



Test & Measurement

Product Catalog



Suin Instruments Co., Ltd

★ Signal Generator

-Function/Arbitrary Waveform Generator

TFG6800A Series	P 1
TFG2900A Series	P 2
TFG3900A Series	P 3
TFG6900A Series	P 4
TFG1900A Series	P 5
TFG1900B Series	P 6

-RF Signal Generator

TFG368X Series	P 7
TFG3600 Series	P 8
SU3630	P 9

-Pulse/Pattern Generator

SU5000 Series	P10
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★ Analyzer

-Power Quality Analyzer

SA2100/2200	P11
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-Spectrum Analyzer

SA911/9200 series	P15
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-Frequency Counter

SS7406	P17
SS7000 Series	P18
SS7001 Series	P19

-Frequency Characteristic Analyzer

SA1000 Series	P20
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★ Meter

-Millivolt Meter

SM2130/2160	P21
-------------	-----

-Digital Multimeter

SA5052/5061	P22
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★ Power Supply

SK33231/33251	P23
SK3323/3325	P24
SK3323J/3325J	P25
SK10000 Series	P26

★ Calibrator

-Frequency Standard Comparator

ST2050 Series	P27
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-Stopwatch Calibrator

SF2002	P28
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Selection Guide of Generators

	TFG2900A Series	TFG3605/3610/3615	SU3630	TFG1903B/05B/10B/20B	TFG3908A/3912A/3916A	TFG66910A/20A/30A/40A/60A	TFG1905A/10A/20A
Max Frequency	400MHz	500/1000/1500MHz	3GHz	3/5/10/20MHz	80/120/160MHz	10/20/30/40/60MHz	5/10/20MHz
Channel	2 or 4	2	1	1	2	2	2
Frequency Resolution	1μHz	1μHz	3Hz	10μHz	1μHz	1μHz	1μHz
Best Accuracy	1ppm	1ppm	±5ppm	50ppm	2ppm	50ppm	20ppm
Sampling Rate	1.2GSa/s	50MSa/s	○	100MSa/s	500MSa/s	120MSa/s	100MSa/s
Vertical Resolution	14bits	10bits	○	8bits	14 bits	14bits	10bits
Output level	○	-127dBm ~ +13dBm	-120dBm ~ +13dBm	○	○	○	○
Waveform	165 kinds of waveforms including sine, Square, Ramp, Pulse, Noise, PRBS, Exponential, Logarithm, Tangent, Gaussian, Cardiac, Quake	CHA: Sine, Square CHB: Sine, Square, Ramp, Pulse, and 4 built in waveforms	Sine	Sine, Square, Ramp, Pulse, Exponent, Logarithm, Noise, etc. totally 16 waveforms	150 kinds of waveforms including sine, Square, Ramp, Pulse, Noise, PRBS, Exponential, Logarithm, Tangent, Gaussian, Cardiac, Quake	Sine, Square, Ramp, Pulse, Noise + 50 built in arbitrary waveform + 5 user-defined	11 built in waveform + 5 user-defined
DC Offset	●	●	○	●	●	●	●
TTL	●	●	○	●	●	●	●
Sweep	●	●	●	●	●	●	●
Modulation	FM, AM, PM, PWM, SUM, FSK, 4FSK, ASK, OSK, NFSK, PSK, 4PSK, NPSK	FM, AM, FSK, PSK	Pulse	FM, AM, PM, PWM, FSK	FM, AM, PM, PWM, SUM, FSK, 4FSK, QPSK, ASK, OSK	FM, AM, PM, PWM, SUM, FSK, BPSK	FM, AM, PM, PWM, FSK
Burst	●	●	○	●	●	●	●
Frequency Counter	○	○	○	○	○	○	○
Display	7" TFT LCD	4.3" TFT LCD	4.3" TFT LCD	VFD	0.1Hz ~ 350MHz 4.3" TFT LCD	0.01Hz ~ 350MHz 4.3" TFT LCD	1Hz ~ 100MHz VFD
Interface	USB Host&Device, LAN, WIFI	USB Device, RS-232	USB Device, RS-232	USB Device	USB Device&Host, LAN	RS-232, USB Device&Host	USB Device&Host
Options	Frequency Counter	GPIB, Frequency Counter	GPIB	○	Amplifier	Amplifier, TCXO	○

*Notice: ● means the indicated function is available while ○ means not available

TFG6800A Series Function/Arbitrary Waveform Generator



Features

- Dual output, maximum output frequency can reach to 100MHz
- 165 kinds of built-in waveforms
- Best accuracy: 25ppm
- 250MHzSa/s sample rate, 16 bit vertical resolution
- Rising/falling time of Square: $\leq 9\text{ns}$
- Complete function of Modulation, Sweep, Burst, etc.
- Standard interface include: USB Host, USB Device and LAN
- 7" touch screen display for easier operation

TFG2900A Series Arbitrary Waveform Generators



Features

- 1.2GSa/s sample rate, 14 bits vertical resolution
- Maximum 4 output channels can be configured
- Generating arbitrary waveform points by points to ensure output high-quality waveform accurately
- Unique Harmonic Synthesis
- Standard Interface include: USB Host, USB Device, LAN and WIFI
- 7" touch screen display for easier operation(pixel 800*400)

Specification

	TFG2922A	TFG2924A	TFG2932A	TFG2934A	TFG2942A	TFG2944A
Channel	2	4	2	4	2	4
Frequency						
Sine	1μHz~200MHz		1μHz~300MHz		1μHz~400MHz	
Square	1μHz~120MHz					
Pulse	1μHz~80MHz					
Ramp	1μHz~6MHz					
Others	1μHz~50MHz					
Resolution	1μHz					
Accuracy	±1ppm					
Waveform						
Type	165 kinds include : Sine, Square, Ramp, Pulse, Noise, Arbitrary waveforms and user-defined.					
Sample Rate	1.2GSa/s					
Vertical Resolution	14 bits					
Arbitrary	Sample Rate	1uSa/s~200MSa/s				
	Length	2 ~ 32M points				
	Resolution	14 bits				
Square	Rise/Fall Time	≤2.5ns				
	Duty Cycle	0.01%~99.99%				
Pulse	Rise/Fall Time	2.5ns ~1.2s				
	Width	4ns~1000000s				
Sine Spectral Purity						
Total Distortion	≤0.2% (20Hz~20kHz,20Vpp)					
Phase Noise	< -120dBc@10MHz (0dBm, 10kHz offset, typical)					
Amplitude (into 50Ω)						
≤40MHz	1mVpp~10Vpp					
≤100MHz	1mVpp~5Vpp					
≤200MHz	1mVpp~2Vpp					
≤300MHz	1mVpp~1.5Vpp					
>300MHz	1mVpp~1Vpp					
Accuracy	±(1% of setting + 2mVpp), (Sine 1kHz, 0V offset, ≥10mVpp)					
Offset						
Range	±5Vpk ac+dc (50Ω load)					
Accuracy	±(1% of setting + 1mVDC + 0.5% of amplitude)					
Modulation						
Type	FM, AM, PM, PWM, Sum, FSK, 4FSK, NFSK, PSK, 4PSK, NPSK, ASK, OSK					
Burst						
Burst Count	1 to 100 000 000					
General Characteristic						
Power	AC 100~240V, 45~65Hz, <70VA (TFG29X2A), <80VA (TFG29X4A)					
Dimension & Weight	363*154*327 mm, 7.0Kgs, (TFG29X2A)					
	363*154*467 mm, 10.0Kgs (TFG29X4A)					

Standard Accessories

Power Cord	1
BNC cable	1
CD(Software+ User's Guide)	1

Options

Frequency Counter (upper limits to 3.0 GHz)

TFG3900A Series Function/Arbitrary Waveform Generators



Features

- Dual channel outputs with identical performance
- 500MSa/s sample rate, 14 bits vertical resolution
- 2ppm high accuracy to ensure the high quality waveform
- 150 built-in waveforms
- Full and complete modulation functions
- 7digits/s, 350MHz built-in counter
- Standard interface: USB Host & Device, LAN

Specification

		TFG3908A	TFG3912A	TFG3916A
Frequency				
Range	Sine	1μHz ~ 80MHz	1μHz ~ 120MHz	1μHz ~ 160MHz
	Square, Pulse	1μHz ~ 30MHz	1μHz ~ 40MHz	1μHz ~ 50MHz
	Arbitrary	1μHz ~ 30MHz		
	Ramp	1μHz ~ 5MHz		
Resolution		1μHz		
Accuracy		±(2ppm+1μHz)		
Waveform				
Type		150 kinds, including Sine, Square, Ramp, Pulse, Noise, PRBS, Exponential, Logarithm, Tangent, Gaussian, Cardiac, Quake, etc.		
Length		16384 points		
Sample Rate		500MSa/s		
Vertical Resolution		14bits		
Amplitude				
Range	Frequency≤40MHz	1mVpp~10Vpp (50Ω load)		
	Frequency≤80MHz	1mVpp~5Vpp (50Ω load)		
	Frequency≤120MHz	1mVpp~2.5Vpp (50Ω load)		
	Frequency>120MHz	1mVpp~2Vpp (50Ω load)		
Accuracy		±(1% of setting + 2mVpp)		
Flatness (relative to 1MHz Sine)		±0.2dBm, frequency<80MHz ±0.3dBm, frequency≥80MHz		
Offset				
Range		±10Vpk (ac+dc, open circuit)	±5Vpk (50Ω load)	
Accuracy		±(1% of setting + 2mV + 0.5% of amplitude)		
Modulation				
FM, AM, PM, PWM, Sum Modulation	Modulating Frequency	1mHz ~ 100kHz (FM, AM, PM, PWM)	1mHz~1MHz(Sum)	
	AM Modulating Depth	0% ~ 120%		
	Phase Deviation	0° ~ 360°		
	Pulse Width Deviation	0% ~ 99%		
	Sum Amplitude	0% ~ 100%		
FSK, 4FSK, QFSK, PSK, 4PSK, QPSK, ASK, OSK	Source	Internal/External		
	Hop Frequency	1μHz ~ maximum frequency		
	Rate	1mHz ~ 1MHz		
Source	Internal/External			
Sweep				
Waveform	Sine, Square, Ramp, etc.			
Type	Linear, Log, List			
Sweep Time	1ms to 500s			
Return/Hold/Interval Time	0s to 500s			
Trigger Source	Internal, External or Manual			
Burst				
Waveform	Sine, Square, Ramp, etc.			
Period	1μs ~ 500s			
Burst Count	1 ~ 100000000			
Start/Stop Phase	0° ~ 360°			
Trigger Source	Internal, External or Manual			
Channel Coupling				
Frequency Coupling	Frequency Ratio, Frequency Difference			
Amplitude Offset Coupling	Amplitude Difference, Offset Difference			
Waveform Coupling	Combination Amplitude, 0% ~ 100%			
Sync Output				
Level	TTL compatible, rise/fall time≤10ns			
Impedance	50Ω (typical)			
Counter				
Frequency Range	0.01Hz ~ 350MHz	Resolution: 7 digits/s		
Period and Pulse Width Measurement	100ns ~ 20s			
Duty Cycle Measurement	0.1% ~ 99.9%			
General Characteristics				
Power	AC 100 ~ 240V, 45 ~ 65Hz, <30VA			
Dimension & Weight	367×256×106 mm, Approx.3.7 kg			

Standard Accessories

Power Cord	1
BNC Testing cable	1
CD(Software+ User's Guide)	1

Options

Power Amplifier	
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TFG6900A Series Function/Arbitrary Waveform Generators



Features

- Dual channel outputs
- 50ppm frequency accuracy and 1 μ Hz resolution
- 5 standard waveforms, 50 built-in and 5 user-defined arbitrary waveforms
- Abundant modulation function FM, AM, PM, PWM, Sum, FSK, BPSK
- Channel coupling and combine features on CHB
- 6digits/s, 350MHz built-in frequency counter
- Standard interface: USB Host & Device, RS-232

Specification

		TFG6910A	TFG6920A	TFG6930A	TFG6940A	TFG6960A
Frequency						
Range	Sine Square, Pulse others	1 μ Hz ~ 10MHz 1 μ Hz ~ 10MHz 1 μ Hz ~ 5MHz	1 μ Hz ~ 20MHz	1 μ Hz ~ 30MHz	1 μ Hz ~ 40MHz	1 μ Hz ~ 60MHz
Resolution		1 μ Hz				
Accuracy		\pm (50ppm+1 μ Hz)				
Waveform						
Type		Sine, Square, Ramp, Pulse, Noise, 50 built-in waveforms + 5 user-defined waveforms				
Length		4096 points				
Sample Rate		120 MSa/s				150 MSa/s
Vertical Resolution		14 bits (CHA); 10bits (CHB)				
Amplitude Characteristics						
Range	Frequency \leq 20MHz Frequency >20MHz	0.1mVpp ~ 10Vpp(50 Ω) 0.2mVpp ~ 20Vpp (open circuit) 0.1mVpp ~ 7.5Vpp(50 Ω) 0.2mVpp ~ 15Vpp (open circuit)				
Resolution		1mVpp (Amplitude \geq 1Vpp, load 50 Ω) 0.1mVpp(Amplitude<1Vpp, load 50 Ω), 2mVpp (Amplitude \geq 2Vpp, open circuit) 0.2mVpp(Amplitude<2Vpp, open circuit)				
Accuracy		\pm (1% of setting +1mVpp)(1kHz Sine, 0V offset, auto range)				
Offset Characteristics						
Range		\pm 5Vdc (50 Ω), \pm 10Vdc (open circuit)				
Accuracy		\pm (1% of setting +1mVdc)				
Modulation Characteristics (CHA)						
FM,AM, PM,PWM, SUM		Carrier Waveform: Sine, Square, Ramp, etc. (only Pulse for PWM) Modulating Waveform: Sine, Square, Ramp, etc.				
FSK,BPSK	Carrier Waveform	Modulating Frequency : 1 μ Hz ~ 100kHz Sine, Square, Ramp, etc.				
	Source	Internal/External				
Sweep Characteristics (CHA)						
Carrier Waveform		Sine, Square, Ramp and etc.				
Type		Linear, Log				
Sweep Time		5ms to 500s				
Hold/Return Time		0s to 500s				
Trigger Source		Internal, External or Manual				
List Sweep		List Length: 600 pcs				
Burst Characteristics (CHA)						
Carrier Waveform		Sine, Square, Ramp, etc.				
Period		1 μ s~500s				
Burst Count		1 ~ 1000000				
Trigger Source		Internal, External or Manual				
Counter						
Frequency Range		10mHz ~ 350MHz, resolution: 6 digits/s				
Period, Pulse Width		100ns ~ 20s				
Duty Cycle		1% ~ 99%				
General Characteristics						
Power		AC 100 ~ 240V, 45 ~ 65Hz, < 30VA				
Dimension & Weight		334 \times 256 \times 106 mm, Approx.3 kg				

Standard Accessories

Power Cord	1
BNC cable	1
CD(Software+ User's Guide)	1

Options

Power Amplifier	Power: 8W (load 8 Ω)
TCXO	Frequency Stability: \pm 2ppm

TFG1900A Series Function/Arbitrary Waveform Generators



USB

CE

2CH

PC Software

Features

- Dual channel outputs
- Frequency accuracy 20ppm and 1 μ Hz resolution
- Abundant modulation function AM, FM, PM, PWM and FSK
- Provide sweep and burst
- 100MHz built-in counter
- Standard interface : USB Device & Host

Standard Accessories

Power Cord	1
CD(Software+ User's Guide)	1

Options

Power Amplifier: 10W, load 8 Ω

Specification

		TFG1905A	TFG1910A	TFG1920A
Frequency				
Range	Sine	1 μ Hz ~ 5MHz	1 μ Hz ~ 10MHz	1 μ Hz ~ 20MHz
	Square, Pulse	1 μ Hz ~ 5MHz		
	others	1 μ Hz ~ 1MHz		
Resolution		1 μ Hz, 6digits		
Accuracy		\pm 20ppm		
Waveform				
Type		11 build-in waveform (Sine, Square, Ramp, Pulse, etc.) + 5 user-defined arbitrary waveforms		
Length		4096 points		
Sample Rate		100 MSa/s		
Vertical Resolution		10 bits		
Amplitude Characteristics				
Range	Frequency \leq 8MHz	0 ~ 10Vpp(50 Ω), 0 ~ 20Vpp(Open circuit)		
	Frequency>8MHz	0 ~ 9Vpp (50 Ω), 0 ~ 18Vpp(Open circuit)		
Resolution		2mVpp(Amplitude>2Vpp) 0.2mVpp(Amplitudes \leq 2Vpp)		
Offset Characteristics (Ampl. 0Vpp)				
Range		\pm 5Vdc (50 Ω), \pm 10Vdc (Open circuit)		
Resolution		2mVdc		
Modulation Characteristics (CHA)				
FM,AM,PM,	Carrier Waveform	16 waveforms, Sine, Square, Ramp, etc. (PWM is only for Pulse)		
PWM	Modulating Waveform	16 waveforms, Sine, Square, Ramp, etc.		
	Modulating Frequency	2mHz ~ 20kHz		
FSK	Carrier Waveform	16 waveforms, Sine, Square, Ramp, etc.		
	Hop Frequency	1 μ Hz ~ 5MHz	1 μ Hz ~ 10MHz	1 μ Hz ~ 20MHz
	Rate	1mHz ~ 100kHz		
Sweep Characteristics (CHA)				
Carrier Waveform		16 waveforms, Sine, Square, Ramp, etc.		
Type		Linear or Log		
Sweep Time		50ms ~ 500s		
Burst Characteristics (CHA)				
Carrier Waveform		16 waveforms, Sine, Square, Ramp, etc.		
Burst Count		1 ~ 1000000		
Internal Period		1 μ s ~ 500s		
Start/Stop Phase		0 $^{\circ}$ ~ 360 $^{\circ}$		
Sync Output				
Waveform Characteristic		Square, rise/fall time \leq 20ns		
Output Level		TTL compatible		
Counter				
Frequency Range		1Hz ~ 100MHz		
Input Amplitude		100mVrms ~ 7Vrms		
Period		50ms ~ 5s		
General Characteristics				
Power		AC 100 ~ 240V, 45 ~ 65Hz, < 30VA		
Display		VFD display		
Dimension & Weight		322 \times 256 \times 102 mm, Approx.1.5 kg		

TFG1900B Series Function Generators



Features

- Simple structure and highly cost-effective
- Output 16 waveforms
- FM, AM, PM, PWM and FSK modulation
- Provide frequency sweep and burst
- Standard configuration interface: USB device

Options

Power Amplifier (output power: 10W)

Specification

		TFG1903B	TFG1905B	TFG1910B	TFG1920B
Frequency					
Range	Sine	10μHz ~ 3MHz	10μHz ~ 5MHz	10μHz ~ 10MHz	10μHz ~ 20MHz
	Square	10μHz ~ 5MHz			
	others	10μHz ~ 1MHz			
Resolution	10μHz				
Accuracy	±50ppm				
Waveform					
Type	16 waveform, Sine, Square, Ramp, Exp, Log, Noise, etc.				
Length	1024 points				
Sampling Rate	100 MSa/s				
Vertical Resolution	8 bits				
Sine	Harmonic Distortion	≤-40dBc(≤5MHz); ≤-35dBc(>5MHz)			
	Total Distortion	≤0.5% (20Hz ~ 20kHz, 20Vpp)			
Square	Rise/Fall Time	≤35ns Overshoot: ≤10 %			
	Duty Cycle	0.1% ~ 99.9%			
Ramp	Symmetry	0.0% ~ 100.0%			
Amplitude					
Range	Frequency≤8MHz	0 ~ 10Vpp(50Ω), 0 ~ 20Vpp(Open circuit)			
	Frequency>8MHz	0 ~ 9Vpp (50Ω), 0 ~ 18Vpp(Open circuit)			
Resolution	5mVpp(Amplitude>2Vpp) 0.5mVpp(Amplitude≤2Vpp)				
DC Offset (Ampl. 0Vpp)					
Range	±5Vdc (50Ω), ±10Vdc (Open circuit)				
Resolution	5mVdc				
Modulation					
FM,AM,	Carrier Waveform	16 waveforms, Sine, Square, Ramp, etc. (only Pulse for PWM)			
PM,PWM	Modulating Waveform	16 waveforms, Sine, Square, Ramp, etc.			
	Modulating Frequency	40mHz ~ 20kHz			
FSK	Carrier Waveform	16 waveforms, Sine, Square, Ramp, etc.			
	Modulating Waveform	Square			
	FSK Rate	40mHz ~ 100kHz			
Sweep					
Type	Linear or Logarithmic				
Sweep Time	50ms ~ 500s				
Trigger Source	Internal/External/Manual				
Burst					
Waveform	16 waveforms, Sine, Square, Ramp, etc.				
Burst Count	1 ~ 1000000				
Internal Period	1μs ~ 20s				
Start Phase	0° ~ 360°				
Trigger Source	Internal/External/Manual				
Sync Output					
Electrical Level	TTL compatible				
Waveform Characteristic	Square, edge time ≤ 20ns				
Output Level	low level<0.3V, high level>4V				
General Characteristics					
Power	AC 100 ~ 240V, 45 ~ 65Hz, <20VA				
Display	VFD display				
Dimension & Weight	322×256×102mm, Approx.1.5 kg				

TFG368X Series Microwave Signal Generator



Features

- Ultra-low phase noise, excellent spurious noise suppression, ultra-wide bandwidth
- Wide application range in radar, communication, ECM, electronic reconnaissance and etc
- It can also be used as local oscillator and signal generator

Specification

	TFG3681	TFG3682
Frequency		
Range	10MHz-12GHz	10MHz-20GHz
Resolution	20Hz 1mHz (option)	
Accuracy	±1ppm, Frequency≥1.0kHz, 18°C-28°C	
Amplitude		
Setting Range	-25dBm ~ +15dBm	
Specified Range	-10dBm ~ +13dBm	
Resolution	0.1dB	
Accuracy	±1.5 dBm of setting (output level: +13dBm ~ -10dBm)	
Output Impedance	50Ω	
Spectrum Purity		
Harmonic	<-35dBc	<-35dBc (200MHz~12GHz) <-25dBc (12GHz ~20GHz)
Non-harmonic	<-70dBc	
Phase Noise	-94dBc/Hz@10kHz, at 10GHz output	-94dBc/Hz@10kHz, at 10GHz output -121dBc/Hz@10kHz, at 10GHz output (option)
Modulation		
PM break-make ratio	60dBc	
Make-break time range	100nS~10mS	
General Characteristics		
Power	AC200V~240V, 50(1±10%)Hz, <40VA	
Dimension & Weight	254×103×374 mm, 4.2 kg	

Standard Accessories

Power Cord

1



Power Cord

CD(Software+ User's Guide)

1



CD

TFG3600 Series Synthesized Signal Generators



Features

- Perfect combination of DDS and PLL techniques
- Frequency upper limits to 1.5GHz
- Higher level of frequency accuracy, up to 1ppm
- Complete AM/FM/FSK/PSK modulation function
- Standard communication interface: USB Device and RS-232

Standard Accessories

Power Cord	1
BNC Testing cable	1
CD(Software+ User's Guide)	1

Options

Frequency Counter
(upper limits to 2.5GHz, only for TFG3605)

GPIO

Specification

CHA		TFG3605	TFG3610	TFG3615
Frequency				
Range	Sine	1μHz ~ 500MHz	1μHz ~ 1000MHz	1μHz ~ 1500MHz
	Square	1μHz ~ 80MHz		
Resolution		1μHz (carrier frequency≤80MHz) 1Hz (carrier frequency>80MHz)		
Accuracy		±1ppm, Frequency≥1.0kHz, 18°C to 28°C ±50ppm, Frequency<1.0kHz, Min. output 1μHz		
Sine Output Level				
Range	Freq≤500MHz	-127dBm ~ +13dBm(-127dBm ~ -117dBm typ.)		
	Freq≤1000MHz	-110dBm ~ +13dBm(-100dBm ~ -110dBm typ.)		
	Freq≤1500MHz	-105dBm ~ +10dBm(-100dBm ~ -105dBm typ.)		
Resolution		0.1dB		
Accuracy	Freq≤300MHz	setting value ±1dBm (output level +13dBm~-100dBm) setting value±2.2dBm (output level +13dBm~-80dBm, setting value ±1.5dBm typ.)		
	Freq≤1500MHz	setting value ±2.7dBm (output level -80dBm~-100dBm, setting value ±2.0dBm typ.)		
Stationary Wave Ratio (SWR)		<1.8 (output level≤0dBm)		
Spectral Purity				
Harmonic		< -33dBc (output level≤4dBm, typ.)		
Non-Harmonic		< -40dBc (output level≤4dBm, deviation CF≥5kHz)		
Sub-Harmonic		< -40dBc (output level≤4dBm)		
Residual FM		< 100Hz (BW: 0.3 ~ 3kHz, RMS < 120MHz)		
Square				
Rise/Fall Time		≤15ns		
Overshoot		≤5%		
Modulation				
Type		AM, FM, FSK, PSK		
External Modulation Input		Voltage Range: 5V full scale, Input impedance:10kΩ, Frequency: DC to 10kHz		
Frequency Sweep				
Sweep Rate		1ms ~ 800s Linear (carrier ≤80MHz) 100ms ~ 800s Logrithm(carrier ≤80MHz)		
Step Time		50ms ~ 10s Linear (carrier>80MHz)		
Burst(Carrier Frequency ≤80MHz)				
Burst Count		1 ~ 10000 cycles		
Interval		0.1ms ~ 800s		
CHB				
Frequency				
Range		1μHz ~ 10MHz		
Resolution		1μHz		
Accuracy		±1ppm, Frequency≥1.0kHz, 18°C to 28°C ±50ppm, Frequency<1.0kHz, Min. output 1μHz		
Waveform				
Type		Sine, Square, Ramp, Pulse, Sinc, Exp, Noise, DC		
Square	Rise/Fall Time	≤50ns		
	Duty Cycle	0.01% ~ 99.99%		
Pulse	Rise/Fall Time	≤50ns		
	Pulse Width	20ns ~ 20s		
Ramp	Symmetry	0.0% ~ 100.0%		
Output				
Amplitude		1mVpp ~ 10Vpp(50Ω), 2mVpp ~ 20Vpp(High Z)		
Offset		±5Vpk ac+dc(50Ω), ±10Vpk ac+dc(High Z)		
Resolution		5mVpp		
Accuracy		±(1% of setting + 10mVpp) (1kHz Sine)		
Flatness		± 0.5dB(1MHz Sine, 1Vpp)		
General Characteristics				
Power		AC 100V~240V, 50/60Hz, 50VA Max		
Dimension & Weight		254×103×374 mm, 4.2 kg		

SU3630 3GHz Synthesized Signal Generator



Features

- Simple and easy to operate
- Up to -115dBc phase noise
- Up to +13dBm output power
- Flexible frequency and amplitude sweep function
- Pulse modulation function
- Standard interface of USB Device and RS232

Specification

Frequency		
Range		25MHz ~ 3GHz
Resolution		3Hz
Reference Frequency	Reference Output	Frequency: 10MHz Level: >0dBm Port: BNC connector
	Reference Input	Frequency: 10MHz Power: -3~ +7dBm Input Port: BNC connector Impedance(nominal): 50Ω
Phase Noise		-90dBc~ -115dBc,offset:20kHz
Spurious	Harmonic	<-35dBc (Power ≤ 5dBm)
	Non-harmonic	<-60dBc
Power		
Range		-120dBm ~ +13dBm
Resolution		0.25dB
Accuracy	Output Frequency: 25MHz~2250MHz	±(1.0+2% absolute of setting value) dB
	Output Frequency: 2200MHz~3000MHz	±(1.0+4% absolute of setting value) dB
Input SWR		<1.5 typical
RF Output	Terminal	N type
	Output Impedance	50Ω
Pulse Modulation		
Break-make Ratio		>80dB
Rising/Falling Edge		<100ns
Pulse Width		0.25s Min.
Pulse Period		0.5s Min.
Sweep		
Frequency Sweep	Sweep Mode	Linear
	Min. Step	3Hz
Power Sweep	Sweep Mode	Linear
	Min. Step	0.25dBm
General Characteristics		
Power		AC 100V~240V, 50/60Hz, 50VA Max
Dimension&Weight		386×256×123 mm, <5 kg

Standard Accessories

Power Cord	1
CD(Software+ User's Guide)	1

Options

GPIB	1
N-N cable	1
N-SMA adapter	1

SU5000 Series Pulse/Pattern Generators



Features

- Direct Digital Synthesis Technology
- Crystal Oscillation Reference
- High Accurate Time and Frequency
- Count burst or single burst both can be selected
- Multiple output channels and EXT
- Trigger/Frequency Standard Input channels
- Data Storage And Recall
- Optional GPIB and USB interface

Specification

	SU5101/5102	SU5202G	SU5302	SU5303
Channel	1/2	2	2	1
Waveform				
Pulse	Single/Dobule, Logic Positive /Negative, Positive/Negative Polary	Single/Dobule, Logic Positive /Negative		Logic Positive /Negative
Edge Time	≤10ns	≤10ns	8ns ~ 1ms	5ns ~ 1ms
Overshoot	≤ 10%	≤ 10%	≤ 10%	≤ 10%
Time				
Pulse Period	20ns ~ 10000s (frequency range: 0.1mHz ~ 50MHz)			20ns ~ 10000s
Time Interval	5ns ~ 10000s			8ns ~ 9999.5s
Resolution	5ns (Low range), 10μs (High range)			0.1ns (typical)
Interval Error	±(T×5×10 ⁻⁵ + 5ns)(Low range), ±(T×5×10 ⁻⁵ + 10μs) (High range)			±(T×5×10 ⁻⁵ +5ns)
Pattern		○	Length:4095bits Format:NRZ Rate:100mHz ~ 50MHz	Length range: 2~16383bits Format:NRZ, RZ
Amplitude Offset				
Amplitude Range	50mV ~ 10V(High Z)	50mV ~ 5V (50Ω)		
Offset Range	50mV ~ 10V(High Z)	±(50mV~5V) (50Ω)		
Output Impedance	50Ω			
TTL				
TTL/COMS Level	Low Level≤ 0.3V, High Level≥3.0V (high impedance load)			
Output Impedance	50Ω			
Burst				
Burst Count	2 ~ 65000 cycles			
Burst Mode	Continuous, Single			
EXT. STD Input				
Frequency	10M mutiple			
Amplitude	0.5-5Vpp, AC coupling			
Trigger				
Trigger Mode	Internal, External, Manual			
Ext. Trigger Input	Frequency: 1Hz ~ 10MHz (Square), Amplitude: 1Vp-p~20Vp-p			Ampl: TTL, Pulse width: >100ns, Input Impedance: ≥1kΩ
Input Impedance	≥100kΩ			
General Characteristics				
Power	AC110~240V, 50/60Hz,<80VA			
Display	VFD	5.7" TFT LCD	5.7" TFT LCD	4.3" TFT LCD
Optional Interface	USB, GPIB	RS232(Standard),GPIB	RS-232(Standard)	RS232(Standard),GPIB
Dimension & Weight	254×103×384mm, Approx.3 kg	330×155×300mm,Approx.4.2kg		450×100×475mm, Approx.6.0 kg

Standard Accessories

Power Cord	1
Testing cable	1
CD (User's Guide)	1

Options

Power Amplifier

SA2100/SA2200 Power Quality Analyzer



Selection Guide

Model		SA2100	SA2200
Standard compliance		IEC61000-4-30 Class S	IEC61000-4-30 Class A
Measurement Items	Voltage/Current	●	●
	Frequency	● (50Hz,60Hz,400Hz)	● 50Hz,60Hz,400Hz
	Dips /swell	●	●
	Harmonics	● 1-50th (50/60Hz)	● 1-100th (50/60Hz)
	Power / Energy	●	●
	Unbalance	●	●
	Monitor	●	●
	Inrush	●	●
	Flicker	●	●
	Transients	● 20kS/s	● 163.84kS/s
	Logger	●	●
	Wave Recording	○	●
Input Characteristics	Channel (Voltage/Current)	4/4	
	Voltage Range	1-1000Vrms, 6000V transient voltage	
	Current Range	depends on supplied current clamp	
PC Software Analysis		○	●
Storage	Micro SD card (build-in)	8GB	32GB
Battery	Capacity/Life	NI-MH, 3800mAh/>7h	Lithium ion, 5200mAh/>8h
Time Synchronization	GPS/Beidou	○	● (option)
Communication	Interface	USB Host, LAN	USB Host, LAN, WIFI
	WIFI App	○	● (option)
General Characteristic	Screen	5.6" TFT LCD /320*240	5.6" TFT LCD /640*480
	Dimension/Weight	262× 173×66 mm/1.6kg	270 × 190×66mm/2.0kg
	Wire Combinations	1Ø+NEUTRAL,1Ø SPLIT PHASE,1Ø IT NO NEUTRAL,3Ø WYE,3Ø DELTA, 3Ø IT, 3Ø HIGH LEG, 3Ø OPEN LEG, 2-ELEMENT, 2 1/2-ELEMENT	
	Electrical Safety	IEC61010-1 ,Safety Degree: 600V CAT IV 1000V CAT III	



Isolated Interface to ensure safe operation



SA2100 Specification

Standard compliance: IEC61000-4-30 Class S

Measurement

	Measurement Range	Resolution	Accuracy
Voltage/Current/Frequency			
Vrms(AC+DC)	1 ~ 1000Vrms	0.1Vrms	±0.5% of nominal voltage
Vpk	1 ~ 1400Vpk	0.1Vpk	±0.5% of nominal voltage
V(Crest Factor)	1.0 ~ >2.8	0.01	±5%
Arms (AC)	10mV/A	0~100A	±0.5%±0.2A
	1mV/A	1~1000A	±0.5%±0.2A
	50mV(65mV)/1000A	15~5000A	±1%±2A
A(Crest Factor)	1 ~ 10	0.01	±5%
Frequency	42.5~57.5(50Hz nominal)	0.01Hz	±0.01Hz
	51~69(60Hz nominal)	0.01Hz	±0.01Hz
	385~414(400Hz nominal)	0.01Hz	±0.1Hz
Dips & Swells			
Vrms1/2	0 ~ 200% of nominal voltage	0.1Vrms	±1%
Arms1/2	1 ~ 3000A	1A	±1% ±2A
Duration	hour-minute-second-microsecond	0.5 cycle	1 cycle
Harmonic (IEC61000-4-7)			
Harmonic Number	1 ~ 50		
Harmonic Voltage %	0.0 ~ 100.0%	0.1%	±0.1% ± nx0.1%
Harmonic Current %	0.0 ~ 100.0%	0.1%	±0.1% ± nx0.1%
THD	0.0 ~ 100.0%	0.1%	±2.5%
Phase	-360° ~ 0°	1°	± nx1.5°
Power and Energy			
Active Power/Apparent Power/Reactive Power	1.0 ~ 20.00MW	0.1kW	±1.5±10 digits
KWh	0.00kWh ~ 200GWh	10Wh	±1.5±10 digits
Power Factor	0 ~ 1	0.01	±0.03
Flicker (IEC61000-4-15)			
Pst(1min),Pst,Plt,PF5	0.00 ~ 20.00	0.01	±5%
Unbalance			
Voltage	0.0 ~ 5.0%	0.1%	±0.5%
Current	0.0 ~ 20.0%	0.1%	±1%
Voltage Phase	-360° ~ 0°	1°	±2 digits
Current Phase	-360° ~ 0°	1°	±5 digits
Voltage Transient			
Vpk	±6000Vpk	1V	±15%
Vrms	10 ~ 1000Vrms	1V	±2.5%
Min. Test Time	50us		
Inrush Current			
Arms	0~3000Arms	0.1	±1% ± 5 digits
Inrush Duration	6s ~ 32min selectable	10ms	±20ms
Logger			
Recording	user-defined parameters for 4 phases at the same time		
Memory	Data stored in Micro SD card, 8GB		
Duration Time	2 hrs to 1 year, depends on the recording items and time interval		
Interval	1s to 60 minutes		
Monitor			
Support EN50160 in default or user-defined standard			









SA2200 Specification

Standard compliance: IEC61000-4-30 Class A

Measurement




	Measurement Range	Resolution	Accuracy
Voltage/Current/Frequency			
Vrms(AC+DC)	1 ~ 120Vrms 120Vrms~400Vrms 400~1000Vrms	0.001Vrms 0.01Vrms 0.1Vrms	±0.1% of nominal voltage
Vpk	1 ~ 1400Vpk	0.01Vpk	±0.5% of nominal voltage
V(Crest Factor)	1.0 ~ >2.8	0.01	±5%
Arms (AC)	10mV/A	0~150A	±0.1%±0.1A
	1mV/A	1~2000A	±0.1%±0.1A
	65mV/1000A	10~6000A	±0.1%±0.2A
A(Crest Factor)	1 ~ 10	0.01	±5%
Frequency	42.5~57.5 (50Hz nominal)	0.01Hz	±0.01Hz
	51~69 (60Hz nominal)	0.01Hz	±0.01Hz
	320~480 (400Hz nominal)	0.01Hz	±0.01Hz
Dips & Swells			
Vrms1/2	0 ~ 200% of nominal voltage	0.01Vrms	±0.2%
Arms1/2	depends on current clamps	0.01A	±1%
Harmonic (IEC61000-4-7)			
Harmonic Number	1 ~ 100(50/60Hz) (IEC61000-4-7) 1~12(400Hz)		
Harmonic Voltage %f	0.0 ~ 100.0%	0.01%	±0.1% ± nx0.1%
Harmonic Current %f	0.0 ~ 100.0%	0.01%	±0.1% ± nx0.1%
THD	0.0 ~ 100.0%	0.01%	±2.5%
Phase	-180° ~ 180 0°	0.1°	± nx0.1°
Power and Energy			
P, S, Q1	Max. 6000MW	0.1kW	±1%±10 digits
PF & cosΦ	0 ~ 1	0.01	±0.01
kWh, kVAh, kvarh	depends on nominal voltage and current clamps		±1%±10 digits
Flicker (IEC61000-4-15)			
Pst(10min)/Plt (2 hrs)	0.00 ~ 20.00	0.01	±5%
Unbalance			
Voltage	0.0 ~ 20.0%	0.1%	±0.1%
Current	0.0 ~ 20.0%	0.1%	±1%
Voltage Phase	-360° ~ 0°	0.1°	±0.1°
Current Phase	-360° ~ 0°	0.1°	±0.5°
Voltage Transient			
Vpk	±6000Vpk	0.01V	±15%
Vrms	10 ~ 1000Vrms	0.01V	±2.5%
Min. Test Time	6.5us		
Inrush Current			
Arms	depends on current clamps	0.01	±1% ± 5digits
Inrush Duration	1 ~ 32min selectable	10ms	±20ms
Logger			
Recording	user-defined parameters for 4 phases at the same time		
Memory	Data stored in Micro SD card, 32GB		
Duration Time	2 hrs to 1 year, depends on the recording items and time interval		
Interval	1s to 60 minutes		
Monitor			
Support EN50160 in default or user-defined standard			

Accessories

Voltage Test Leads		(2m) × 5 pcs	Soft Carry Bag		1 pcs
Alligator Clips		5 pcs	CD (Software, Manuals)		1 pcs
Power Cord Power Adapter		1 pcs	Sticker of input port (SA2200)		1 pcs

CT Clamps

Clamp Mode	KLC8C-5A	CTC0080	CTC0130	CTC1535	ETCR035AD
Appearance					
Measurement Range	0-5A	0-50A	1~100A	1~1000A	0.0-1000A (AC/DC)
Output Voltage Ratio	10mV/A	10mV/A	1mV/A	1mV/A	1mV/A
Accuracy	0.2%	0.2%	0.2%	1%	±3%
Frequency Characteristic	45Hz~55Hz	50Hz~400Hz	50Hz~400Hz	40Hz~100kHz	AC: 45Hz~400Hz
Clamp Radius (mm)	8	8	13	52	30×35
Dimension (mm)	158×43×24	171×46×27	174×52×27	111×216×45	122×70×33
Cable Length (cm)	200	200	200	200	150
Power	○	○	○	○	9V Dry cell 6LR61

Flexible Probes Mode	SY-1500A	PY-3000A	PY-5000A(SA2100)	SY-6000A(SA2200)
Appearance				
Measurement Range	1~1500A	15~3000A	20~5000A	20~6000A
Output Voltage Ratio	100mV/1000A @ 50Hz	65mV/1000A @ 50Hz	50mV/1000A @ 50Hz	65mV/1000A @ 50Hz
Accuracy	±0.5% + Position Error	±1% + Position Error		±1% + Position Error
Maximum Allowable Input	100KA	100KA		100KA
Phase Error	<±1°	<±1°		<±1°
Noise	<2mVrms (10Hz~10KHz)	<2mVrms (10Hz~10KHz)		<2mVrms (10Hz~10KHz)
Frequency Characteristic	10Hz~10KHz (-3dB)	10Hz~10KHz (-3dB)		10Hz~10KHz (-3dB)
Weight	110g	130g		150g
Length	200cm	200cm		200cm
CT Perimeter	35cm	50cm		80cm
Measurement Position Error	±1%	±2%		±2%

SA9100/9200 Series Spectrum Analyzers

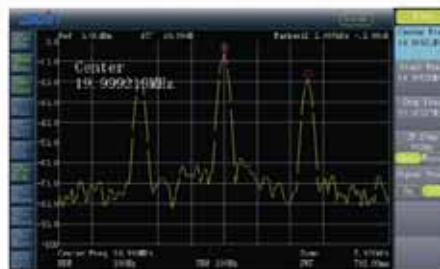


Features

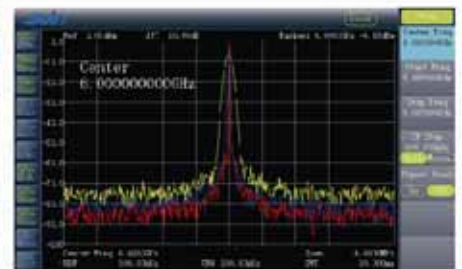
- Frequency range from 9kHz to 7.5GHz
- -160dBm Display Average Noise Level (Min.)
- < -100 dBc/Hz @10 kHz Offset Phase Noise (Typ.)
- Total Amplitude Accuracy < 0.8 dB
- Preamplifier and EMI filter are standardly configured



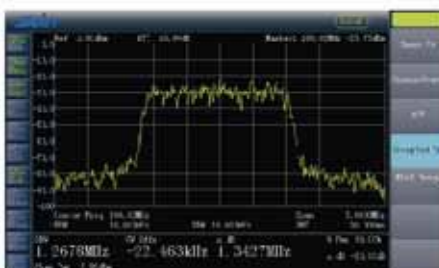
Adjacent Channel Power



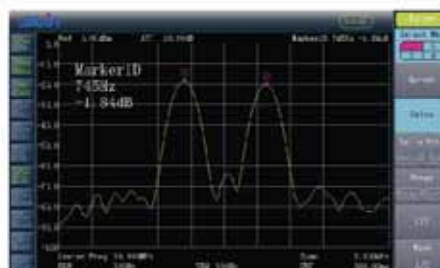
AM modulation signal



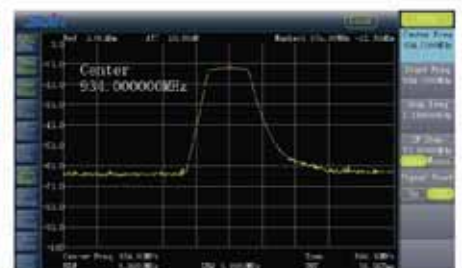
Different analysis width



Occupied bandwidth



Higher resolution



Scalar network analyzer

Specification

	SA9115	SA9130	SA9232	SA9275
Frequency				
Range	9kHz ~ 1.5GHz	9kHz ~ 3.0GHz	9kHz ~ 3.2GHz	9kHz ~ 7.5GHz
Resolution	1Hz			
Aging Rate	<5×10 ⁻⁶ /year		<1×10 ⁻⁶ /year	
Frequency Span				
Frequency Span Range	0Hz, 100Hz ~ 1.5GHz	0Hz, 100Hz ~ 3.0GHz	0Hz, 100Hz ~ 3.2GHz	0Hz, 100Hz ~ 7.5GHz
Uncertainty	±span/(sweep points-1)			
SSB Phase Noise (fc=1.0GHz)	-80dBc/Hz @10 kHz offset		-96dBc/Hz @10 kHz offset	
Bandwidth				
Resolution Bandwidth (-3dB)	10Hz ~ 1MHz, step 1-3-10,			
RBW Uncertainty	10%, nominal (RBW>1kHz)			
	20%, nominal (RBW≥10Hz, sweep time≥5s)			
Video Bandwidth (-3dB)	1Hz to 1MHz, step 1-3-10			
Amplitude				
Range	DANL to +30dBm		DANL to +20dBm	
	DC Voltage: 50V			
Maximum Input Level	CW RF Power: +30dBm (1.0W)		CW RF Power: +20dBm (0.1W)	
	Max.Damage Level: +40dBm (10W)		Max.Damage Level: +30dBm (1W)	
Displayed Average Noise Level (DANL)				
DANL (Preamplifier Off)	typ. -125 dBm		typ. -135 dBm	
DANL (Preamplifier On)	typ. -135 dBm		typ. -152 dBm	
Reference Level Range	-100 dBm to +30 dBm, step 1 dB			
Sweep				
Sweep Time Range	10 ms to 3000 s (100Hz≤Spans≤3GHz)		1ms to 7500 s (100Hz≤Spans≤7.5GHz)	
	20 μs to 3000 s (Span=0 Hz)		20 μs to 7500 s (Span=0 Hz)	
Sweep Time Uncertainty	5%, nominal (100Hz≤Spans≤7.5GHz)			
	0.5%, nominal (Span=0 Hz)			
Sweep Mode	Continuous, Single			
Trigger				
Trigger Source	Free, Video, External			
External Trigger Level	5 V TTL level			
Advanced Measurement				
Channel Power, Adjacent Channel Power, N-dB bandwidth, Occupied Bandwidth				
EMI	200Hz, 9kHz, 120kHz			
Input/Output				
RF Input Impedance	50 Ω			
Standard frequency	Frequency: 10MHz			
	Amplitude: 0dBm~10dBm (input)-3dBm to +3dBm (output)			
Tracking Generator (-TG Model)				
TG Frequency range	9kHz to 1.5GHz	9kHz to 3GHz	100kHz to 3.2GHz	100kHz to 7.5GHz
TG Output level range	-20dBm to 0dBm		-40dBm to 0dBm	
TG Output level resolution	1 dB			
Interface				
Type	USB Host & Device, LAN, VGA, RS-232 (only SA9100 series available)			
General Characteristic				
Power Supply	Input Voltage: AC100V to 240V			
	Frequency: 50/60Hz (1±10%)			
	Power Consumption: 35W			
Dimension & Weight	363×154×327mm, Approx. 6.0kg		363×154×327mm, Approx. 6.5kg	

Standard Accessories

Standard	Power Cord	1
	N-BNC Adapter	1
	CD(Software+ User's Guide)	1



Attenu 1:900MHz/1.8GHz



Attenu 2:2.4GHz



Near Filed Probe Set SY5030

Options

Tracking Generator
N-SMA Adapter, N-SMA Cable, BNC-BNC Cable,
USB cable, RS-232 cable
Attenu 1(900MHz/1.8GHz), Attenu2 (2.4GHz)
Near Filed Probe Set SY5030

SS7406 Universal Frequency Counter/Timer/Analyzer



Specification

Measuring Functions

Frequency Range	Channel 1: 1mHz ~ 200MHz Channel 2: 1mHz ~ 200MHz Channel 3: 3GHz/6.5GHz/12.4GHz/16GHz/20GHz/26.5GHz (option)
Measurement Resolution	11 digits/s
Period	5ns ~ 1000s
Time Interval Range	1ns ~ 10000s
Time Resolution	25 ps
Pulse Width	1ns ~ 10000s
Duty Cycle	1% ~ 99%
Totalize	0 ~ 1×10 ¹³
Phase Difference	1° ~ 359°

Input

Dynamic Range	50mVrms ~ 1.0Vrms (Sine), 150mVPP ~ 4.5VPP(Pulse)
Input Impedance	1MΩ//35pF or 50Ω
Coupling Mode	AC or DC
Input Attenuation	×1 or ×10
Trigger Level	-5.000V ~ +5.000V, min. step 1mV or auto trigger level

Other Functions

Frequency Ratio	ratio value range : 0.00001~999999
Up/Low Limit	"Limit" light on shows the result out of range, off shows within range
Statistics Calculation	Multi-average, Max.,Min., PPM, SD, Allan Variance

Standard Time Base

Daily Aging	1×10 ⁻⁸ /day
Yearly Aging	5×10 ⁻⁷ /year

Optional Time Base

Daily Aging	5×10 ⁻¹⁰ /day
Yearly Aging	5×10 ⁻⁹ /year

Channel Options

	Frequency Range	Dynamic Range
3.0GHz	100MHz ~ 3GHz	A. -27dBm~+19dBm (100MHz~2.6GHz) -15dBm~+19dBm (2.6GHz~3.0GHz)
	100MHz ~ 3GHz	B. -27dBm~+19dBm
6.5GHz	200MHz ~ 6.5GHz	-15dBm ~ +13dBm
12.4GHz	6.5GHz ~ 12.4GHz	-15dBm ~ +10dBm
16.0GHz	6.5GHz ~ 16GHz	-15dBm ~ +10dBm
20.0GHz	200MHz~20GHz	-10dBm ~ +10dBm (200MHz~350MHz)
		-15dBm ~ +10dBm (350MHz~18GHz)
		-10dBm ~ +10dBm (18GHz~20GHz)
26.5GHz	10GHz~26.5GHz	-20dBm ~ +10dBm (10GHz~20GHz)
		-15dBm ~ +10dBm (20GHz~24GHz)
		-10dBm ~ +10dBm (24GHz~26.5GHz)

General Characteristics

Interface	RS-232, GPIB, LAN
Power	Standard: AC220V (10%), 50Hz (5%), <70VA Optional: AC110V (10%), 60Hz (5%), <70VA
Dimension & Weight	454×97.5×480mm, 7.3Kg

Features

- Minimum measuring resolution 11 digits/s
- Time resolution 25ps (Typ.)
- 4.3' TFT-LCD display to show abundant information also trendgram and histogram of statistical calculation visually
- Firm and sophisticated standard 2U design
- Standard interface of RS-232, GPIB and LAN

Standard Accessories

Power Cord	1
BNC Testing Cable	1
CD(Software+ User's Guide)	1



Power Cord



BNC Testing Cable



CD

SS7000 Series Universal Frequency Counter/Timer/Analyzer



Features

- Minimum measuring resolution 11 digits/s
- Time resolution 25ps (typical)
- Maximum frequency's measurement can reach to 26.5GHz (options)
- Measures Frequency, Period, Duty Cycle, Frequency Ratio, Totalize, Phase Difference, Pulse Width, Time Interval and DCV.
- Utility statistics functions of multi-average, maximum, minimum, PPM, standard deviation and Allan Variance for frequency measurement
- Stores 15 group status
- High-stability crystal oscillator is optional

Specification

		SS7200A	SS7300	SS7400	SS7402
Measuring Functions					
Frequency Range	CH1	0.001Hz ~ 200MHz			
	CH2	0.001Hz ~ 200MHz			
	CH3	CH 3: 3GHz/6.5GHz/12.4GHz/16GHz/20GHz/26.5GHz (option)			
Display Resolution		8 digits/s	10 digits/s	11 digits/s	11 digits/s
Period		5ns ~ 1000s			
Time Interval Range		10ns ~ 10000s		1ns ~ 10000s	
Time Resolution		2.5ns	500 ps	150ps	25ps
Pulse Width		30ns ~ 5000s		1ns ~ 10000s	
Duty Cycle		1% ~ 99%			
Totalize		0 ~ 1×10 ¹³			
Phase Difference		1° ~ 359°			
Input					
Dynamic Range		50mVrms ~ 1.0Vrms (Sine), 150mVpp ~ 4.5Vpp(Pulse)			
Input Impedance		1MΩ//35pF or 50Ω			
Input Attenuation		×1 or ×10			
Trigger Level		-5.000V ~ +5.000V			
Other Functions					
Frequency Ratio		●			
Up/Low Limit		"Limit" light on shows the result out of range, off shows within range			
Statistics Calculation		Multi-average, Max., Min., PPM, SD, Allan Variance			
Standard Time Base					
Accuracy		5×10 ⁻⁸			
Daily Aging		1×10 ⁻⁸ /day			
Optional Time Base					
Accuracy		5×10 ⁻⁸			
Daily Aging		5×10 ⁻¹⁰ /day			
Channel Options					
		Frequency Range	Dynamic Range		
3.0GHz		100MHz ~ 3GHz	A. -27dBm~+19dBm (100MHz~2.6GHz) -15dBm~+19dBm (2.6GHz~3.0GHz)		
		100MHz ~ 3GHz	B. -27dBm~+19dBm		
6.5GHz		200MHz ~ 6.5GHz	-15dBm ~+13dBm		
		6.5GHz ~ 12.4GHz	-15dBm ~ +10dBm		
12.4GHz		6.5GHz ~ 16GHz	-15dBm ~ +10dBm		
		6.5GHz ~ 16GHz	-10dBm ~ +10dBm (200MHz~350MHz) -15dBm ~ +10dBm (350MHz~18GHz) -10dBm ~ +10dBm (18GHz~20GHz) -20dBm ~ +10dBm (10GHz~20GHz)		
20.0GHz		200MHz~20GHz	-15dBm ~ +10dBm (20GHz~24GHz) -10dBm ~ +10dBm (24GHz~26.5GHz)		
		10GHz~26.5GHz			
26.5GHz		10GHz~26.5GHz			
		10GHz~26.5GHz			
General Characteristics					
Interface	Standard	USB	USB, RS-232	USB, RS-232	RS-232, GPIB
	Optional	RS-232, GPIB	GPIB	GPIB	○
Power		AC220V(10%) or AC110V(10%), 50Hz(5%) or 60Hz(5%) AC220V (1 ±10%), 50Hz (1 ±5%) <70VA (for SS7402 and SS7400)			
Dimension & Weight		375×105×235mm			
		3.7kg	3.7kg	4.2kg	5.2kg

Standard Accessories

Power Cord	1
BNC Testing Cable	1
CD(Software+ User's Guide)	1



Power Cord



BNC Testing Cable



CD

SS7001 Series Frequency Counter



Features

- High accuracy with minimum measuring resolution 10 digits/s
- 16-bit microcontroller is used and the speed of data processing is fast
- Maximum frequency's measurement can reach to 26.5GHz (options)
- Utility statistics functions of multi-average, maximum, minimum, PPM, standard deviation and Allan Variance for frequency measurement
- High-stability crystal oscillator is optional

Specification

		SS7201	SS7301
Measuring Functions			
Frequency	CH 1	0.001Hz ~ 150MHz	0.001Hz ~ 200MHz
	CH 2	3GHz/6.5GHz/12.4GHz/16GHz/20GHz/26.5GHz (options)	
	CH 3	3GHz/6.5GHz/12.4GHz/16GHz/20GHz/26.5GHz (options)	
Display Resolution		8 digits/s	10 digits/s
Period		8ns ~ 1000s	5ns ~ 1000s
Pulse Width		50ns ~ 1000s	
Duty Cycle		5% ~ 95%	
Totalize		0 ~ 1×10 ¹¹	
Input			
Dynamic Range		50mVrms ~ 1.0Vrms (Sine), 150mVpp ~ 4.5Vpp(Pulse)	
Input Impedance		1MΩ//35pF or 50Ω	
Coupling Mode		AC or DC	
Trigger Mode		Rising edge or Falling edge	
Input Attenuation		×1 or ×10	
Low-pass Filter		stop frequency approx.100kHz	
Trigger Level		-5.000V ~ +5.000V, step 5mV	
Other Functions			
Frequency Ratio		<input type="radio"/>	<input checked="" type="radio"/>
Frequency Self-test		<input type="radio"/>	<input checked="" type="radio"/>
Up/Low Limit		"Limit" light on shows the result out of range, off shows within range	
Statistics Calculation		Multi-average, Max., Min., PPM, SD, Allan Variance	
Standard Time Base			
Accuracy		1×10 ⁻⁵	5×10 ⁻⁸
Daily Aging		<input type="radio"/>	1×10 ⁻⁸ /day
Optional Time Base			
Accuracy		1×10 ⁻⁵	5×10 ⁻⁸
Daily Aging		<input type="radio"/>	5×10 ⁻¹⁰ /day
Channel Options			
		Frequency Range	Dynamic Range
3.0GHz		100MHz ~ 3GHz	A. -27dBm~+19dBm (100MHz~2.6GHz) -15dBm~+19dBm (2.6GHz~3.0GHz)
		100MHz ~ 3GHz	B. -27dBm~+19dBm
6.5GHz		200MHz ~ 6.5GHz	-15dBm ~ +13dBm
		6.5GHz ~ 12.4GHz	-15dBm ~ +10dBm
12.4GHz		6.5GHz ~ 12.4GHz	-15dBm ~ +10dBm
		6.5GHz ~ 16.0GHz	-15dBm ~ +10dBm
20.0GHz		200MHz~20GHz	-10dBm ~ +10dBm (200MHz~350MHz)
			-15dBm ~ +10dBm (350MHz~18GHz)
			-10dBm ~ +10dBm (18GHz~20GHz)
			-20dBm ~ +10dBm (10GHz~20GHz)
26.5GHz		10GHz~26.5GHz	-15dBm ~ +10dBm (20GHz~24GHz)
			-10dBm ~ +10dBm (24GHz~26.5GHz)
General Characteristics			
Interface	Standard	RS-232	USB, RS-232
	Optional	<input type="radio"/>	GPIO
Power		AC220V(10%) or AC110V(10%), 50Hz(5%) or 60Hz(5%)	
Dimension & Weight		375×105×235mm, Approx. 3.5kg	

Standard Accessories

Power Cord	1
BNC Testing Cable	1
CD(Software+ User's Guide)	1



Power Cord



BNC Testing Cable



CD

SA1000 Series Frequency Characteristic Analyzer



Features

- Built-in detector, dispensing with detection radiometer
- Measure amplitude-frequency, phase-frequency, frequency discrimination and S parameters
- Available to set sweep mode arbitrarily, such as linear, logarithmic or single tone
- Display the frequency, gain and phase value at cursor position
- Four cursors could be displayed at same time within the sweep range
- 7" TFT color LCD with clear graph interface and convenient operation
- USB Device and RS-232 interface

Specification

	SA1030C/D	SA1050C/D	SA1080C/D	SA1140C/D
Sweep Range	20Hz ~ 30MHz	20Hz ~ 50MHz	20Hz ~ 80MHz	20Hz ~ 140MHz
Function	SA1000C: amplitude-frequency, phase-frequency, frequency discrimination and S Parameters can be measured SA1000D: amplitude-frequency, phase-frequency and frequency discrimination can be measured			
Sweep Mode	Linear, Log or Tone			
Output Amplitude	>0.5Vrms			
Input Impedance	50Ω/High Impedance			
Output Impedance	50Ω			
Output Attenuation	0 ~ 80dB, 1dB step			
Input Gain	10 ~ -30dB, 10dB step			
Phase Range	-180° ~ +180°			
Phase Resolution	1°			
Amplitude range of Input	0.1V≤As≤10V			
DC Offset	±4V			
General Characteristics				
Display	7" TFT LCD, 800×480			
Interface	RS-232, USB Device			
Power	AC 220 (1±10%)V, 50(1±5%)Hz, <60VA			
Dimension & Weight	363×154×327mm, Approx.4.8 kg			

Standard Accessories

- Power Cord 1
- BNC Testing Cable 2
- Test clip leads 2
- CD(User's Guide) 1



Power Cord



CD



BNC Testing Cable



Test clip leads

Options

TCXO Stability: ±5×10⁻⁷/day

SM2100 Series Digital AC Millivolt Meter



Features

- LED Display, Dual Independent Channels
- Auto/Manual Ranging can be selected
- Multiple display result with different units
- High Frequency Range from 5Hz to 6MHz
- Standard Interface USB Device

Specification

	SM2130	SM2160
Frequency Range	5Hz ~ 3MHz	5Hz ~ 6MHz
Measurement Range		
AC Voltage	50 μ V ~ 400V	50 μ V ~ 300V
Range	3mV, 30mV, 300mV, 3V, 30V, 300V	
dBV	-86dBV ~ 52dBV	-86dBV ~ 50dBV
dBm	-73dBm ~ 65.05dBm	-73dBm ~ 62.55dBm(R=50 Ω)
Vpp	141 μ V ~ 1131.3Vpp	141 μ V ~ 848.4Vpp
dB	-86dB ~ 52.04dB	-86dB ~ 49.54dB
Voltage Measurement Error		
\geq 5Hz ~ 100Hz	\pm 2.5% reading \pm 0.8% range	
$>$ 100Hz ~ 500kHz	\pm 1.5% reading \pm 0.5% range	
$>$ 500kHz ~ 2MHz	\pm 2.0% reading \pm 1.0% range	
$>$ 2MHz ~ 3MHz	\pm 3.0% reading \pm 1.0% range	
$>$ 3MHz ~ 5MHz	\pm 4.0% reading \pm 2.0% range	
$>$ 5MHz ~ 6MHz	\pm 5.0% reading \pm 4.0% range	
Resolution		
Range	3 ¹ / ₂ digits Display	4 ¹ / ₂ digits Display
3mV	0.001mV	0.0001mV
30mV	0.01mV	0.001mV
300mV	0.1mV	0.01mV
3V	0.001V	0.0001V
30V	0.01V	0.001V
300V	0.1V	0.01V
Damage Voltage		
3V ~ 300V		350Vrms (5Hz ~ 6MHz)
3V ~ 400V	350Vrms (5Hz ~ 3MHz)	
3mV ~ 300mV	350Vrms (5Hz ~ 1kHz) 35Vrms (1kHz ~ 10kHz) 10Vrms (10kHz ~ 5MHz)	
General Characteristics		
Power	AC220(1 \pm 10%)V, 50 (1 \pm 5%)Hz, < 20VA	
Interface	USB Device	
Display	LED display	
Dimension & Weight	260 \times 106 \times 375mm , Approx.3.9 kg	

Standard Accessories

Power Cord	1
Test clip leads	1
CD(Software+ User's Guide)	1



Power Cord

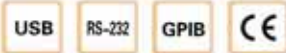


CD



Test clip leads

SA5052/5061 Digital Multimeter



Features

- VFD display with high-brightness
- True 6½ digits
- Reading rates up to 1000 readings per second
- True RMS measurement of AC voltage and current
- Built-in math operations
- Full measuring functions to meet user's test need
- Standard interface RS-232 and USB Device, optional interface of GPIB

Specification

SA5052 5 ½ digits			SA5061 6 ½ digits	
Basic Function	Range	Best Accuracy ± (% reading + digits)	Range	Best Accuracy ± (% reading + % range)
DC Voltage	100mV/1V/10V/100V/1000V	± (0.01% + 4)	100mV/1V/10V/100V/1000V	± (0.0035% + 0.0005%)
AC Voltage	100mV/1V/10V/100V/750V	± (0.1% + 100)	100mV/1V/10V/100V/750V	± (0.06% + 0.04%)
DC Current	10mA/100mA/1A/10A	± (0.04%+8)	10mA/100mA/1A/3A	± (0.05%+0.005%)
AC Current	10mA/100mA/1A/10A	± (0.5%+100)	1A/3A	± (0.1%+0.09%)
Resistance	100Ω/1KΩ/10KΩ/100KΩ/ 1000KΩ/10MΩ/100MΩ	± (0.03%+6)	100Ω/1KΩ/10KΩ/100KΩ/ 1MΩ/10MΩ/100MΩ	± (0.01%+0.001%)
Capacitance	1nF/ 10nF/ 100nF/1uF/10uF	± (1%+10)	○	○
Frequency	5Hz-1MHz	± (0.0015%+8)	3Hz-990kHz	± 0.02%
Temperature	-200 ~ 800°C		-200 ~ 800°C	
Features				
Reading Rate	800 reading/s		1000 reading/s	
Auto Range	●		●	
Diode	●		●	
Continuity	●		●	
Null	●		●	
Trigger	●		●	
Save/Read	●		●	
Math	MAX,MIN,Null,dB, dBm, MX+B,Limit Test,%		MAX,MIN, Null, dB, dBm, MX+B, Limit Test,%	
General Characteristics				
Safety	IEC61010-1: 2001, CAT I 1000V/CAT II 600V, Class of pollution: 2			
Interface	USB Device, RS-232, GBIP (optional)			
Power	110 V/220 V (1±10%), 50 Hz/60 Hz, 15 VA			
Dimension & Weight	260x106x375 mm, 3.0 kg			

Standard Accessories

Power Cord	1
Test Lead Kit	1
CD(User's Guide)	1



Power Cord



CD



Test Lead Kit

SK33231/33251 Programmable DC Power Supply



Features

- Less buttons, easy to operate
- Three outputs, the maximum power is up to 342W
- 4 digit LED display can show voltage, current and power simultaneously

Specification

Model	SK33231		SK33251
Channel			
	CH1	0~32V/0~3.2A	0~32V/0~5.1A
	CH2	0~32V/0~3.2A	0~32V/0~5.1A
	CH3	1.8V/2.5V/3.3V/5V switchable, 3.2A (Max. output)	
Line Regulation			
Voltage	CH1, CH2,CH3	$\leq 1 \times 10^{-4} + 2\text{mV}$	
Current	CH1, CH2,CH3	$\leq 1 \times 10^{-4} + 2\text{mA}$	
Load Regulation			
Voltage	CH1		$\leq 1 \times 10^{-4} + 8\text{mV}$
	CH2	$\leq 1 \times 10^{-4} + 3\text{mV}$	
	CH3		$\leq 1 \times 10^{-4} + 3\text{mV}$
Current	CH1,CH2	$\leq 1 \times 10^{-4} + 2\text{mA}$	$\leq 1 \times 10^{-4} + 2\text{mA}$
Programming/Readback Accuracy			
Voltage	CH1	$\leq \pm(0.5\% + 30\text{mV})$	
	CH2		
	CH3 (no readback)	$\leq \pm 7\%$	
Current	CH1	$\leq \pm(0.5\% + 30\text{mA})$	$\leq \pm(1\% + 60\text{mA})$
	CH2		
	CH3 (no readback)	$\geq 3.2\text{A}$	
Ripple and Noise			
Voltage	CH1,CH2,CH3	$\leq 1\text{mVrms}$	$\leq 1\text{mVrms}$
Current	CH1,CH2	$\leq 3\text{mArms}$	$\leq 5\text{mArms}$
Display resolution			
Voltage	CH1,CH2	10mV	
Current	CH1,CH2	1mA	
Display Digits			
Voltage		4 digits	
Current		4 digits	
Other function			
Auto switch of serial and parallel		●	
General Characteristics			
Rated Voltage		220-230 (198-242)V	
Rated Power		500W 670VA	600W 800VA
Rated Frequency		50/60(47-63) Hz	
USB charging Interface		5V 1A	
Remote Interface		USB Device	
Dimension		225×128×290mm	225×128×320mm
Weight		8KGs	9KGs

Standard Accessories

Power Cord	1
CD(User's Guide)	1



Power Cord



CD

SK3323/3325 Programmable DC Power Supply



Features

- Three outputs, the maximum power is up to 342W
- Standard Timing Output
- Comprehensive over-voltage protection
- 4 digit LED display can show voltage, current and power simultaneously

Specification

Model	SK3323		SK3325
Channel			
	CH1	0~32V/0~3.2A	0~32V/0~5.1A
	CH2	0~32V/0~3.2A	0~32V/0~5.1A
	CH3	1.8V/2.5V/3.3V/5V switchable, 3.2A (Max. output)	
Line Regulation			
Voltage	CH1, CH2, CH3	$\leq 1 \times 10^{-4} + 2\text{mV}$	
Current	CH1, CH2, CH3	$\leq 1 \times 10^{-4} + 2\text{mA}$	
Load Regulation			
Voltage	CH1	$\leq 1 \times 10^{-4} + 3\text{mV}$	$\leq 1 \times 10^{-4} + 8\text{mV}$
	CH2		
	CH3		$\leq 1 \times 10^{-4} + 3\text{mV}$
Current	CH1, CH2	$\leq 1 \times 10^{-4} + 2\text{mA}$	$\leq 1 \times 10^{-4} + 2\text{mA}$
Programming/Readback Accuracy			
Voltage	CH1	$\leq \pm(0.5\% + 30\text{mV})$	
	CH2		
	CH3 (no readback)	$\leq \pm 7\%$	
Current	CH1	$\leq \pm(0.5\% + 30\text{mA})$	$\leq \pm(1\% + 60\text{mA})$
	CH2		
	CH3 (no readback)	$\geq 3.2\text{A}$	
Ripple and Noise			
Voltage	CH1, CH2, CH3	$\leq 1\text{mVrms}$	$\leq 1\text{mVrms}$
Current	CH1, CH2	$\leq 3\text{mA rms}$	$\leq 5\text{mA rms}$
Display resolution			
Voltage	CH1, CH2	10mV	
Current	CH1, CH2	1mA	
Display Digits			
Voltage		4 digits	
Current		4 digits	
Other function			
Timing Output		●	
Auto switch of serial and parallel		●	
Over voltage Protection		●	
General Characteristics			
Rated Voltage		220-230 (198-242)V	
Rated Power		500W 670VA	600W 800VA
Rated Frequency		50/60(47-63) Hz	
USB charging Interface		5V 1A	
Remote Interface		USB Device	
Dimension		225×128×290mm	225×128×320mm
Weight		8KGs	9KGs

Standard Accessories

Power Cord	1
CD(User's Guide)	1



Power Cord



CD

SK3323J/3325J Programmable DC Power Supply



Features

- Three outputs, the maximum power is up to 338W
- Low Ripple and Noise: $\leq 1\text{mV}/\leq 3\text{mA}$
- Standard Timing Output
- Comprehensive over-voltage and over-temperature protection
- Fully remote control interface: LAN, USB Device and RS-232
- 5 digit LED display can show voltage, current and power simultaneously

Specification

Model	SK3323J		SK3325J
Channel			
	CH1	0~32V/0~3A	0~32V/0~5A
	CH2	0~32V/0~3A	0~32V/0~5A
	CH3	0~6V/0~3A	
Line Regulation			
Voltage	CH1, CH2, CH3	$\leq 1 \times 10^{-4} + 3\text{mV}$	
Current	CH1, CH2, CH3	$\leq 1 \times 10^{-4} + 500\mu\text{A}$	
Load Regulation			
Voltage	CH1		$\leq 1 \times 10^{-4} + 5\text{mV}$
	CH2	$\leq 1 \times 10^{-4} + 3\text{mV}$	
	CH3		$\leq 1 \times 10^{-4} + 3\text{mV}$
Current	CH1, CH2, CH3	$\leq 1 \times 10^{-4} + 500\mu\text{A}$	
Programming/Readback Accuracy			
Voltage	CH1		
	CH2	$\leq \pm(0.05\% + 20\text{mV})$	
	CH3		
Current	CH1	$\leq \pm(0.3\% + 5\text{mA})$	$\leq \pm(0.3\% + 10\text{mA})$
	CH2		
	CH3	$\leq \pm(2\% + 20\text{mA})$	
Ripple and Noise			
Voltage		$\leq 1\text{mV}$	
Current		$\leq 3\text{mA}$	
Display resolution			
Voltage		1mV	
Current		1mA	
Display Digits			
Voltage		5 digits	
Current		4 digits	
Other function			
Auto switch of serial and parallel		○	
Timing Output		●	
OTP		●	
OVP		●	
General Characteristics			
Rated Voltage		220/230 (198-242)V	
Rated Power		0.5kW 0.7kVA	0.6kW 0.8kVA
Rated Frequency		50/60(47-63) Hz	
USB charging Interface		5V 2A	
Remote Interface		LAN, USB Device, RS-232	
Dimension		256×160×440mm	
Weight		9KGs	10KGs

Standard Accessories

Power Cord	1
CD(User's Guide)	1

SK10000 Series Programmable DC Power Supply



Features

- All digital controlled, output 1mV/1mA step
- High stability, Low drift
- LED display the voltage/current and working status visually
- Intelligent temperature controlled fan with low noise
- Storage and recall function
- OVP (Over Voltage Protection) function
- Keypad locked function to avoid the misoperation
- Standard RS-232 interface, optional USB Device

Specification

Model	SK11204 SK16008 SK13515 SK12025	SK11206 SK16012 SK13520 SK12035	SK11208 SK16016 SK13530 SK13530K	SK12050
Output Range	120V/4A 60V/8A 35V/15A 20V/25A	120V/6A 60V/12A 35V/20A 20V/35A	120V/8A 60V/16A 35V/30A 20V/50A	
Output Power	500W	750W	1000W	
Resolution	1mV/1mA			
Source Effect				
CV	$\leq 1 \times 10^{-5} + 1\text{mV}$			
CC	$\leq 1 \times 10^{-5} + 3\text{mA}$			
Load Effect				
CV	$\leq 1 \times 10^{-4} + 3\text{mV}$			
CC	$\leq 1 \times 10^{-4} + 3\text{mA}$			
Period and Random Deviation (PARD)				
CV	$\leq 1\text{mV}$			
CC	$\leq 6\text{mA}$		$\leq 20\text{mA}$ (applied to SK13530K)	
Accuracy				
Voltage	$\leq \pm (0.05\% + 10\text{mV})$		$\leq \pm (0.1\% + 10\text{mV})$ (applied to SK13530K)	
Current	$\leq \pm (0.2\% + 50\text{mA})$		$\leq \pm (0.2\% + 50\text{mA})$ (applied to SK13530K)	
OVP	$\leq \pm (0.5\% + 0.5\text{V})$		$\leq \pm (0.5\% + 0.8\text{V})$ (applied to SK13530K)	
General Characteristics				
Power	AC220V(1±10%)V, 50(1±5%)Hz		AC220~230(198~242)V, 50(47~63)Hz (applied to SK13530K)	
Interface	RS-232 (standard) USB Device (option)			
Dimension & Weight	225×153×650 mm, Approx 25kg	325×153×650 mm, Approx 30kg	425×150×665 mm, 34kg 325×150×450 mm, 13kg (applied to SK13530K)	

Standard Accessories

Power Cord	1
RS-232 cable	1
CD(Software+User's Guide)	1



Power Cord

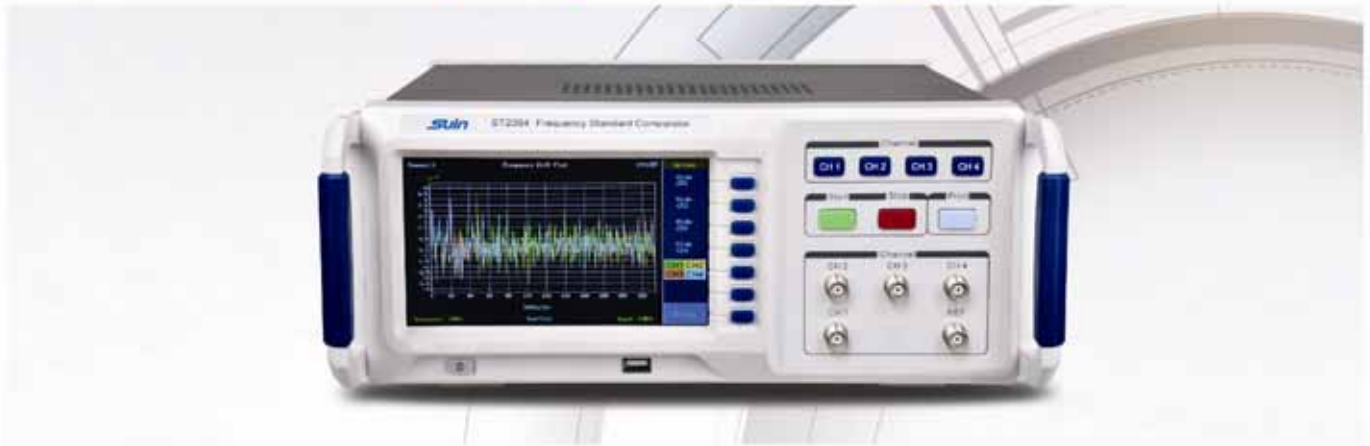


RS-232 cable



CD

ST2050 Series Frequency Standard Comparator



Features

- With dual-channel frequency difference measuring technique
- Measuring Channel: up to 4
- The sampling time could be set as user demand: 1s to 10³s
- Graphic interface, auto and real time measurement of Allan Deviation
- Measure Cesium/Hydrogen/Rubidium Atomic Clock, such as daily fluctuation, booting characteristic, aging rate, accuracy, drift, frequency deviation and difference of daily accuracy

Specification

Main Specification	ST2051	ST2052	ST2053	ST2054
Measuring Channel	1	2	3	4
Frequency	5MHz, 10MHz			
Input Amplitude	3dBm ~ 13dBm, Input Impedance: 50ohm			
Max. Frequency Deviation	1×10 ⁻⁸			
Comparison Uncertainty	5×10 ⁻¹³ /s			
	5×10 ⁻¹⁴ /10s			
	5×10 ⁻¹⁵ /100s			
	1×10 ⁻¹⁵ /1000s			
	5×10 ⁻¹⁶ /10000s			
Measuring Function	Allan standard deviation, Accuracy, Booting characteristic, Aging rate, Repeatability			
Built-in Frequency Counter	13digits/s			
Port	USB: connect USB-type mouse, keyboard and USB disk LAN: remote control			
General Characteristics				
Voltage	220(1±10%)V			
Frequency	50(1±5%)Hz			
Power Consumption	65VA Max.			
Working Temperature	10 ~ 30 C			
Weight	10.5kg			
Dimension	365×154×467mm			

Standard Accessories

- | | |
|----------------------|---|
| Power Cord | 1 |
| CD (User's Guide) | 1 |
| Network cable | 1 |
| BNC testing cable | 5 |
| Connector TNC/BNC-JK | 5 |



Connector TNC/BNC-JK



Power Cord



CD



BNC testing cable



Network cable

SF2002 Stopwatch Calibrator



Features

- High resolution of crystal oscillator with accuracy up to 5×10^{-8}
- Quick response
- Easy operation suitable for metrological service, factory, academy and scientific research institution to calibrate all kinds of timer instruments

Specification

Mechanical stopwatch and electronic stopwatch

Input Range	$T_0: 1s-99999s$
Accuracy	$< \pm (1 \times 10^{-7} \times T_0 + 3ms)$

Pointer electrical stopwatch

Input Range	$T_0: 0.1s-99999s$ (Continuous, Trigger and Pause)
Accuracy	$< \pm (\text{Mains frequency accuracy} \times T_0 + 0.6ms)$

Digital electrical stopwatch

Input Range	$T_0: 0.1ms-9999.9s$
Accuracy	$< \pm (1 \times 10^{-7} \times T_0 + 3\mu s)$

Crystal Oscillator

Nominal Frequency	10MHz
Daily Aging Rate	$\leq 5 \times 10^{-9}/\text{day}$
Second Stability	$\leq 5 \times 10^{-11}/s$
Accuracy	$\leq 5 \times 10^{-8}$
Warm Up Time	>2 hours

General Characteristics

Power	220(1±10%)V, 50(1±5%)Hz, <20VA
Display	LCD
Dimension	390×255×105 mm
Weight	3.7kg

Standard Accessories

- Power Cord 1
- CD (User's Guide) 1
- Dual banana plug test lead 2
- BNC-banana test lead 1



Power Cord



BNC-banana test lead



CD



Dual banana plug test lead

Options

- Test Fixture
- Certificate issued by third part



• Our company reserves the right to change the specification of the catalogue without notice.



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