Triarchy

DATASHEET

VSG6G1C

USB Vector signal generator

Accurate and stable in frequency/level
Extra low cost, extra low weight, best performance to price ratio.
Frequency range from 1MHz~6.1GHz. Output level from -100dBm~10dBm.
Connect to PC through USB type C port without extra power unit.

www.triarchytech.com

The VSG6G1C is a very cost effective USB RF vector signal generator. It can do most basic test functions of a regular sized RF vector signal generator can do. The VSG6G1C is very tiny instrument, but it cab cover very wide measurement range.

RF frequency is from 1MHz to 6.1GHz, RF output level is from -100dBm to 10dBm. The most of modulation can be done by this tiny equipment. Such as pulse modulation, frequency hopping, I&Q modulation, it can generate FSK, MSK, GMSK, QPSK, 8PSK, 16QAM.
It can generate TDD format signal for communication set. It also can generate radar signal.

VSG6G1C is very suitable for field test. Because it is very small and easy to be carried. It also can be integrated RF system as module. It can simulated most of RF system signal.

Single frequency with/without pulse mode: Frequency range: 1MHz to 6.1GHz. Frequency resolution: 1Hz. Pulse modulation with pulse width: 0.25us~5s, repeat time: 40us~20s, multiple pulse number: 2~250. Pulse modulation on/off ratio : 90dB

Frequency sweeping with/without pulse mode: SPAN range: 1KHz to full span. Step:1Hz~1GHz. Pulse modulation with pulse width: 0.25us~5s, repeat time: 400us~20s

Frequency hopping with/without pulse mode: Hopping range: 1MHz to 6.1GHz. Hopping number: 2~4000, Pulse modulation with pulse width: 0.25us~5s, repeat time: 400us~20s

Low band: Frequency range: 100Hz~1MHz. I&Q file modulation. Raw data output, AM/FM/PM modulation with low band frequency.

Amplitude range: High band amplitude range: -100dBm~10dBm (1MHz~4GHz), -100dBm~0dBm (4GHz~6.1GHz). Amplitude resolution: 0.25dB. Low band amplitude range (not calibrated): -50dBm~0dBm (100Hz~1MHz)

Reference clock: Internal clock accuracy is 0.5PPM. Clock port is MMCX connector at back panel, ref clock out: 10MHz, ref clock in: 20MHz.

Internal I&Q modulation: Load I&Q file to generate different modulation. I&Q file size (max): 100KB. I&Q clock: 1.1KHz~2MHz. Using I&Q engine to generate different modulation file.

Analog modulation: Demo file with AM, FM and PM.

Digital modulation: Demo file with MSK, GMSK and FSK.

Phase modulation: Demo file with QPSK, 8PSK and 16QAM.

External I&Q modulation: External modulation signal bandwidth: 500MHz, Signal level: 1Vpp. External signal input from 4 MMCX connectors (IP, IN, QP, QN).

Pulse signal out: Output level: 3.3V COMS level. Pulse width:0.25us~5s, Repeat time: 50us~20s,

Multiple pulse number: 2~250. Pulse connector is MMCX at back panel.

Temperature range: working range: -10C ~+50C, stored range: -50C~+70C

Power Source: 5V from USB type C port. Working Current: 800mA

Dimensions: 115mm(L)x25mm(W)x25mm(H)

Weight: 100g

- Wireless Remotes, cordless phones, Monitors
- ATE system
- Industrial, Scientific, Medical (ISM)
- Cellular and PCS
- Two-Way Radio Trunk Radio
- Bluetooth, WiFi, WiMax
- Field Service and Installation