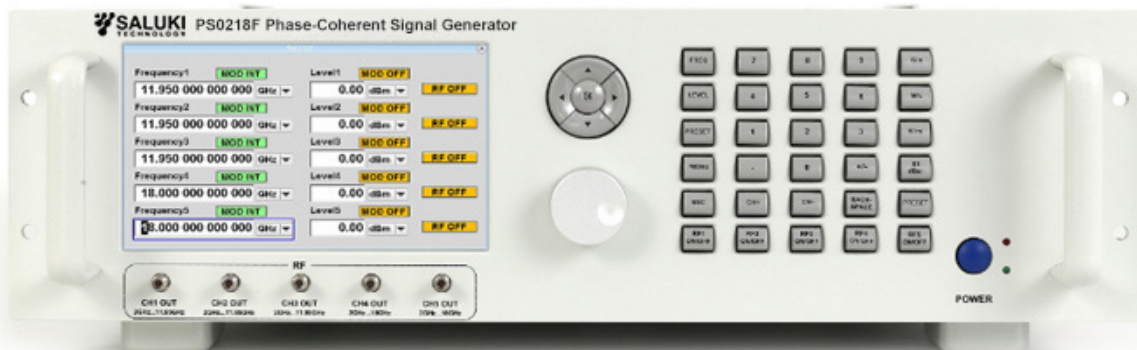


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## PS0218 Series Multi-Channel Phase-Coherent Signal Generator



Saluki Technology Inc.

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## Multi-channel phase-coherent signal generator

Saluki PS0218 Series multi-channel phase coherent signal generator is a low phase noise coherent signal generator that supports 5/6/8 channel output. The channel can be configured with a frequency range of 2GHz to 11.95GHz or 2GHz to 18GHz, an output power range of -20dBm to +22dBm, and each channel is independently controllable. Standard 19-inch 3U/4U rack-mounted chassis structure.

Saluki PS0218 Series multi-channel phase coherent signal generator has excellent performance in fields requiring high signal quality and stable coherence of each channel. High-stability OXCO reference provides excellent frequency accuracy and frequency stability. In addition, the signal source has high-frequency reference input and output ports, which can ensure strict phase coherence between multiple output channels and multiple instruments and maintain long-term stability.

The product has a LAN control interface to ensure convenient and efficient program control. The remote control of the instrument can be quickly realized through any host system, and the application program interface (API) or programming examples provided make instrument program control very simple.

### Features:

- Frequency range: 2-18GHz
- Multiple channel outputs are independently controllable
- Strict coherence between channels
- 24-hour channel frequency drift  $\leq \pm 1^\circ$
- Ultra-low phase noise and ultra-high output power

### Application:

- Modulator local oscillator
- Distributed acquisition system sampling clock
- Particle accelerator sampling clock



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## Output

Model	PS0218
Frequency Range	2 to 11.95GHz 2 to18GHz
Output Channel	5/6/8 Channels
Frequency Resolution	0.01Hz
Output Power (max.)	+22dBm @ < 8GHz +20dBm @ 8~12GHz +18dBm @ > 12GHz
Output Power (min.)	-20dBm
Power Resolution	0.01dB
Power Uncertainty	≤±1.3dB @ > -20dBm ≤±1.5dB @ ≤-20dBm
Output Signal Noise	≤-70dBc @ ≤12GHz ≤-65dBc @ > 12GHz
Output Signal Harmonics	≤-50dBc @ 10dBm Output
Isolation	≥80dB
Phase stability	≤±1°(10GHz, 24h) ≤-75dBc/Hz@100Hz ≤-108dBc/Hz@1KHz
SSB Phase Noise (10GHz)	≤-113dBc/Hz@10KHz ≤-113dBc/Hz@100KHz ≤-120dBc/Hz@1MHz ≤-138dBc/Hz@10MHz

## Reference

Internal frequency stability	±5e-8 0°C to +50°C
Internal frequency	10MHz
Internal input power range	≥5dBm
External Input power range	5 to 10dBm
With internal and external reference switching function	
	≤-125dBc/Hz@10Hz ≤-140dBc/Hz@100Hz
Reference Phase Noise	≤-150dBc/Hz@1KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@100KHz

## Output synchronous frequency

Output frequency	1.6GHz
Input frequency	1.6GHz

## Environment

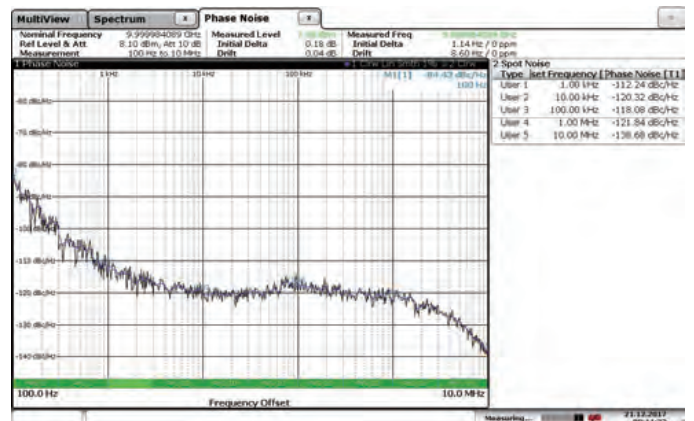
Operating Temp.	0°C to +50°C
Relative Humidity	20% to 80% (+30°C)

## Overview

Control Interface	RJ-45 (TCP/IP over Ethernet )
Power Supply	85 to 264VAC, 50Hz to 60Hz, 270W
Dimension	483mm*134mm*559mm
Weight	≤20kg
Warranty	3 years



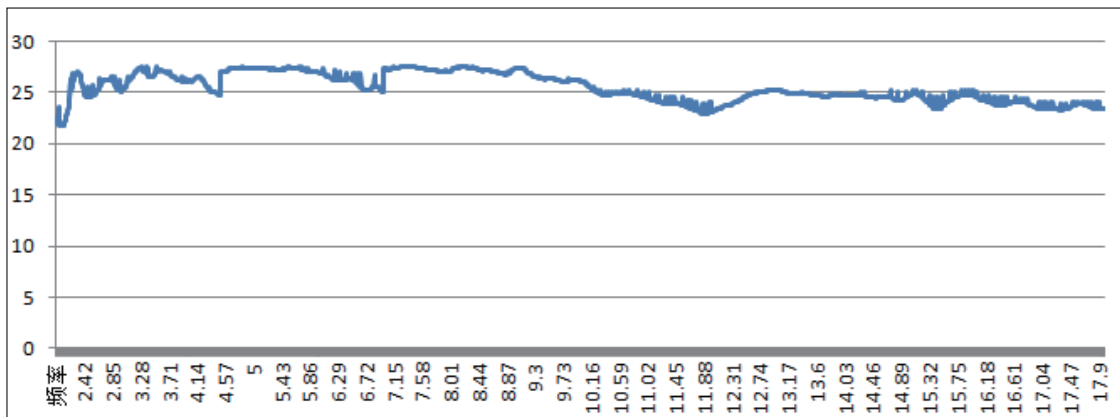
Phase synchronization



10GHz measured phase noise curve

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Maximum output power diagram

## Order

PS0218F (5 channels)	2 to 11.95GHz 3 channels; 2 to 18GHz 2 channels
PS0218G (6 channels)	2 to 11.95GHz 4 channels; 2 to 18GHz 2 channels
PS0218H (8 channels)	2 to 11.95GHz 4 channels; 2 to 18GHz 4 channels

