

NEW

Product Brief

5 MHz to 7 GHz Signal Source Analyzer APPH6040

The APPH6040 provides fast and accurate measurements of SSB phase noise and also provides time domain analysis capability.

In phase noise mode, applying proven cross-correlation measurement procedures and self-calibration routines, fast, reproducible, and accurate measurements are obtained even under changing environmental conditions. A dedicated traceable calibration procedure guarantees accurate and reproducible measurements.

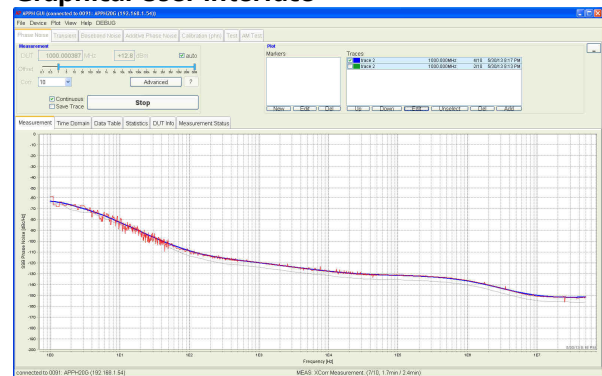
The instrument has built-in power detector and frequency counter and operates with either internal or external reference sources and offers measurements from 0.1 Hz up to 50 MHz frequency offset.

The instrument offers direct access to the dual-channel 50 MHz FFT analyzer that enables all kind of time and frequency domain measurements.

The APPH6040 can be controlled with LAN (VXI-11), USB, or with GPIB from any PC or laptop.

Platform independent intuitive graphical user interface (GUI), API library, and powerful SCPI command language set are included.

Graphical User Interface



Features

- All-in-one compact measurement system
- Traceable calibration procedure
- Measurements down to -185 dBc/Hz
- Offset range 0.1 Hz to 50 MHz
- Built-in frequency counter and power meter
- Two channel FFT Analyzer
- Selectable internal or external reference
- Powerful GUI
- Remote control via USBTMC, LAN VXI-11, or GPIB

Applications

- General purpose phase and amplitude noise tests
- Additive or residual phase noise measurements supported
- Wide-band Time domain and spectrum analysis
- Cross-correlator FFT analysis
- Automated production testing

Key Specifications

The specifications in the following pages describe the warranted performance of the signal analyzer for $25 \pm 10^\circ\text{C}$ after a 30 minute warm-up period. Typical specifications describe expected, but not warranted performance. Min and Max specifications are warranted.

Parameter	Value	Notes
RF Frequency range	5 MHz to 7 GHz	
Input Power Range	-10 to + 20 dBm	
Input impedance VSWR	50 Ohms < 2	
Offset Analysis Range	0.01 Hz to 50 MHz	
Measurement Accuracy	± 2 dB	
Residual Phase Noise Floor		
10 Hz offset 1 kHz 10 kHz	-150 dBc/Hz -174 dBc/Hz -185 dBc/Hz	Correlator engine only
Meas. time per average 1 Hz (Start) 10 Hz 100 Hz 1 kHz	10 sec 2 sec 0.4 sec 0.1 sec	
Tuning voltage output	0 to +20 V	
Baseband input range Input Impedance Voltage noise density	-12 to +12 V 1 k Ω 1.2 nV $\sqrt{\text{Hz}}$	DC coupled Input shorted, $f > 1$ kHz
Transient Measurements / Time Domain Analysis	See data sheet	