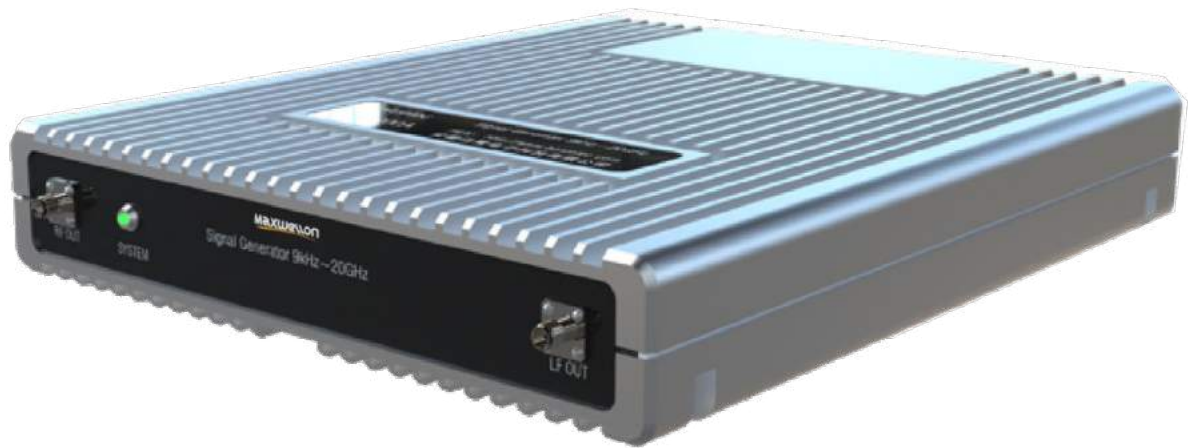


Quality&Precise



MAXWELLON MSG150A/MSG200A

100kHz~15GHz/ 9kHz~20GHz
RF Signal Generator
2023

Maxwellon

MSG150A/MSG200A microwave signal source module has ultra wide band, excellent performance and easy integration characteristics. The module has a variety of practical functions such as continuous wave signal, analog modulation, pulse modulation, amplitude/frequency sweep, low-frequency function waveform output, and has a very high cost performance ratio. The module height is standard 1U, suitable for system integration and desktop testing and measurement equipment use. The complete standard SCPI command set and universal LAN interface bring great convenience for remote control and secondary development.

■ Key Feature

- Frequency range up to 20GHz
- High signal purity, SSB phase noise<-115dBc/ Hz@10 KHz
- Output power -120dBm to+10dBm
- Various analog modulation AM/FM/ΦM
- Pulse modulation, up to 70dB on off ratio;External input pulse sequence
- Internal modulation source: sine, square, triangular
- Low power consumption, light weight, and compact size
- USB/LAN remote control interface, providing standard SCPI command set

■ Specification

Frequency Properties		
Frequency Range	MSG150A: 100kHz~15GHz	
	MSG200A: 9kHz~20GHz	
Frequency Resolution	0.01Hz	
Internal Reference Frequency	10 MHz	
Temperature Stability	±1.0ppm	
Internal Reference Output	10 MHz, +8 dBm (typ.)	
External Reference Output	0 dBm~+10 dBm	
Spectral Purity		
Harmonic	< -30 dBc (typ.)	
Non-Harmonic	< -60 dBc (typ.)	
SSB Phase Noise	Carrier Frequency Offset @f=1GHz	-115 dBc / Hz @ 10kHz offset
Sweep Properties		
Sweep Mode	Step Sweep, List Sweep	
Sweep points	Step Sweep	2 ~ 65535
	List Sweep	2 ~16383
Dwell time	10ms~50s	
Trigger mode	Free/External	
Power Properties		
Output Power Range	Max. output power	+ 10 dBm
	Min. output power	- 120 dBm
Power Accuracy	±1.0 dB(ALC open)	
Modulation Characteristics		
Internal Modulation Signal Generator (LF)	Waveform	Sine, Square, Triangle,
	Sine	1 Hz~500 kHz
	Triangle	1 Hz~100 kHz
	Square	1 Hz~20 kHz
Output level	0.2V _{p-p} ~ 2V _{p-p}	

Analog Modulation (AM/FM/ΦM),Supporting internal and external modulation sources		
Amplitude Modulation	Modulation Depth	0 %~90 %
	Modulation Frequency Range	10 Hz~20 kHz
Phase Modulation	Max. phase Offset	N × 6 rad
	Modulation Frequency Range	10 Hz~200 kHz
Frequency Modulation	Frequency Offset	N × 64 MHz
	Modulation Frequency Range	10 Hz~200 kHz
Pulse Modulation	Break-make Ratio	≥70 dB
	Pulse Cycle Range	400 ns~160 s
	Pulse width	200 ns~85 s
Interface		
RF Output Interface	SMA , 50Ω	
LF Output	SMA , 50Ω	
Functional Interface	Interface Name	External Pulse Modulation Input, Internal Pulse Output, External Trigger Input, Internal Trigger Output, External Modulation Input, 10M Reference Input/Output, AM Modulation Input, FM Modulation Input, Sweep Output
	Interface Type	SMA
LAN	10/100 Base T	
General Properties		
Dimension (W × D × H)	245 mm × 190 mm × 44 mm	
Weight	Approx. 1.5 kg	
Operating Temp.	-10 C ~ +45 C	
Storage Temp.	-20 C ~ +70 C	
Power Supply	DC: +12V ± 5%/2 A	

Notes:

1. N represents a factor that helps define and determine indicators, with a maximum of 1 and a minimum of 1/128.

■ Ordering Information

Model

Model	Name	Description
MSG150A	Signal Generator Module	100kHz~15GHz
MSG200A	Signal Generator Module	9kHz~20GHz

Standard

No.	Name	Description
1	Power Cord	DC: +12V $\pm$ 5%/2 A
2	Product certificate	



Maxwellon Electronic Instruments Co.,LTD.

Factory: No.6 Xiangjiang Road, Qingdao 266000, China
Tel: 0086 13816527810

Sales Office: NO.153 Zhuzhou Rd.,Laoshan District, Qingdao 266100, China.
Tel: 0086-532-80977508
Fax: 0086-532-80977508

Sales: Sales@Maxwellon.com
Web: www.maxwellon.com