

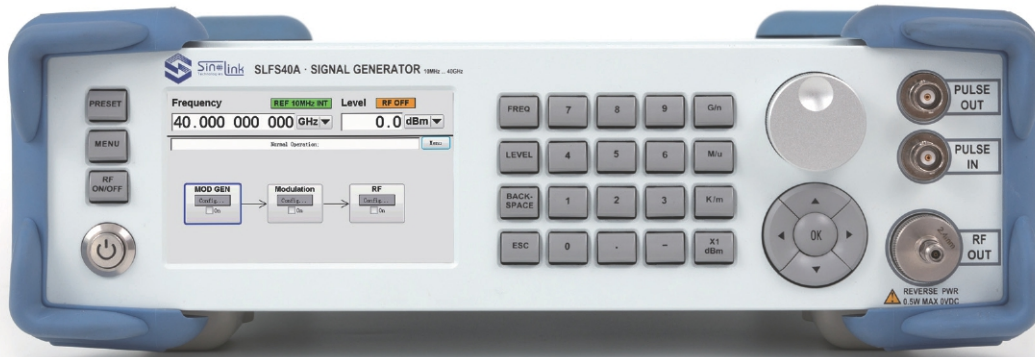


SLFS series

Microwave Analog Signal Generator

10MHz to 12/ 24/ 43.5/ 67GHz

www.sinolink-technologies.com



SLFS Series Microwave Analog Signal Generator is a ultra-low phase noise, high power output signal generator covering a continuous frequency range from 10MHz up to 12GHz, 24GHz, 43.5GHz and 67GHz, with frequency resolution as low as 0.01 Hz. The SLFS supports narrow pulse modulation. It is a cost-effective product that focuses on the application where excellent spectral purity, wide output power range and portability are necessary.

Sinolink Technologies promise you an excellent performance, compact and affordable test assistant.

Features:

- Balance budget & performance to applications
- Maximum output power: $\geq +20\text{dBm}$
- Phase noise $< -116\text{dBc/Hz}$ (10GHz, 10kHz offset)
- Narrow pulse modulation, minimum pulse width 50ns
- Rise/fall time 10ns
- Compact, light weight

Applications:

- R&D low noise microwave generator
- Local Oscillator Replacement
- Component Test
- Receiver Sensitivity Test



Specifications

Frequency

Frequency range	
Model	Frequency range
SLFS12A	10MHz to 12GHz
SLFS24A	10MHz to 24GHz
SLFS40A	10MHz to 43.5GHz
SLFS67A	10MHz to 67GHz
CW Switching speed	≤20ms
Resolution	0.01Hz

Spectral purity

Phase noise (dBc/Hz) (Output Power: 0dBm)

Frequency	Offset					
	100Hz	1KHz	10KHz	100KHz	1MHz	10MHz
5GHz	-105	-125	-130	-135	-135	-145
10GHz	-86	-108	-116	-116	-120	-140
20GHz	-80	-102	-110	-110	-114	-134
40GHz	-74	-96	-104	-104	-108	-128
67GHz	-70	-92	-90	-90	-94	-124

Harmonics

Frequency	Output Power: 10dBm
10MHz to 200MHz	< -40dBc
200MHz to 40GHz	< -55dBc

Non-harmonics

Frequency	Output Power: 0dBm
10MHz to 2GHz	< -75dBc
2GHz to 12GHz	< -70dBc
12GHz to 24GHz	< -65dBc
24GHz to 67GHz	< -60dBc

Reference

Internal reference frequency stability	±2e-8 0°C~+50°C
External reference input power	+5±3dBm
Internal reference output power	+10±1dBm

General

Power requirement	85~264VAC, 50Hz~60Hz, 110W
Temperature range	0°C~+50°C
Weight	≤10kg
Size	88mm high X 320mm W X 400mm L (Without protection cushion)

Output

Maximum output power	10MHz to 20GHz: ≥+15dBm
	20GHz to 40GHz: ≥+13dBm
	40GHz to 50GHz: ≥+10dBm
	50GHz to 67GHz: ≥+7dBm;
Minimum output power	-110dBm/-90dBm(SLFS67A)
Resolution	0.1dB

Absolute level accuracy

Frequency	≥-20dBm	< -20~-75dBm	< -75dBm
10MHz to 40GHz	±1.3dB	±1.5dB	±3.0dB
40GHz to 67GHz	±1.3dB	±1.5dB	±3.0dB

SWR

Frequency	Step attenuator set to 10dB
≤2GHz	< 1.40: 1
2GHz to 24GHz	< 1.50: 1
24GHz to 40GHz	< 1.60: 1
40GHz to 67GHz	< 1.80: 1

Pulse modulation

General characteristics

On/Off ratio	>70dB
Minimum pulse width	50ns
Minimum period	100ns

External pulse input

Input resistance	DC coupling, high impedance
Level logic	3.3V-CMOS

Internal pulse generator

Square wave rate	0.1Hz to 10MHz
Pulse period	100ns to 10s
Pulse width	50ns to 10s
Resolution	5ns
Delay	5ns to 10s
Level Logic	3.3V-CMOS

Interface and structure

RF output	3.5mm/2.92mm/1.85mm(50Ω)
Internal pulse output	BNC
External pulse input	BNC
External reference input	BNC
Internal reference output	BNC
External trigger input	BNC
Internal trigger output	BNC
Control interface	RJ-45 (TCP/IP over Ethernet)/RS422



SLFS Serials Microwave Analog Signal Generator User's Manual



The combination of superior product reliability and 3-year warranty service helps you achieve the following goals: increased measurement confidence, reduced cost of ownership, and increased ease of operation.