

**Sinolink Technologies**

- Your RF Team for **QUANTUM COMPUTING**

# Quantum Engineering Toolkit

Signal Generator, IQ Mixer, Microwave Switch...



# Quantum Engineering Toolkit

Sinolink Technologies provides industry-leading phase coherent multichannel Signal Generators. We offer a dedicated clock synchronization mode to maintain phase coherence between different channels even across multiple instruments. With stable room temperature we can ensure days or weeks of operation with constant phase coherence.

- 5Ch Coherent SIGNAL GENERATOR
- High isolation and fast switching MICROWAVE SWITCH
- High isolation, image rejection and broadband IQ MIXER
- Widely used in QUANTUM COMPUTING

Apply for a FREE evaluation demo unit: sales@sinolink-technologies.com

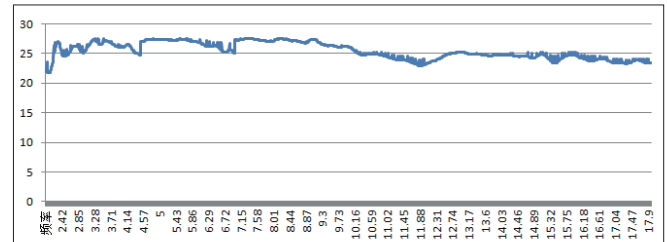
## Phase-Coherent Multi-Channel Signal Generator

### Features:

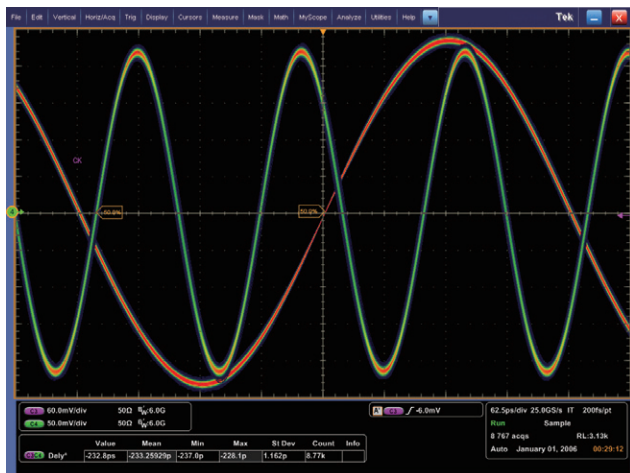
- Frequency range: 2-18GHz
- 5 RF output channels which can operate individually
- Phase coherent among every channel
- Channel to channel relative phase drift (10GHz, 24h)  $\leq \pm 1^\circ$
- Low phase noise, high output power
- Narrow pulse modulation
- Fast frequency switching time

### Applications:

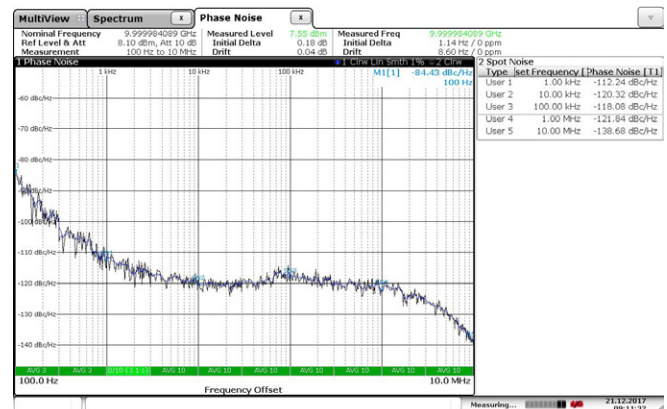
- modulator LO
- Sampling clock of distributed acquisition system
- Synchronizing clock of particle accelerator



Maximum Output Power



Phase Synchronization

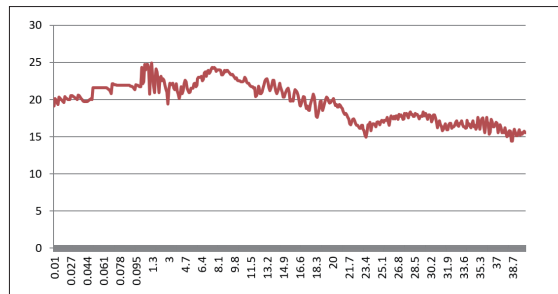


Phase Noise @ 10GHz

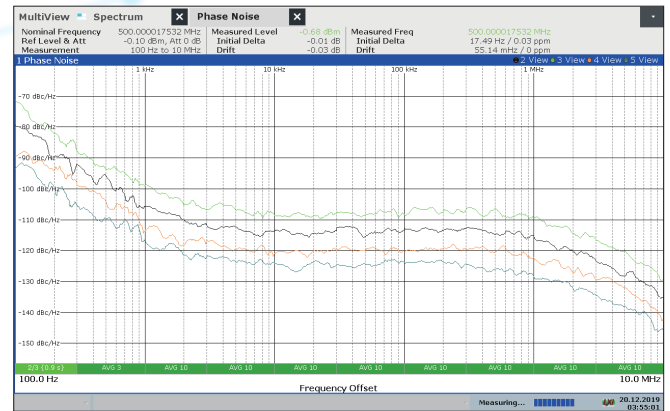
# Microwave Analog Signal Generator

## Features:

- Non-harmonic spurious < -60dBc (bandwidth:2GHz-40GHz)
- Maximum output power:  $\geq +15$ dBm
- Phase noise < -115dBc/Hz (10GHz, 10kHz offset)
- Narrow pulse modulation, minimum pulse width 100ns
- Rise/fall time 10ns
- Compact, light weight



Output power



— Phase noise@40GHz — Phase noise@20GHz  
 — Phase noise@10GHz — Phase noise@5GHz

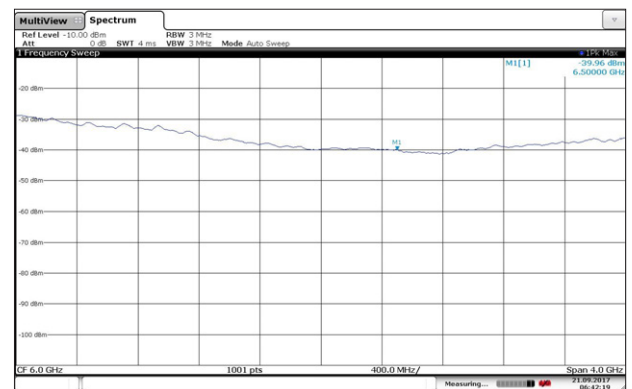
# Broadband IQ Mixer

## Features:

- Ultra-wide frequency range , Support customization
- Frequency conversion loss: 10dB
- Ultra-wide baseband bandwidth:  $\geq 500$ MHz; (max 3GHz)
- LO isolation:  $\leq -45$ dB
- IQ Amplitude unbalance:  $\leq 0.5$ dB
- IQ phase unbalance:  $\leq 5^\circ$  (typ)

## Applications:

- Point to point microwave radio
- VSAT
- ATE



LO Leakage

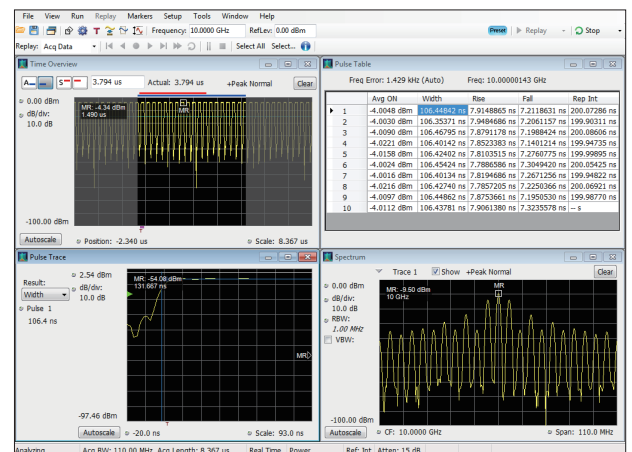
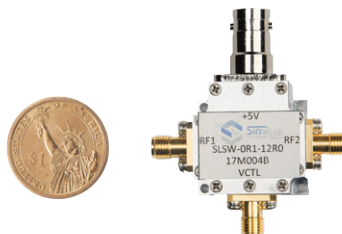
# Microwave Switch

## Features:

- Frequency range: 100MHz~12GHz (can expand to 20GHz)
- Excellent isolation: 45dB (Typ)
- Insertion loss:  $\leq 3$ dB;
- Switch speed: 10ns (10%-90%)
- Video leakage:  $\leq 40$ mV
- Input P-I: 20dBm

## Applications:

- Base station facilities
- Optical fiber and broadband telecommunications
- Microwave radio and VSAT
- Radar and EMC
- Test instruments



SLSW-OR1-12R0 time response

## High Speed Playback Board

### Features:

- 8 channels output
- 16-bit resolution
- Support external reference clock input
- 1GSPS with interpolation
- FMC standard interface
- SFDR: 75dBc (input signal 80MHz @ -0.5 dBFS);

### Applications:

- Software-defined radio system

## High Speed Acquisition Board

### Features:

- 4-channel input, 500MSPS
- 12-bit ADC resolution
- 200MHz Analog input bandwidth
- Support external sampling clock input
- Support external trigger input
- FMC standard interface
- SFDR: 79dBc (input signal 80MHz @ -0.5 dBFS);

### Applications:

- Software-defined radio system

For more information on Sinolink Technologies' products, applications or services please contact Sinolink Technologies (Beijing) Co., Ltd.  
The complete list is available at: [www.sinolink-technologies.com](http://www.sinolink-technologies.com)



### Sinolink Technologies (Beijing) Co., Ltd.

Address: Rm1403, Tower C, No.15 Ronghua South Road, BDA, Beijing, 100176, P.R. China

Tel: 86-10-81028321

Fax: 86-10-81028322

WhatsApp: 86-18800101219

Email: [sales@sinolink-technologies.com](mailto:sales@sinolink-technologies.com)

Postal Code: 100176

[www.sinolink-technologies.com](http://www.sinolink-technologies.com)



Sinolink Technologies reserves the rights to change product specifications and pricing.  
All related trademarks are service marks or registered trademarks of respective companies.

Website



*3 Year Warranty*

*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.*