

PTS PRECISION TEST SYSTEMS

PSG Series Portable Signal Generators



- Frequency Range 1 kHz to > 3 GHz in six models
- Frequency Step Size 1 Hz – 10 Hz (depending upon model)
- Accurate phase locked output frequency.
- Low residual FM output. Can be used in narrow band systems.
- Output Level -30 dBm to +10 dBm
- Output level adjustable in 1 dB steps
- CW output or output can be frequency swept.
- Portable hand held unit
- Powered by batteries or external AC power supply
- Memory for 10 front panel set ups
- Other models covering different frequencies. E.g. 350 -700 MHz, 1 GHz to 1.6 GHz, 1.5 – 2 GHz, 2-2.5 GHz and 2.5 – 3 GHz
- RS232 Interface can be used for special set-up

The PSG series are low cost, hand-held signal generators. They can be powered by internal rechargeable batteries or from an external AC adapter (supplied).

The output is a sinewave (50 Ω impedance) at a maximum level of +10 dBm. The output level can be adjusted from +10 dBm to -30 dBm in 10 dB steps (optional 1 dB steps)

The frequency of the output can be set anywhere within the range of each individual unit, in frequency step sizes of 1 Hz to 10 Hz (depends upon model).

The output frequency is phase locked to an internal 10 MHz TXCO oscillator with an accuracy of ± 1 ppm. For greater accuracy an optional OXCO oscillator can be fitted or the unit can accept an external 10 MHz reference.

Six models cover the 1 kHz to 3 GHz range. Frequency ranges can be adopted on

special request.

Applications

The PSG series of field strength meters are ideal for the following applications:

- Propagation study or mapping of radio systems including analog and digital systems.
- Measurement of antenna performance of a cellular phone or two way radio.
- Direction finding using a directional antenna.
- General purpose signal generator

Specifications

PSG300	1 kHz to 300 MHz in 1Hz steps
PSG700	350 MHz to 700 MHz in 1 Hz steps
PSG1600	1000 MHz to 1600 MHz in 5 Hz steps
PSG2000	1500 MHz to 2000 MHz in 10 Hz steps
PSG2500	2000 to 2500 MHz in 10Hz steps
PSG3000	2500 to 3000 MHz in 10 Hz steps
Frequency Accuracy	± (reference error + step size)
TXCO Reference (Standard)	Aging 1 ppm per year
Generate Level Range	-30 dBm to +10 dBm
Generate Level Resolution	10 dB (option 02 is 1 dB steps)
Generate Level Accuracy	± 3 dB
Spurs and Harmonics	Typically -40 dBc *
Signal Type	Sine Wave
Display Type	LCD
Battery Life	3 hours
Charger	AC 115/230 VAC
Operating Temperature Range	0 °C to +50°C

* Spurs higher at some spot frequencies