

스펙

SMB100A RF 및 마이크로웨이브 신호 발생기



Frequency		
Frequency range	R&S®SMB-B101	9 kHz to 1.1 GHz
	R&S®SMB-B102	9 kHz to 2.2 GHz
	R&S®SMB-B103	9 kHz to 3.2 GHz
	R&S®SMB-B106	9 kHz to 6 GHz
	R&S®SMB-B112/R&S®SMB-B112L	100 kHz to 12.75 GHz
	R&S®SMB-B120/R&S®SMB-B120L	100 kHz to 20 GHz
	R&S®SMB-B131	100 kHz to 31.8 GHz
	R&S®SMB-B140/R&S®SMB-B140L/ R&S®SMB-B140N	100 kHz to 40 GHz
Setting time	SCPI mode	< 3 ms
	List mode	< 1 ms
Level		
Maximum output power	R&S®SMB-B101/-B102/-B103/ R&S®SMB-B106/-B112/-B112L, 1 MHz < f ≤ 12.75 GHz	+18 dBm
	R&S®SMB-B120 with R&S®SMB-B31, 50 MHz < f ≤ 20 GHz	+16 dBm
	R&S®SMB-B120L with R&S®SMB-B31, 100 MHz < f ≤ 20 GHz	+19 dBm
	R&S®SMB-B131/-B140/-B140N with R&S®SMB-B32, 50 MHz < f ≤ 40 GHz	+19 dBm
	R&S®SMB-B140L with R&S®SMB-B32, 50 MHz < f ≤ 40 GHz	+16 dBm
Minimum specified output power	R&S®SMB-B101/-B102/-B103/-B106/-B112/ -B12/-B131/-B140/-B140N	-120 dBm
	R&S®SMB-B112L	-5 dBm
	R&S®SMB-B120L/-B140L	0 dBm
Setting time (without switching of the mechanical attenuator)	SCPI mode	< 2.5 ms
	List mode	< 1 ms
Spectral purity		
SSB phase noise	f = 1 GHz, carrier offset = 20 kHz, 1 Hz measurement bandwidth	< -122 dBc, typ. -128 dBc
	f = 10 GHz, carrier offset = 20 kHz, 1 Hz measurement bandwidth	< -102 dBc, typ. -108 dBc
Harmonics		
R&S®SMB-B101/-B102/-B103/ R&S®SMB-B106/ -B112/-B112L	1 MHz < f ≤ 6 GHz; level ≤ 13 dBm <sup>1)</sup> , f > 6 GHz; level ≤ 10 dBm <sup>1)</sup>	< -30 dBc
R&S®SMB-B120/-B120L/-B131/-B140/-B140N/ -B140L	standard; level ≤ 8 dBm <sup>1)</sup>	
	f > 1 MHz	< -30 dBc
	with R&S®SMB-B25/-B26 low harmonic option, low harmonic filter on, level ≤ 10 dBm <sup>1)</sup>	
	1 MHz < f ≤ 150 MHz	< -30 dBc
	150 MHz < f ≤ 3 GHz	< -58 dBc
	3 GHz < f ≤ 20 GHz	< -50 dBc
	f > 20 GHz	< -60 dBc (meas.)
Supported modulation modes		
AM		standard
AM depth		0 % to 100 %
FM/φM		standard
Maximum FM deviation	f = 10 GHz	32 MHz
Maximum φM deviation	f = 10 GHz	320 rad
Pulse	R&S®SMB-K21/-K22 pulse modulator	
Rise/fall time		< 20 ns, typ. < 5 ns
ON/Off ratio		> 80 dB
Minimum pulse width of pulse generator output		10 ns
Connectivity		
Remote control		GPIO IEEE-488.2 Ethernet (TCP/IP), USB
Peripherals		USB