(Frequency Range: 10MHz - 40GHz, 2-5 channels)



#### **Key Features**

- Frequency range: 10MHz to 40GHz
- 2-5 RF output channels which can operate individually
- Maximum output power: ≥+15dBm
- Phase noise: <-116dBc/Hz (10GHz, 10kHz offset)</p>
- Phase coherent among every channel
- Channel to channel relative phase drift (10GHz, 24h) ≤±1°
- High-speed frequency switching <10us</p>
- Narrow pulse modulation, minimum pulse width 50ns
- Rise/fall time 10ns

#### **Overview**

Saluki S1134 series signal generator is a low-phase-noise coherent signal generator that supports 2-5 independent channel outputs. Output frequency: 10MHz-40GHz, output power range is -110dBm to +20dBm, each channel is independently controllable. Standard 2U/3U rack-mounted chassis structure. The multi-channel coherent signal generator has excellent performance in applications requiring high signal quality and stable coherence of each channel. High stability OCXO references provide excellent frequency accuracy and frequency stability. In addition, the signal source has high-frequency reference input and output ports, which can ensure that the phases of multiple output channels and multiple instruments are strictly coherent and stable for a long time. At the same time, the multi-channel coherent signal source has a LAN control interface, which can 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 example provided at the same time makes the instrument programming very simple.

Applications: Local Oscillator Replacement / Component Test / Receiver Sensitivity Test / R&D low noise microwave generator



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### **Technical Specifications**

Model	S1134 Series	
Output		
Frequency Range	10MHz - 24/40GHz (each channel can be different) *For other frequency range, contact us for customization*	
Output Channel	2-5 channels	
Frequency Resolution	0.01Hz	
Maximum Output Power	10MHz to 20GHz: +15dBm 20GHz to 40GHz: +13dBm	
Minimum Output Power	-110dBm	
Power Resolution	0.01dB	
	≤±1.3dB @>-20dBm	
Power Level Uncertainty	≤±1.5dB @-20 to -65dBm	
	≤±3dB @≤ -65dBm	
Harmonic Spurious	≤-40dBc @10MHz - 200MHz, ≤-50dBc @200MHz - 20GHz, ≤-55dBc @20GHz - 40GHz	
	10MHz - 12GHz: ≤-70dBc	
Non-harmonic Spurious	12GHz - 20GHz: ≤-65dBc	
	20GHz - 40GHz: ≤-60dBc	
Channel to Channel Isolation	≥80dB	
Pulse Modulation	Minimum pulse width 50ns	
	≤-86dBc/Hz@100Hz	
	≤-108dBc/Hz@1KHz	
SSB Phase Noise	≤-116dBc/Hz@10KHz	
(@10GHz)	≤-116dBc/Hz@100KHz	
	≤-120dBc/Hz@1MHz	
	≤-140dBc/Hz@10MHz	





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SSB Phase Noise  (@10GHz)  Frequency Reference  Both external and internal reference supported  Internal Reference Frequency Temperature Stability  Internal Reference Output Power  External Reference Input Level Range  \$\frac{5dBm}{5dBm} - 10dBm\$  \$\frac{5dBm}{5dBc/Hz@100Hz} \frac{5dBc}{10dHz} \frac{5dBc}{2dz} \frac{6dc}{10dHz} \frac{5dBc}{2dz} \frac{6dc}{10dHz} \frac{5dBc}{2dz} \frac{6dc}{10dHz} 6d			
SSB Phase Noise  (@10GHz )  Frequency Reference  Both external and internal reference supported  Internal Reference Frequency Temperature Stability  Internal Reference Output Power  External Reference Input Level Range  \$\frac{5dBm}{5dBm} - 10dBm}\$  \$\frac{5dBm}{5dBm} - 10dBm}\$  SSB of Internal Reference \$\frac{5dBm}{5dBm} - 10dBm}\$  \$\frac{5dBm}{5dBm} - 10dBm}\$			
Both external and internal reference supported  Internal Reference Frequency Temperature Stability  Internal Reference Frequency Internal Reference Output Power  External Reference Input Level Range  ≤-125dBc/Hz@10Hz ≤-140dBc/Hz@100Hz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@10KHz  General Information		Measurement   100 Hz to 10 Mtz   Drift   0.04 db   Drift   0.04 db   Drift   2 Spot Noise   2	
Both external and internal reference supported  Internal Reference Frequency Temperature Stability  Internal Reference Frequency Internal Reference Output Power  External Reference Input Level Range  SSB of Internal Reference  SSB of Internal Reference  General Information			
Internal Reference Frequency Temperature Stability  Internal Reference Frequency Internal Reference Output Power  External Reference Input Level Range  SSB of Internal Reference  SSB of Internal Reference  General Information		Frequency Reference	
Frequency Temperature Stability  Internal Reference Frequency Internal Reference Output Power  External Reference Input Level Range  ≤-125dBc/Hz@10Hz ≤-140dBc/Hz@10Hz ≤-150dBc/Hz@10KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@100KHz  General Information	Both external and internal refe	rence supported	
Internal Reference Output Power  External Reference Input Level Range  5dBm - 10dBm  5dBm - 10dBm  ≤-125dBc/Hz@10Hz ≤-140dBc/Hz@100Hz ≤-140dBc/Hz@100Hz ≤-150dBc/Hz@1KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@100KHz  General Information	Frequency Temperature	±5e-8, 0°C to+50°C	
Power  External Reference Input Level Range  5dBm - 10dBm  5dBm - 10dBm  ≤-125dBc/Hz@10Hz ≤-140dBc/Hz@100Hz ≤-140dBc/Hz@100Hz ≤-155dBc/Hz@1KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@100KHz  General Information	Internal Reference Frequency	10MHz	
Level Range  SdBm - 10dBm  ≤-125dBc/Hz@10Hz ≤-140dBc/Hz@100Hz  ≤-150dBc/Hz@1KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@100KHz  General Information	-	≥ 5dBm	
SSB of Internal Reference ≤-140dBc/Hz@100Hz ≤-150dBc/Hz@1KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@100KHz  General Information	_	5dBm - 10dBm	
SSB of Internal Reference ≤-150dBc/Hz@1KHz ≤-155dBc/Hz@10KHz ≤-155dBc/Hz@100KHz  General Information	SSB of Internal Reference	≤-125dBc/Hz@10Hz	
≤-155dBc/Hz@10KHz ≤-155dBc/Hz@100KHz  General Information		≤-140dBc/Hz@100Hz	
≤-155dBc/Hz@100KHz  General Information		≤-150dBc/Hz@1KHz	
General Information		≤-155dBc/Hz@10KHz	
		≤-155dBc/Hz@100KHz	
	General Information		
LAN Control RJ-45 (TCP/IP over Ethernet )	LAN Control	RJ-45 (TCP/IP over Ethernet )	



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Operation Temperature	0°C to +50°C
Operation Humidity	20%-80% (+30°C)
Power Supply	AC 176-264VAC, 45Hz-65Hz
Dimension	483 (W) × 89 (H) × 559 (D) mm (2U) 483 (W) × 134 (H) × 559 (D) mm (3U)
Weight	≤20kg

### **Ordering Information**

The output frequency of each channel can be configured flexibly.

Module No.	Item
S1134D	2-channel output, frequency range: 10MHz-24GHz/40GHz
S1134T	3-channel output, frequency range: 10MHz-24GHz/40GHz
S1134Q	4-channel output, frequency range: 10MHz-24GHz/40GHz
S1134F	5-channel output, frequency range: 10MHz-24GHz/40GHz

#### Example:

S1134T-224: 3CH output, 2 channels are 10MHz-24GHz, 1 channel is 10MHz-40GHz. S1134Q-2222: 4CH output, all channels are 10MHz-24GHz.

**Note:** Information will conduct the necessary updates, the contents of this document are subject to change without notice

