

Single-channel models
APSIN6010HC,
APSIN6G

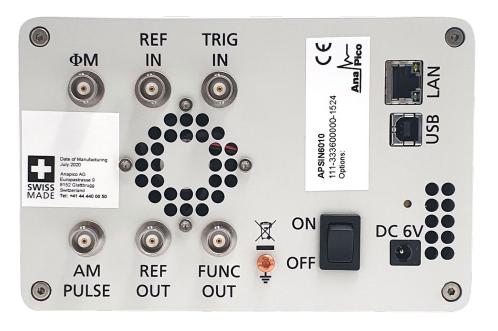
Keysight, Rohde





APSIN6010HC

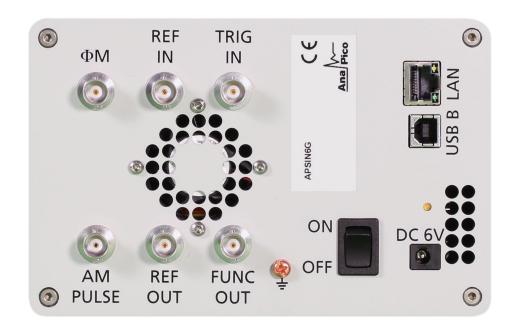






APSIN6G

















Model	APSIN6010HC	APSIN6G	N5171B	N5181B	SMB100B
Frequency range	9 kHz to 2.4, 6.1 GHz	9 kHz to 6.1 GHz	9 kHz to 1.3.6 GHz	9 kHz to 3.6 GHz	8 kHz to 1.3.6 GHz
Max. power	Std/PE3 option	Std/PE3 option	std 1EA	std 1EA	std B32 B32+K32
1 GHz	18/17	27/27	18/21	18/21	18 21 26
3 GHz	18/17	27/26	18/21	18/21	18 21 26
5 GHz	18/17	27/26	16/18	16/18	18 21 26
6 GHz	18/17	27/25	16/18	16/18	18 20 26
Attenuator	-120 dBm	-120 dBm	-130 dBm	-130 dBm	-127 dBm
Frequency agility	200 μs, 30 μs option FS	200 μs, 30 μs option FS	5ms	5ms	1ms













Model	APSIN6010HC	APSIN6G	N5171B	N5181B	SMB100B
Duty stability	0.5ppm	0.5ppm	1ppm	1ppm	1ppm, 0.1ppm, 0.03ppm
PN level 1 GHz, 20 kHz	-130 dBc/Hz''	-130 dBc/Hz''	-122 dBc/Hz	-131/-141 UNX	-132 dBc/Hz
Harmonics	-30 dBc, >4 GHz -60 dBc —option FILT	-30 dBc>4 GHz -60 dBc —option FILT	-30 dBc	-30 dBc	-30 dBc
Non-harmonics					
1 GHz	-65	-75	-72	-87	-76
3 GHz	-65	-65	-66	-81	-70
6 GHz	-65	-65	-60	-75	-64
IM modulation	standard	standard	option UNW	option UNW	option













Model	APSIN6010HC	APSIN6G	N5171B	N5181B	SMB100B
Pulse width	15 ns	15 ns	20 ns	20 ns	20 ns
Permission to install MI	15 ns, option NP 5 ns	15 ns, option NP 5 ns	10 ns	10 ns	10 ns
Power consumption	20 W	20 W	160 W	160 W	110 W
Operation from an external battery	Yes	Yes	No	No	No
Frequency modulation					
Deviation in World Cup Mode	6 GHz-100 MHz	6 GHz-100 MHz	6 GHz-16 MHz	6 GHz-16 MHz	6 GHz-16 MHz

APSIN6010HC AnaPico is 30-40% cheaper, **APSIN6G** AnaPico is 50% cheaper.

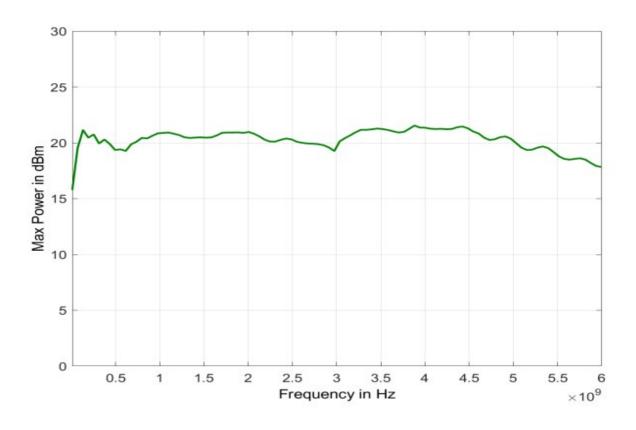


Power Graphs

AnaPico APSIN6G

30 Maximum Power in dBm 01 12 05 2.5 3.5 0.5 1.5 3 4.5 5 5.5 $\times 10^9$

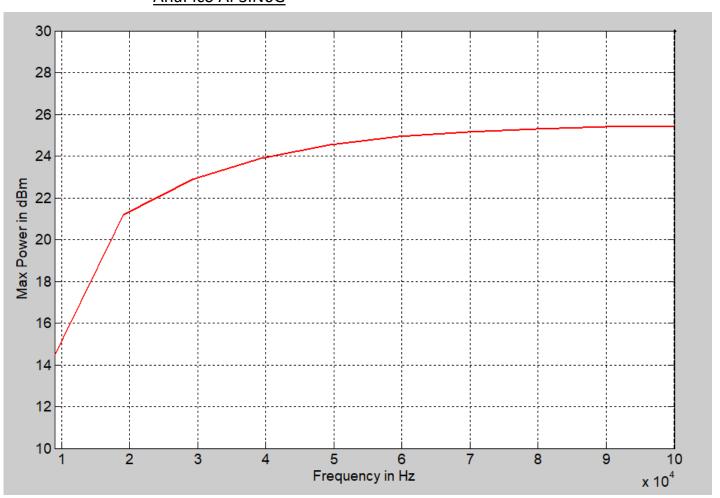
AnaPico APSIN6010HC





Power Graphs APSIN6G from 9 kHz

AnaPico APSIN6G

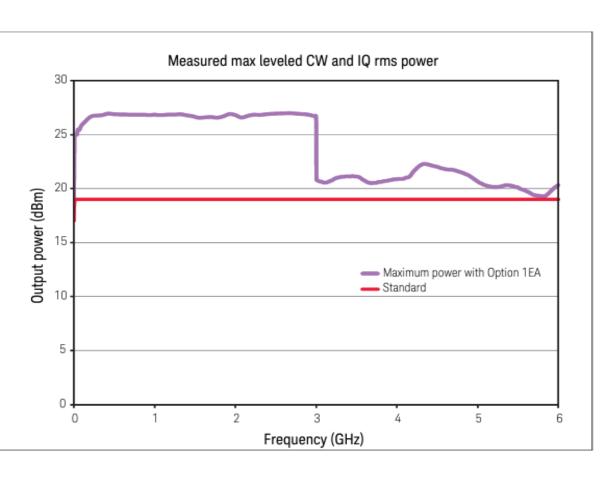


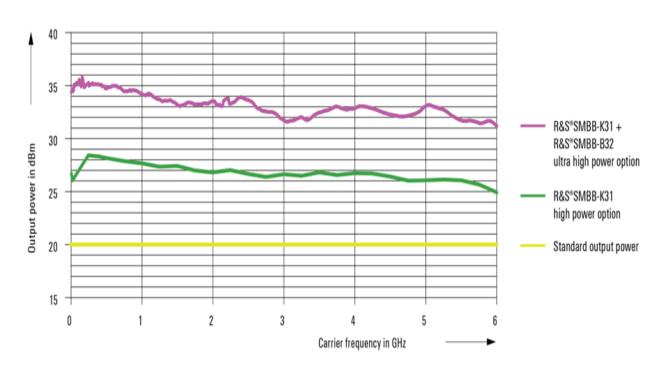
The unit is equipped with state-ofthe-art signal amplification technology, allowing high power to be achieved in the lower 9 kHz to 100 kHz frequency range, whereas most analog class models reach high power from 10 MHz onwards.



Power Graphs

Caseite N5171B | N5181B



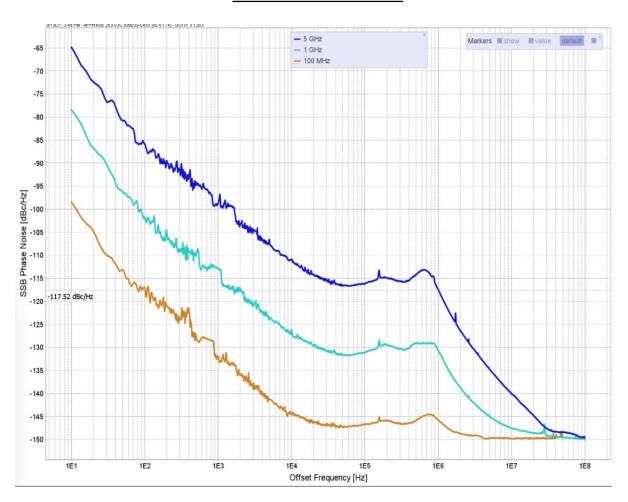


Measured output power for the base unit, with the high power option (R&S*SMBB-K31) and with the additional ultra high power option (R&S*SMBB-B32).

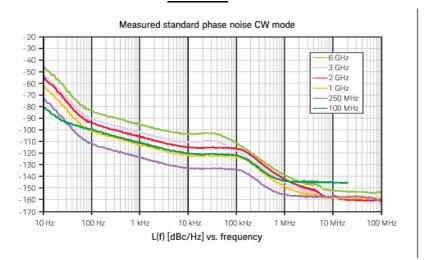


Phase noise AnaPico vs Keysight

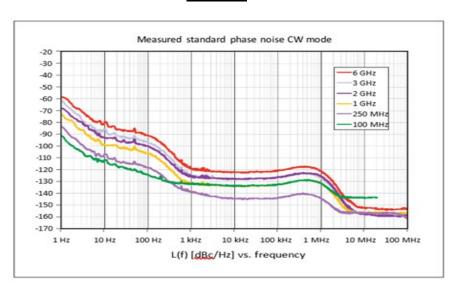
AnaPico APSIN6010HC



N5171B



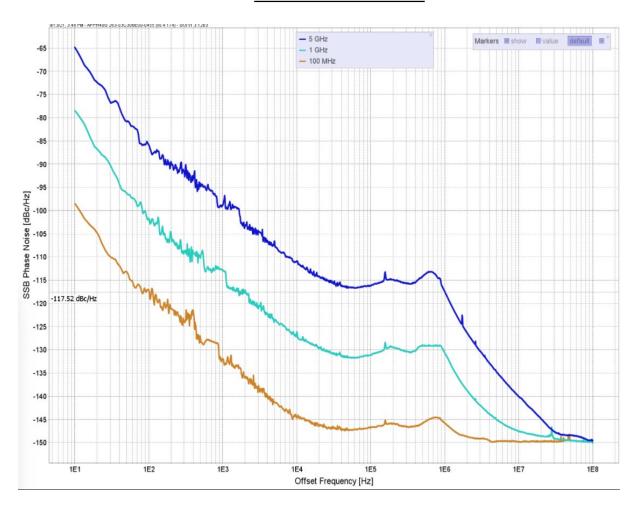
N5181B



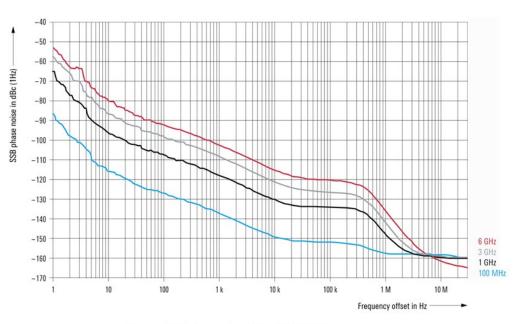


Phase noise AnaPico vs R&S

AnaPico APSIN6010HC



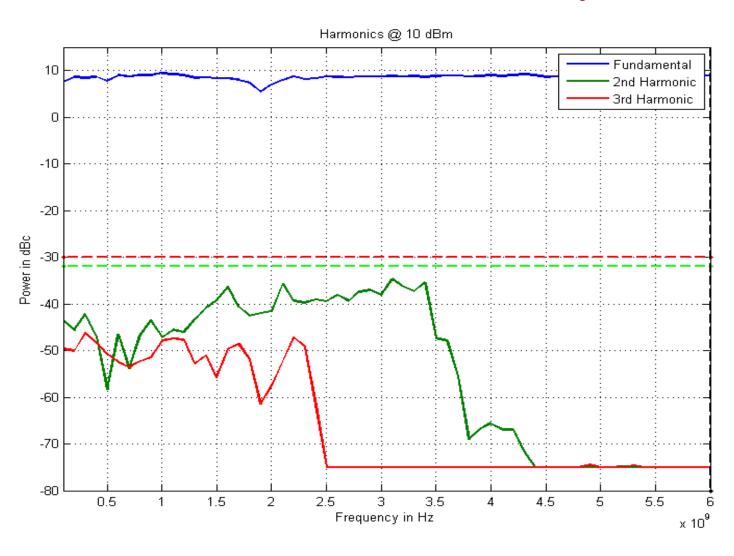
SMB100B



Measured SSB phase noise with R&S*SMBB-B1H option.



Harmonics AnaPico with FILT option





AnaPico options without analogues

AnaPico provides a cost-effective solution in terms of price, phase noise, power and frequency agility.

Name	Description	Who better to offer	
В3	Work from the internal accumulator	Field tests, antenna measurements, for related departments	
1URM	1U rackmount	Production	
NP	Pulse setting resolution 5 ns	Radar	
EB6	Adapter cable work from an external power bank	Field tests, antenna measurements, for related departments	



Conclusion APSINX010HC

- 1) The generator has quite low phase noise for its class of 1 GHz 20 kHz -130 dBc/Hz
- 2) Frequency adjustment speed is 200 microseconds, which is faster than all analogs in the class
- 3) With the FILT option, harmonics can be guaranteed -60dBc from 4 GHz, where competitors' harmonics are -30dBc
- 4) All types of modulation are included in the price
- 5) There is a solution to work in the field without mains power.
- This unit is 30-40% cheaper than its class counterparts, while having a class advantage in some features and others comparable to its peers. Advantage in such characteristics as the level of harmonics and phase noise, i.e. generator class parameters, will ensure the relevance of this model for many years. Phase noise is one of the main requirements for new generation DUT.
- Average delivery time: 4 weeks. Low power consumption makes the units reliable, with a MTBF of 10 years.



Conclusion APSIN6G

- 1) The generator has quite low phase noise for its class of 1 GHz 20 kHz -130 dBc/Hz and max power till +25 dBm. As example: Keysight's SG have smaller max. power in 6 GHz range
- 2) Frequency adjustment speed is 200 microseconds, which is faster than all analogs in the class
- 3) With the FILT option, harmonics can be guaranteed -60dBc from 4 GHz, where competitors' harmonics are -30dBc
- 4) All types of modulation are included in the price
- 5) There is a solution to work in the field without mains power.
- This unit is 30% cheaper than its class counterparts, while having a class advantage in some features and others comparable to its peers. Advantage in such characteristics as the level of harmonics and phase noise, i.e. generator class parameters, will ensure the relevance of this model for many years. Phase noise is one of the main requirements for new generation DUT.
- Average delivery time: 4 weeks. Low power consumption makes the units reliable, with a MTBF of 10 years.