



6061A

General-Purpose Signal Generator

Featuring premium spectral purity performance

The 6061A Programmable (.01 to 1050 MHz) Synthesized Signal Generator takes the field-proven performance of the Fluke 6060 line of signal generators and extends it into RF applications that place greater demands on spectral purity.

New low noise circuitry enables Fluke to offer this improved spectral purity in the 6061A at a price well below other generators in its class.

Applications

Some application benefits include:

- Signal Simulation – a more perfect source

The 6061A's low SSB phase noise: typically -123 dBc/Hz at 500 MHz and 20 kHz offset, reducing to approximately -150 dBc/Hz at 1 MHz offset, combined with low

out-of-band spurious makes the 6061A suitable for laboratory simulations.

- Large dynamic-range measurements

The same noise properties that make the 6061A desirable for signal simulations, also make it an excellent choice as the RF source used in large dynamic-range measurements. For example, the characterization of band-pass devices having large stopband attenuations.

- SINAD measurement of high performance FM receivers

Measurement of modern receivers requires low-distortion frequency modulation and low residual FM. The 6061A's FM distortion is conservatively specified at 1 percent, and its Residual FM is typically 8 Hz when measured in a .3 to 3 kHz bandwidth (the guaranteed specification is 12 Hz) at 1000 MHz. In practical measurements, this places the noise level 50 dB below a 3.5 kHz deviation reference test tone.

Outstanding 6060-series signal generator features

The IEEE-488 interface is supplied standard on the 6061A, making it fully bus programmable. Its programming commands are compatible with the 6060B and with the 6070 signal generator family.

The switching speed for program commands and settling time of both frequency and amplitude is less than 100 mS, giving you fast throughput in automated test situations.

The 6061A complements the successful 6060B signal generator introduced last year. Both have a frequency range of .01 to 1050 MHz with 10 Hz resolution. Amplitude range is from +13 dBm to -127 dBm with 0.1 dB resolution and an absolute accuracy of 1 dB. Internal and external FM can be used in combination or separately.



Specifications

All specifications are identical to those for the 6060B except for the following:

Residual FM (Hz RMS) in 0.3 to 3 kHz Bw:

Frequency Range	6061A		6060B
.01 to 245 MHz	12	(typ.) 8	20 Hz rms
245 to 512 MHz	6	4	10
512 to 1050 MHz	12	8	20

Residual FM (Hz RMS) in .05 to 15 kHz BW:

Frequency Range	6061A		6060B
.01 to 245 MHz	18	(typ.) 12	44 Hz rms
245 to 512 MHz	9	6	22
512 to 1050 MHz	18	12	44

Residual FM (Hz RMS), CCITT:

Frequency Range	6061A		6060B
.01 to 245 MHz	10	(typ.) 7	Not specified
245 to 512 MHz	5	3.5	
512 to 1050 MHz	10	7	

SSB Phase Noise (typical)

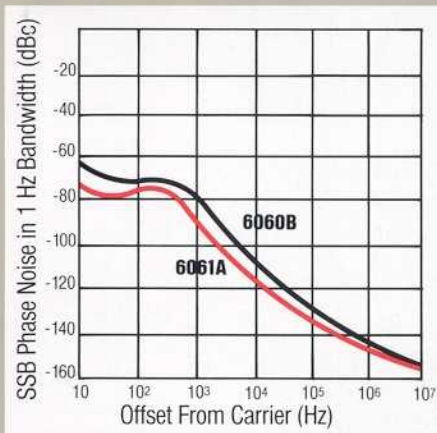
Measured at 20 kHz offset from carrier, CW

Frequency Range	6061A	6060B
500 MHz	-123 dBc/Hz	-116 dBc/Hz
1000 MHz	-117 dBc/Hz	-110 dBc/Hz

RF Leakage (2 turn loop, 1" from surface)

	6061A	6060B
Leakage at carrier frequency	0.5 μ V	1 μ V

Typical SSB Phase Noise @ 500 MHz (with int. reference).



Ordering Information

	Model 6061A	Model 6060B
Base Price	\$5695	\$4995
Options		
Hi Stability-130	\$950	\$950
Medium Stability -132	\$300	\$300
IEEE-488	No Charge	\$395
Low-rate FM-651	\$395	\$395
Rear output-830	\$125	\$125



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