



The VSG60A features a low phase noise, agile local oscillator with 200 μ s switch time, enabling frequency hopping spread spectrum testing.

A dual 14-bit DAC runs at 2x or 3x the I/Q symbol rate using digital oversampling to provide a flat, clean baseband; and a digitally adjustable internal VCTCXO ensures frequency errors are kept to a minimum over temperature, or an external 10 MHz input may be used for zero ppm frequency error. A trigger output is also available to synchronize your VSG60A with other test equipment.

Preprogrammed modulation types:

CW AM, FM, Pulse, Multitone, Sweep, AWGN, FSK, GFSK, OOK, ASK, MSK, GMSK, BPSK, DBPSK, QPSK, DQPSK, Pi/4DQPSK, OQPSK, 8-PSK, 16-PSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM

Digital modulation impairments:

Channel, AWGN, I/Q Offset, Sample rate multiplier, Frequency offset, Time-base multiplier

Custom modulation:

Use the API to continuously stream I/Q data to the VSG60A at an arbitrary sample rate up to 51.2 MSPS, or use the software to load a CSV, binary short int, or binary floating point I/Q le. Corrections are automatically applied as the data is streamed to the VSG60A.

Speciation:

- RF frequency range of 50 MHz to 6 GHz May be used down to 30 MHz
- ~ 40 MHz of real-time streaming bandwidth
- 200 μ s switch time enables frequency hopping spread spectrum signal generation
- Arbitrary I/Q sample rates from 12.5 kSPS to 51.2 MSPS
- Trigger output is available to synchronize the VSG60A with other test equipment
- Amplitude range: -55 dBm to +7 dBm May be used from -85 dBm to +10 dBm at reduced accuracy
- Arbitrary I/Q sample rates from 12.5 kSPS to 51.2 MSPS
- Stream waveforms of virtually any size from your PC or laptop
- Agile, low phase noise LO with 200 μ s switching time
- Amplitude, mixer balance, and DC offset corrected over frequency and temperature
- Digital oversampling in the FPGA, baseband filtering, and harmonic filtering across full operating range
- USB-powered
- Powerful software and API included
- Typical EVM: 0.3% (1 GHz carrier, 1 MSPS QAM16, alpha 0.35, raised cosine)
- External 10 MHz input and trigger output
- Under 9 inches long, and under 1 lb.