

Test Instrument



Portable frequency source- PFS series

Features

- Maximum output frequency 20GHz
- 40dB dynamic power output range
- Continuous wave and pulse output
- Low phase noise (option)
- Support network port, USB, Bluetooth and WIFI control
- Compact size
- Built in battery working time 2-4hours

Frequency Range	PFS-06	10MHz~6GHz
	PFS-10	10MHz~10GHz
	PFS-20	10MHz~20GHz
	PFS-10L	80MHz~10GHz
	PFS-20L	80MHz~20GHz
Frequency Resolution (Hz)	PFS-06	3
	PFS-10	
	PFS-20	
	PFS-10L	0.001
	PFS-20L	
Frequency Switching Time (us)		≤200
Power	PFS-06	-25dBm~+15dBm
	PFS-10	-25dBm~+13dBm
	PFS-20	
	PFS-10L	
	PFS-20L	
Power Resolution (dB)		0.1
Power Stability (dB)		±0.5 (0~+40°C) ; ±1.5 (0~+40°C) ;
Power Accuracy (dB)		±1.5 (< 0dBm) ±0.5 (≥0dBm)
Frequency Stability		±0.3ppm (Same as reference)
Frequency Accuracy		±0.3ppm (Same as reference)
Non-Harmonic Spurious (dBc) ★		-70 (typ)
Harmonics (dBc) ★	10MHz~3GHz:≤-30	
	3GHz~20GHz:≤-40	
Pulse Modulation		
Pulse depth ★★		≥60dBc
pulse width		≤100ns~10ms
Pulse period		500ns~10ms
Rise/Fall Time		≤30nS/50nS
Notes : ★ The relevant indexes are tested under the conditions of output power 0dBm, ambient temperature 25+ C, and so on		
★★ The relevant indexes are tested under the conditions of output power 10dBm, ambient temperature 25+ C, and so on		

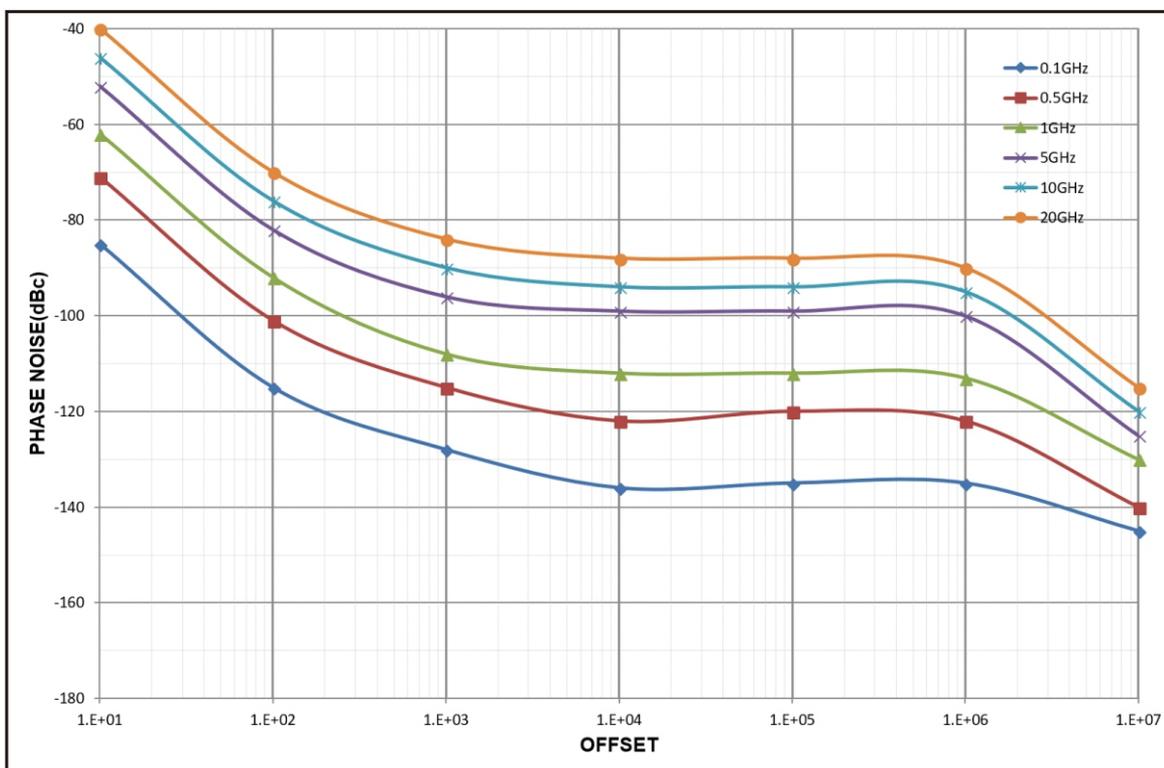
Phase Noise

Model	PFS-06/PFS-10/PFS-20				
	1GHz	2.5GHz	5GHz	10GHz	20GHz
Phase Noise	1GHz	2.5GHz	5GHz	10GHz	20GHz
dBc/Hz@100Hz	≤-92	≤-90	≤-84	≤-76	≤-70
dBc/Hz@1kHz	≤-108	≤-102	≤-96	≤-90	≤-84
dBc/Hz@10kHz	≤-112	≤-105	≤-99	≤-93	≤-87
dBc/Hz@100kHz	≤-112	≤-105	≤-99	≤-93	≤-87
dBc/Hz@1MHz	≤-113	≤-106	≤-100	≤-95	≤-90

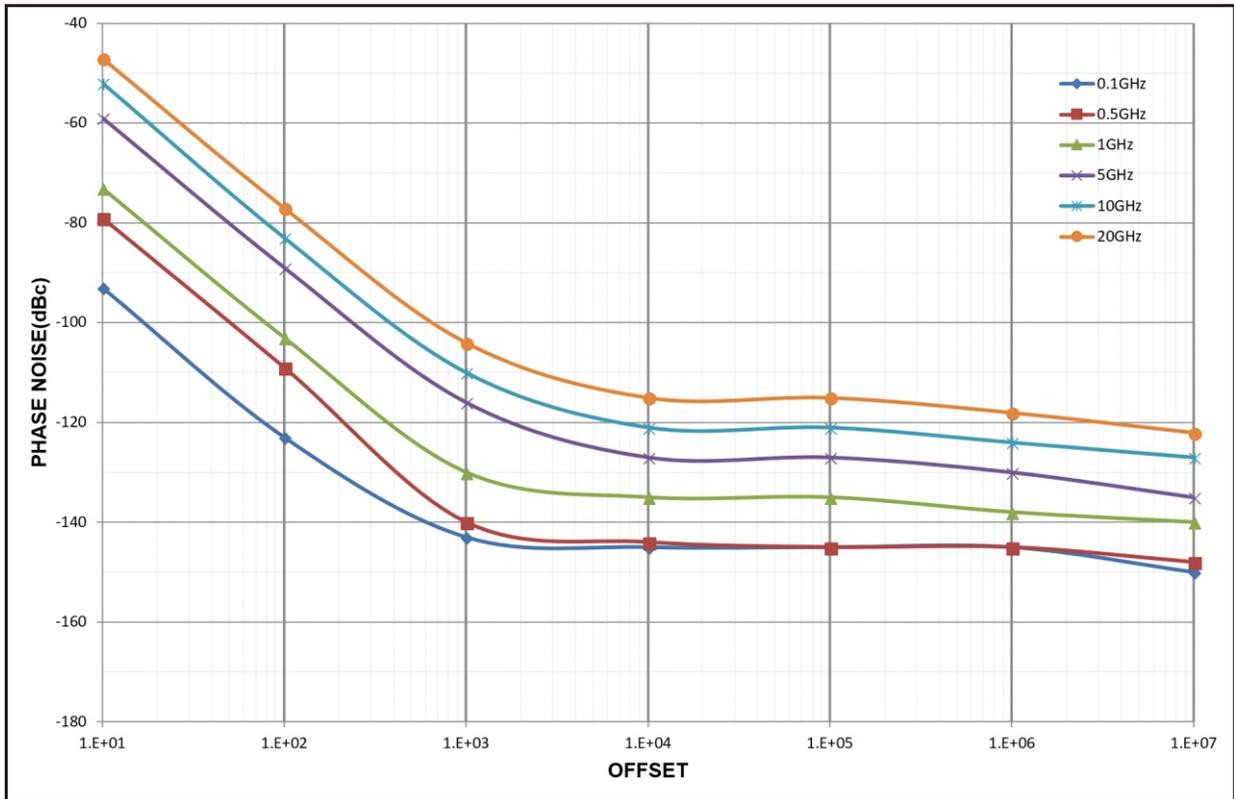
Low Phase Noise

Model	PFS-10L/PFS-20L (Low Phase Noise)				
	0.5GHz Typ (Max.)	1GHz Typ (Max.)	5GHz Typ (Max.)	10GHz Typ (Max.)	20GHz Typ (Max.)
Phase Noise	0.5GHz Typ (Max.)	1GHz Typ (Max.)	5GHz Typ (Max.)	10GHz Typ (Max.)	20GHz Typ (Max.)
dBc/Hz@100Hz	-109/-105	-103/-99	-89/-85	-83/-77	-77/-71
dBc/Hz@1kHz	-140/-136	-130/-127	-116/-113	-110/-107	-104/-101
dBc/Hz@10kHz	-144/-139	-135/-131	-127/-122	-121/-116	-115/-110
dBc/Hz@100kHz	-145/-140	-135/-131	-127/-122	-121/-116	-115/-110
dBc/Hz@1MHz	-145/-140	-138/-133	-130/-125	-124/-121	-118/-115

Phase Noise(PFS-06/10/20)



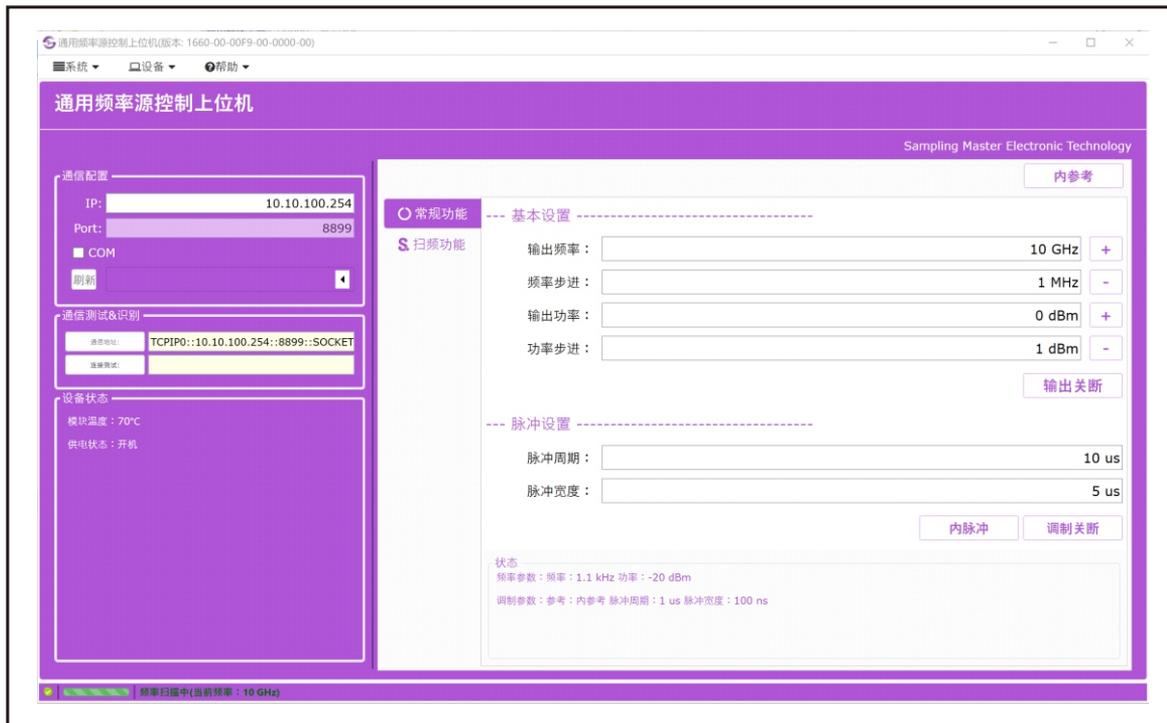
Low Phase Noise(PFS-10L/20L)



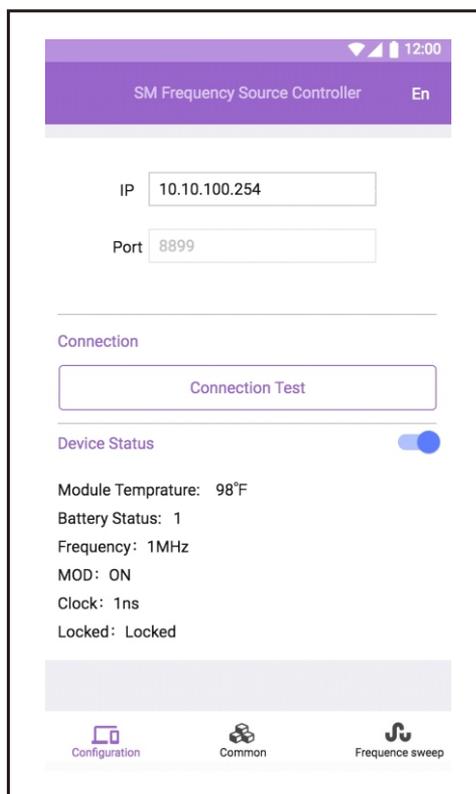
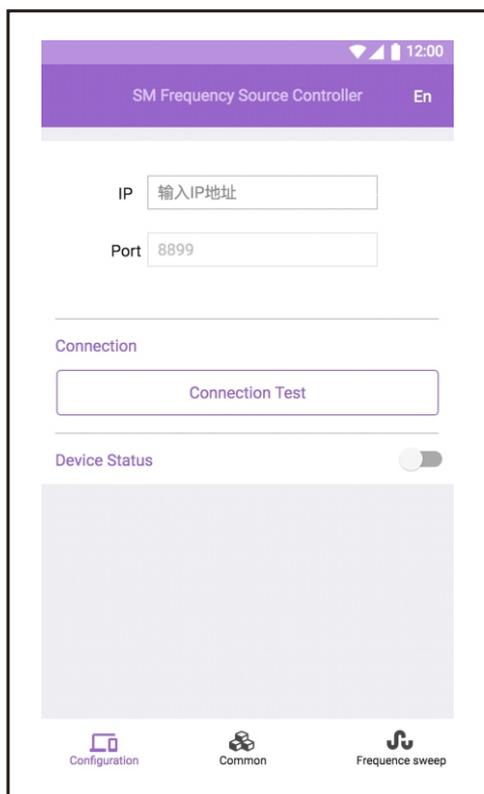
General & Environmental Specifications

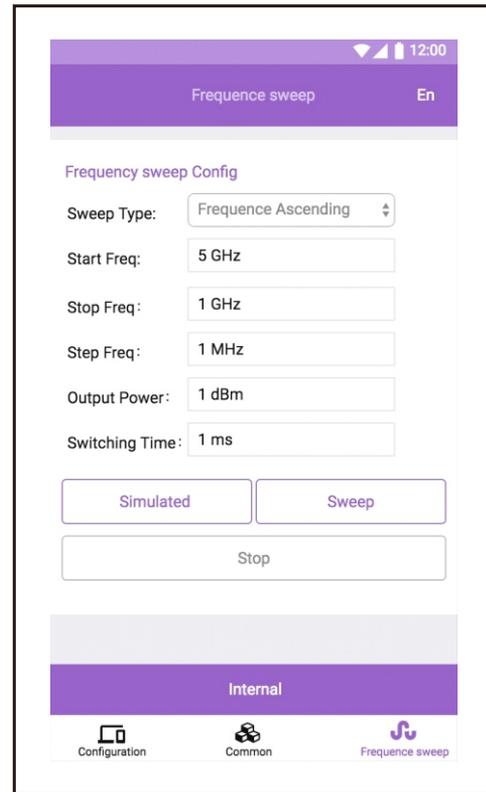
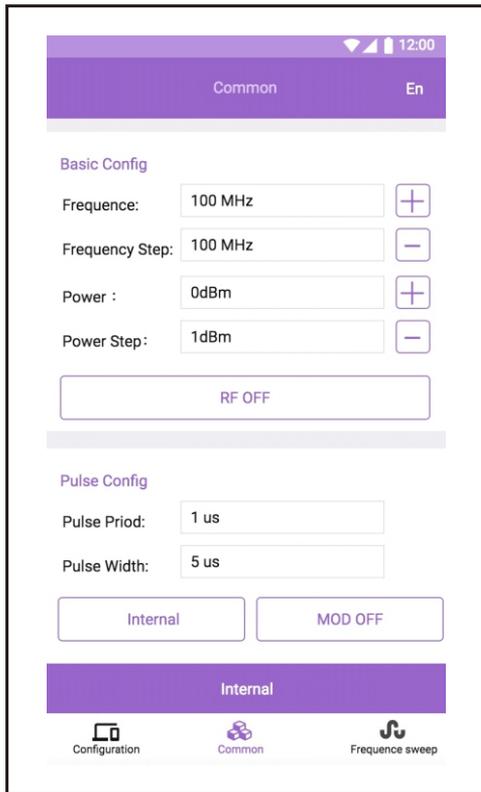
Supply Voltage	220V power adapter
Working hours in battery mode	3~4hours (Standard phase noise mode) ; 2~3hours (Low phase noise mode)
Connector	RF : SMA-KFD ; Power connector : D000-055.5×2.1mm
Control Interface	Ethernet port、 USB、 WIFI、 Bluetooth
Temperature Range (operating/non-operating) (°C)	0~+40/-20~+55
Size (W x L x H)	230mm×140mm×50mm

PC software control interface



APP control interface





Ordering Information

Part Number	Description
PFS-06	Frequency Range : 10MHz~6GHz
PFS-10	Frequency Range : 10MHz~10GHz
PFS-20	Frequency Range : 10MHz~20GHz
PFS-10L	Frequency Range : 80MHz~10GHz , Low Phase Noise model
PFS-20L	Frequency Range : 80MHz~20GHz , Low Phase Noise model