test adopts the high-performance V2000 processor, and the GPU AI-controlled test uses the Orin AGX processing platform

### Compact Size with Highly-integrated Functions

The compact size of the device enables users to install it in their system or mounted in a standard rack

# Application

**Large-Scale Scientific Facility**

Large-scale array data acquisition and analysis

**Remote Sensing**

Multi-channel receiving/transmitting and intelligent detection

**Radio Astronomy**

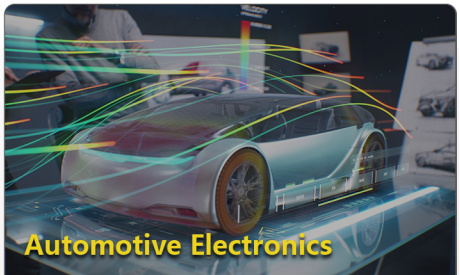
High-bandwidth acquisition and transmission of cosmic rays

**Product Line Testing**

With multiple functions highly integrated, easy for customized development

**LEO Satellite**

SDR technology combined with GPU AI master-controlled



**Automotive Electronics**

Control unit simulation and collision warning signal simulation

# Features

The SUA8000 series digital transceiver combines arbitrary waveform generation, signal acquisition and waveform recording, designed for complex signal applications. The series features a modular architecture but is offered in standard configurations, ensuring a convenient out-of-the-box experience with superior reliability and consistency. With the combination of digital receiving/transmitting technology and AI algorithm, it can not only efficiently generate, acquire and analyze high-speed signals, but also support users to develop customized/secondary business systems and flexibly scale applications. The powerful software platform provides an open interface for customers to build automated test processes or customized solutions in remote sensing, industrial measurement, automotive electronics, and more. With leading-edge hardware performance and intelligence features, the series enables more accurate and efficient R&D validation and business applications, accelerating the innovation process.

## AWG

- Up to 8 GSa/s sample rate
- 14-bit vertical resolution
- -70 dBc SFDR
- Supports importing the external waveforms
- Supports advanced sequence to define outputs of various types of complex waveforms
- Analog bandwidth (DC-3.5 GHz)

## Digitizer

- Up to 4 GSa/s sample rate
- 14-bit vertical resolution
- -55 dBc SFDR
- Supports RingBuffer and Streaming operating modes
- Analog bandwidth (DC-1.5 GHz)

## 1 Gpts Waveform Memory Depth for Each Channel

## Supports 16TB Expandable Storage Option

## High Stability Synchronization (12h)

- Time-delay stability in any two channels: <1 ps
- Time-delay stability in any two devices: <10 ps

## Master Control Selectable

- CPU, 25 W TDP, 3.95 GHz, high performance
- GPU, 200 TOPS high computing power

## Multiple External Interfaces: 10 G/1 G LAN, USB3.0, HDMI

# Specifications Overview

| | | SUA8104 | SUA8204 | SUA8208 | SUA8304 |
|---|---|---|---|---|---|
| Number of Channels | AWG Channels | 4 | - | - | 2 |
| | Digitizer Channels | - | 4 | 8 | 2 |
| AWG Parameters | Sample Rate | 8 GSa/s | - | - | 8 GSa/s |
| | Vertical Resolution | 14-bit | - | - | 14-bit |
| | Bandwidth | DC-3.5 GHz | - | - | DC-3.5 GHz |
| | Arbitrary Waveform Length | 1 Gpts/CH | - | - | 1 Gpts/CH |
| | Output Type | 50 Ω, Single-ended | - | - | 50 Ω, Single-ended |
| | Max. Output Amplitude | 500 mVpp | - | - | 500 mVpp |
| | Phase Noise | -117 dBc/Hz @ 1GHz offset 10 kHz | - | - | -117 dBc/Hz @ 1GHz offset 10 kHz |
| | Channel Stability | ±1 ps@12 h | | | ±1 ps@12 h |
| | Sequence Mode (Option) | Support | - | - | Support |
| | Number of Sequence | 3000/CH | - | - | 3000/CH |

| | | SUA8104 | SUA8204 | SUA8208 | SUA8304 |
|---|---|---|---|---|---|
| Digitizer Parameters | Sample Rate | - | 4 GSa/s | 4 GSa/s | 4 GSa/s |
| | Vertical Resolution | - | 14-bit | 14-bit | 14-bit |
| | Bandwidth | - | DC-1.5 GHz | DC-1.5 GHz | DC-1.5 GHz |
| | Digital Pre-processing | - | DDC, Decimation, Truncation | DDC, Decimation, Truncation | DDC, Decimation, Truncation |
| | Cache Bandwidth | - | 32 GB/s | | |
| | Cache Depth | - | 1 Gpts/CH | 512 Mpts/CH | 1 Gpts/CH |
| | Output Type | - | 50 Ω, Single-ended | | |
| | Input Amplitude | - | 1 Vpp | | |
| | Measurement Accuracy | - | ±5‰ | | |
| | Acquisition Mode | | Ring Buffer Mode, Streaming Mode | | |
| Master Control Parameters | Master Control Type | CPU-controlled test | | | |
| | CPU | AMD V2516, 6 core, 2.1 GHz-3.95 GHz | | | |
| | GPU | - | | | |
| | Memory and Storage | 32 GB DDR4-3200, non-ECC, 512 GB SSD | | | |
| | Network | 10 GbE SFP+, 1 GbE RJ45 | | | |
| | Interface | HDMI, USB3.0 x2 | | | |
| | Operating System | Linux | | | |
| Dimensions | Width x Depth x Height | 340 mm (W) x 235.5 mm (D) x 68 mm (H) | | | |
| Optional | | - | 16 TB Waveform Recording Extension | | |

| | | SUA8104G | SUA8204G | SUA8208G | SUA8304G |
|---|---|---|---|---|---|
| Number of Channels | AWG Channels | 4 | - | - | 2 |
| | Digitizer Channels | - | 4 | 8 | 2 |
| AWG Parameters | Sample Rate | 8 GSa/s | - | - | 8 GSa/s |
| | Vertical Resolution | 14-bit | - | - | 14-bit |
| | Bandwidth | DC-3.5 GHz | - | - | DC-3.5 GHz |
| | Arbitrary Waveform Length | 1 Gpts/CH | - | - | 1 Gpts/CH |
| | Output Type | 50 Ω, Single-ended | - | - | 50 Ω, Single-ended |
| | Max. Output Amplitude | 500 mVpp | - | - | 500 mVpp |
| | Phase Noise | -117 dBc/Hz @ 1GHz offset 10 kHz | - | - | -117 dBc/Hz @ 1GHz offset 10 kHz |
| | Channel Stability | ±1 ps@12 h | | | ±1 ps@12 h |
| | Sequence Mode (Option) | Support | - | - | Support |
| | Number of Sequence | 3000/CH | - | - | 3000/CH |

| | | SUA8104G | SUA8204G | SUA8208G | SUA8304G |
|---|---|---|---|---|---|
| Digitizer Parameters | Sample Rate | - | 4 GSa/s | 4 GSa/s | 4 GSa/s |
| | Vertical Resolution | - | 14-bit | 14-bit | 14-bit |
| | Bandwidth | - | DC-1.5 GHz | DC-1.5 GHz | DC-1.5 GHz |
| | Digital Pre-processing | | DDC, Decimation, Truncation | DDC, Decimation, Truncation | DDC, Decimation, Truncation |
| | Cache Bandwidth | | 32 GB/s | | |
| | Cache Depth | - | 1 Gpts/CH | 512 Mpts/CH | 1 Gpts/CH |
| | Output Type | - | 50 Ω, Single-ended | | |
| | Input Amplitude | - | 1 Vpp | | |
| | Measurement Accuracy | - | ±5‰ | | |
| | Acquisition Mode | | Ring Buffer Mode, Streaming Mode | | |
| Master Control Parameters | Master Control Type | GPU AI-controlled | | | |
| | CPU | NVIDIA ORIN AGX, Carmel Armv8.2 64-bit 8 core, 2.2 GHz | | | |
| | GPU | 1792-core NVIDIA Ampere architecture GPU with 56 Tensor Cores, 200TOPS AI Performance | | | |
| | Memory and Storage | 32 GB 256-bit LPDDR4x, 32 GB eMMC 5.1, 4TB NVMe SSD | | | |
| | Network | 10 GbE SFP+, 1 GbE RJ45 | | | |
| | Interface | HDMI, USB3.0 x2 | | | |
| | Operating System | Linux | | | |
| Dimensions | Width x Depth x Height | 340 mm (W) x 235.5 mm (D) x 68 mm (H) | | | |
| Optional | | - | 16 TB Waveform Recording Extension | | |

# Specifications

Specifications describe the warranted performance of calibrated instruments that have been stored for a minimum of 2 hours within the operating temperature range of 0 to 50°C, and a 40-minute warm-up period. Unless otherwise stated, the specifications in this manual include the measurement uncertainty.

Typical: characteristic performance, which 80% of the measurement results will meet at room temperature (approximately 25℃). This data is not warranted and does not include the measurement uncertainty.

Nominal: the expected mean or average performance or a design attribute (such as the 50 Ω connector). This data is not warranted and is measured at room temperature (approximately 25℃)

**NOTE:**

All charts in this manual are the measurement results from several instruments at room temperature unless otherwise noted.

## Playback Channels

| **Analog Output** | |
|---|---|
| Sample Rate | Max. 8 GSa/s |
| Amplitude Range | 500 mVpp |
| Amplitude Accuracy | ±2 % of setting |
| Analog Bandwidth | DC-3.5 GHz |
| Rise/Fall Time (20% to 80%) | ＜ 120 ps @500 mVpp |
| Number of Channels | 2/4 Channels |
| Output Coupling | DC |
| Output Impedance | 50 Ω ±2% |
| Connector | SMA |

**Spurious Free Dynamic Range (Typ)**

SFDR is measured @ 250 mVpp, excluding harmonics.

| | In-band Performance | | Adjacent Band Performance | |
|---|---|---|---|---|
| Output Signal | Measured Range | Specifications | Measured Range | Specifications |

| Spurious Free Dynamic Range (Typ) | | | | |
|---|---|---|---|---|
| DC-1 GHz | DC-4 GHz | -70 dBc | 4 GHz-8 GHz | -60 dBc |
| 1 GHz-1.5 GHz | | -55 dBc | | -60 dBc |
| 1.5 GHz-3 GHz | | -45 dBc | | -45 dBc |
| 3 GHz-3.5 GHz | | -40 dBc | | -45 dBc<br>(image signal is not included) |

| Harmonics | | |
|---|---|---|
| Harmonic distortion measurement @250 mVpp | | |
| SHG | DC-1 GHz | <-45 dBc |
| | 1 GHz-2 GHz | <-38 dBc |
| | 2 GHz-3.5 GHz | <-33 dBc |
| THG | DC-1 GHz | <-55 dBc |
| | 1 GHz-2 GHz | <-40 dBc |
| | 2 GHz-3.5 GHz | <-36 dBc |

| Phase Noise | | |
|---|---|---|
| Output Phase Noise (Typ) | fc=100 MHz | -138 dBc/Hz @ offset 10 KHz |
| | fc=1 GHz | -117 dBc/Hz @ offset 10 KHz |

| IMD | |
|---|---|
| IMD is measured @ 250 mVpp | |
| 100 MHz ± 1 MHz | -70 dBc |
| 1 GHz ± 1 MHz | -50 dBc |

| Waveform | | |
|---|---|---|
| Waveform File Import Capacity | *.dat file format | Stored in binary format, int16 data type, with a range from -32768 to 32767. |
| | | Stored in binary format, float/double data type, with a range from -1 to +1. |
| | *.csv file format | The data range is from -1 to +1 |
| Waveform Sequence | | Supports to build complex waveform sequences with the NSWave programming language. |

| Waveform Generator | | |
|---|---|---|
| Number of Waveform Segment | 1 to 3,000 | |
| Waveform Segment Length | Waveform length: 16 KSa to 512 MSa;<br>Minimum waveform granularity: 32 Sa | |
| Output Sequence | Executes the steps of the sequence in specific order. | |
| Loop | Executes 1 to 2^32 times or infinite times in a loop. | |
| Jump | Direct: immediately executes the step in the sequence.<br>Wait: waits for internal or external trigger to play the step in the sequence.<br>Delay: supports the time delay for jump between sequence steps. | |
| **DUC** | | |
| Mixer Local Oscillator Frequency Accuracy | Less than 0.1 Hz | |
| Interpolation Ratio | 8 GSa/s | 1x 2x 4x 5x 10x 20x |
| | 4 GSa/s | 1x 2x 4x 5x 10x 20x |
| | 2 GSa/s | 1x 2x 5x 10x |

## Acquisition Channel

| Analog Input | |
|---|---|
| Sample Rate | Max. 4 GSa/s |
| Vertical Resolution | 14-bit |
| Max. Input Voltage Range | 1 Vpp |
| DC Accuracy | ±5‰ |
| Analog Bandwidth | DC-1.5 GHz |
| Number of Channels | 2/4/8-channel |
| Input Impedance | 50 Ω ±2% |
| Coupling Mode | DC |
| Connector | SMA/RF integrated connector |

| Spurious Free Dynamic Range (Typ) | | |
|---|---|---|
| SFDR is measured @ 1 Vpp, excluding harmonics. | | |
| DC-1500 MHz | -55 dBc | |
| **Harmonics (@1 Vpp)** | | |
| Harmonic distortion is measured @ 1 Vpp | | |
| SHG | DC-1 GHz | -60 dBc |
| | 1 GHz-1.5 GHz | -55 dBc |
| THG | DC-1 GHz | -70 dBc |
| | 1 GHz-1.5 GHz | -65 dBc |
| **ENOB** | | |
| ENOB is measured @ -1 dBFs | | |
| DC-1500 MHz | 8-bit | |

## Acquisition

**Ring Buffer**

| Ring Buffer | | | |
|---|---|---|---|
| Trigger Mode | External input trigger, internal trigger, analog channel trigger | | |
| 8-bit Quantization Mode | Max. 4 GSa/s per channel | Total Trigger Depth | 2/4 channels: 2 GSa<br>8-channel: 1 GSa |
| | | Number of pre-trigger sample points | 2/4 channels: 32 KSa-2 GSa<br>8-channel: 32 KSa-1 GSa<br>Minimum granularity: 32 KSa |
| | | Number of post-trigger sample points | 2/4 channels: 32 KSa-2 GSa<br>8-channel: 32 KSa-1 GSa<br>Minimum granularity: 32 KSa |

| Ring Buffer | | | |
|---|---|---|---|
| 14-bit Quantization Mode | 2/4 channels: Max. 4 GSa/s per channel<br>8-channel: Max. 2 GSa/s per channel | Total Trigger Depth | 2/4 channels: 1 GSa<br>8-channel: 512 MSa |
| | | Number of pre-trigger sample points | 2/4 channels: 16 KSa-1 GSa<br>8-channel: 16 KSa-512 MSa<br>Minimum granularity: 16 KSa |
| | | Number of post-trigger sample points | 2/4 channels: 16 KSa-1 GSa<br>8-channel: 16 KSa-512 MSa<br>Minimum granularity: 16 KSa |

**Streaming**

| Streaming | | | |
|---|---|---|---|
| Continuous Trigger | External input trigger, internal trigger, analog channel trigger | | |
| Continuous Trigger Sample Points | 8-bit Quantization Mode | Max. 4 GSa/s per channel | Total continuous trigger depth | 2/4 channels: 2 GSa<br>8-channel: 1 GSa |
| | | | Single trigger depth | 2/4/8 channels: 64 KSa |
| | | | Pre-trigger sample points for a single trigger | 64 Sa-64 KSa<br>Minimum granularity: 64 Sa |
| | | | Post-trigger sample points for a single trigger | 2/4 channels: 64 Sa-2 GSa<br>8-channel: 64 Sa-1 GSa<br>Minimum granularity: 64 Sa |
| | 14-bit Quantization Mode | | Total continuous trigger depth | 2/4 channels: 1 GSa<br>8-channel: 512 MSa |
| | | | Single trigger depth | 2/4/8 channels: 32 KSa |
| | | | Pre-trigger sample points for a single trigger | 32 Sa-32 KSa<br>Minimum granularity: 32 Sa |
| | | | Post-trigger sample points for a single trigger | 2/4 channels: 32 Sa-1 GSa<br>8-channel: 32 Sa-512 MSa<br>Minimum granularity: 32 Sa |

| Streaming | |
|---|---|
| Continuous Acquisition | Supports a 16 TB memory option, offers 8-bit and 14-bit quantization memory, and has a total data bandwidth of 2.4 GB/s. |

| DDC | | |
|---|---|---|
| Mixer Local Oscillator Frequency Accuracy | Less than 0.1 Hz | |
| Decimation Ratio | 4 GSa/s | 1x 2x 4x 5x 10x 20x |
| | 2 GSa/s | 1x 2x 5x 10x |
| | 1 GSa/s | 1x 5x |

## Trigger

| Trigger System | |
|---|---|
| Trigger Source | Analog channel (1-8), external trigger, internal trigger |
| Trigger Modes | Single, continuous |
| External Trigger Input | Level: TTL 5 V, SMA connector |
| Trigger Output | Level: TTL 5 V, SMA connector |

## Clock

| Clock System | |
|---|---|
| Clock Source | 10 MHz external input, 100 MHz external input, 100 MHz internal clock, external sample clock |
| Internal Clock | 100 MHz |
| | Accuracy: ±1 ppm |
| | Temperature stability (-20-70°C): ±0.5 ppm |
| | Aging: ±1 ppm/year |
| 100 MHz Clock Output | Power: 0 dBm-5 dBm |
| | SMA connector, 50 Ω (nom) |
| 100 MHz Clock Input | Power: 0-10 dBm |
| | SMA connector, 50 Ω (nom) |
| 10 MHz Clock Input | Power: 0 dBm-10 dBm |
| | SMA connector, 50 Ω (nom) |

| Clock System | |
|---|---|
| External Sample Clock | Frequency: 1 GHz-8 GHz |
| | Power: 0-10 dBm |
| | SMB connector, 50 Ω (nom) |

## Processor System

| GPU Processor | |
|---|---|
| AI Performance | 200 TOPS |
| GPU | 1792-core NVIDIA Ampere c GPU with 56 Tensor Cores |
| GPU Max. Frequency | 930 MHz |
| CPU | 8-core Arm® Cortex® -A78AE v8.2 64-bit CPU 2 MB L2 + 4 MB L3 |
| CPU Max. Frequency | 2.2 GHz |
| Video Memory | 32 GB 256-bit LPDDR5 204.8 GB/s |
| **CPU Processor** | |
| Clock Speed | 2.1 GHz base frequency, 3.95 GHz maximum frequency |
| Core Count | 6 cores |
| Memory | 32 GB DDR4-3200 MT/s |

## Instrument Characteristics

| Instrument Characteristics | |
|---|---|
| Operating System | Linux |
| Display | 2.8″ basic status display |

## General Specifications

| Interface | |
|---|---|
| LAN Interface | Electrical port: 1, RJ45 Ethernet interface, 10/100/1000 BASE-T interface |
| | Optical port: 1, 10 Gigabit, SFP+ interface |
| Web Control | Support Web Control (input the IP address of the product into the Web browser to display the operation interface) |

| | | |
|---|---|---|
| **Interface** | | |
| HDMI | 1, HDMI 1.4b, A plug; used to connect to an external monitor | |
| USB 3.0 | 2, Type A interface | |
| GPIO | 1 RS232, 1 RS422, used to interconnect with the processor serial port | |
| **Power Supply** | | |
| Input Interface | 5.5 mm round hole | |
| Input Voltage | DC 19.5 V, 11.8 A | |
| Power Consumption | 180 W (typ) | |
| **Environment** | | |
| Temperature Range | Operating | 0℃ to +50℃ |
| | Non-operating | -40℃ to +70℃ |
| Humidity Range | Operating | Up to +30℃, ≤90% RH (non-condensing) |
| | | +30℃ to +40℃, ≤75% RH (non-condensing) |
| | | +40℃ to +50℃, ≤45% RH (non-condensing) |
| | Non-operating | Up to 65℃, ≤90% RH (non-condensing) |
| Altitude | Operating | Up to 3,000 meters |
| | Non-operating | Up to 15,000 meters |
| **Calibration Interval** | | |
| Recommended Calibration Interval | 12 months | |

| Regulation Standards | | |
|---|---|---|
| Electromagnetic Compatibility | Compliant with EMC Directive (2014/30/EU), compliant with or higher than the standards specified in EN 61326-1: 2013, EN 61326-2-1:2013, EN IEC 61000-3-2:2019+A1, EN 61000-3-3:2013+A1:2019 | |
| | CISPR 11:2009+A1 Class A | |
| | EN IEC 61000-3-2:2019+A1 | Harmonics, Class A |
| | EN 61000-3-3:2013+A1:2019 | Voltage flicker |
| | EN 61000-4-2:2009 | ±4.0 kV (contact discharge), ±8.0 kV (air discharge) |
| | EN 61000-4-3:2006+A1+A2 | 10 V/m (80 MHz to 1 GHz); 3 V/m (1.4 GHz to 6 GHz) |
| | EN 61000-4-4:2004+A1 | 2 kV power cord |
| | EN 61000-4-5:2006 | 1 kV (phase-to-neutral voltage); 2 kV (phase-to-earth voltage); 2 kV (neutral-to-earth voltage) |
| | EN 61000-4-6:2009 | 10V, 0.15 MHz to 80 MHz |
| | EN 61000-4-11:2004 | Voltage dip: 0% UT during half cycle; 0% UT during 1 cycle; 70% UT during 25 cycles |
| | | Short interruption: 0% UT during 250 cycles |
| Safety | EN 61010-1:2010+A1:2019<br>IEC 61010-1:2010+A1:2016<br>UL 61010-1: 2012 R6.23<br>CAN/CSA-C22.2 NO. 61010-1-12 + GI1 + GI2 (R2017) + A1 | |
| Vibration | Compliant with GB/T 6587, class 2 random, compliant with MIL-PRF-28800F and IEC60068-2-6, class 3 random | |
| Shock | Compliant with GB/T 6587-2012, class 2 random, compliant with MIL-PRF-28800F and IEC 60068-2-27, class 3 random (in non-operating conditions: 30 g, half-sine wave, 11 ms duration, 3 oscillations/axis along the main axis, a total of 18 vibrations) | |
| **Mechanical Characteristics** | | |
| Dimensions | 340 mm (W) x 68 mm (H) x 230 mm (D) | |
| Weight | ≤4.5Kg | |
| Rack Mount | Mounting accessories (optional) | |

# Order Information and Warranty Period

## Order Information

| Order Information | Order No. |
|---|---|
| **Model** | |
| 4-channel AWG, 8 GSa/s sample rate, 3.5 GHz bandwidth, 14-bit vertical resolution, CPU master-controlled | SUA8104 |
| 4-channel Digitizer, 4 GSa/s sample rate, 1.5 GHz bandwidth, 14-bit vertical resolution, CPU master-controlled | SUA8204 |
| 8-channel Digitizer, 4 GSa/s sample rate, 1.5 GHz bandwidth, 14-bit vertical resolution, CPU master-controlled | SUA8208 |
| 2-channel AWG and 2-channel digitizer, 4 GSa/s sample rate, 1.5 GHz bandwidth, 14-bit vertical resolution, CPU master-controlled | SUA8304 |
| 4-channel AWG, 8 GSa/s sample rate, 3.5 GHz bandwidth, 14-bit vertical resolution, GPU AI-controlled | SUA8104G |
| 4-channel digitizer, 4 GSa/s sample rate, 1.5 GHz bandwidth, 14-bit vertical resolution, GPU AI-controlled | SUA8204G |
| 8-channel digitizer, 4 GSa/s sample rate, 1.5 GHz bandwidth, 14-bit vertical resolution, GPU AI-controlled | SUA8208G |
| 2-channel AWG and 2-channel Digitizer, 4 GSa/s sample rate, 1.5 GHz bandwidth, 14-bit vertical resolution, GPU AI-controlled | SUA8304G |
| **Standard Accessories** | |
| Power adapter (based on destination country) | - |
| **Options** | |
| 16 TB waveform recording extension option | M8501 |
| AWG advanced sequence mode | SUA8000-SQ |

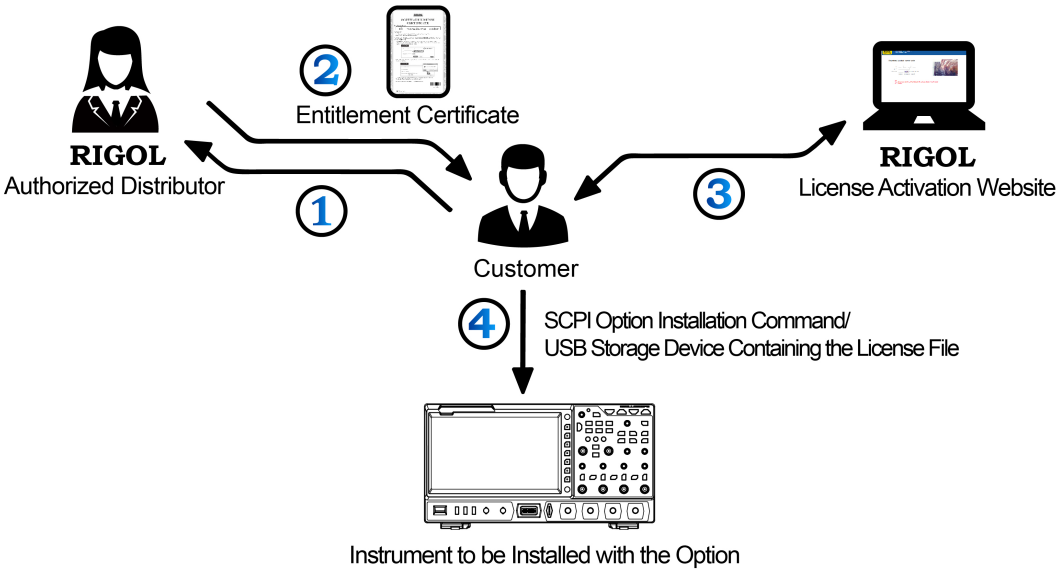
**NOTE:**

For all the hosts, accessories, and options, please contact the local office of RIGOL.

# Warranty Period

Three years for the mainframe, excluding the accessories.

# Option Ordering and Installation Process




1. According to the usage requirements, please purchase the specified function options from **RIGOL Sales Personnel**, and provide the serial number of the instrument that needs to install the option.
2. After receiving the option order, the **RIGOL** factory will mail the paper software product entitlement certificate to the address provided in the order.
3. Log in to **RIGOL** official website for registration. Use the software key and instruments serial number provided in the entitlement certificate to obtain the option license code and the option license file.
4. Install the option by running the SCPI command concerning the option installation. You can also save the option license file to the root directory of the USB storage device. Then insert it to the instrument. After being recognized, follow the instructions to install the option.

**NOTE:**

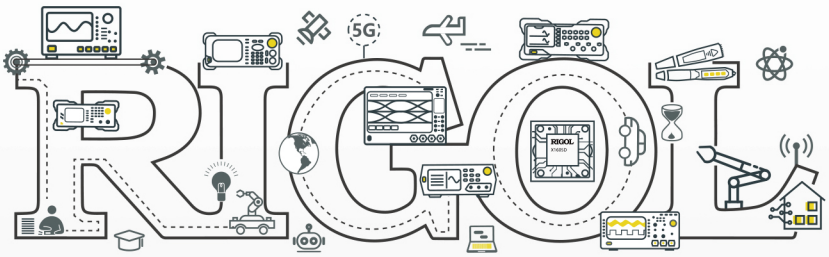
If any problems occur during the option installation process, please contact **RIGOL** technical team.

# Boost Smart World and Technology Innovation

Industrial Intelligent Manufacturing

Semiconductors

Education& Research




Communication

System Integration

New Energy

- Cellular-5G/WIFI
- UWB/RFID/ ZIGBEE
- Digital Bus/Ethernet
- Optical Communication

- Digital/Analog/RF Chip
- Memory and MCU Chip
- Third-Generation Semiconductor
- Solar Photovoltaic Cells

- New Energy Automobile
- PV/Inverter
- Power Test
- Automotive Electronics

*Provide Testing and Measuring Products and Solutions for Industry Customers*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