

PN400 Phase Noise & VCO Test System

High-Performance Precision Test Solution In One Powerful Workflow



The PN400 phase noise test system is a revolutionary, high-performance and versatile phase noise and VCO characterization system. Combining the PN400 with two SM200 or SM435 spectrum analyzers enables cross-correlated phase noise measurements, VCO characterization via low noise tuning and supply voltage, and all the power and flexibility of Signal Hound's spectrum analysis capabilities.

Achieve phase noise floors 20-30 dB lower than the capabilities of a single SM200 or SM435 with Signal Hound's licensed Advanced Phase Noise Test Tool Kit. This feature-rich software kit is activated through Spike and requires a separate purchase with an annual renewal.

This is the most cost-effective phase noise test solution on the market

System Requirements

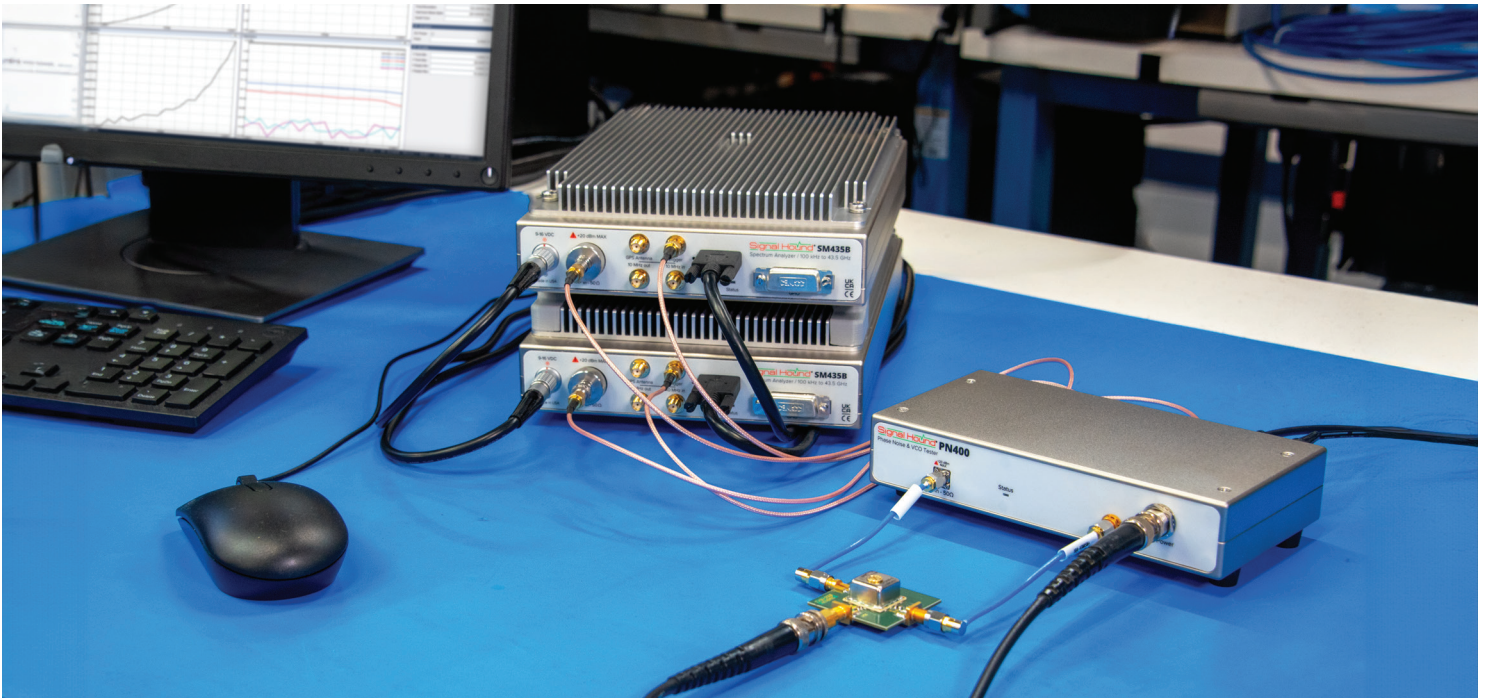
- PN400 Phase Noise & VCO Tester
- Advanced Phase Noise Test Tool Kit Software License
- TWO (2) SM-series Spectrum Analyzers
 - *Mix and match SM200 or SM435
 - *SM Spectrum Analyzers purchase not required if you already own

The Advanced Phase Noise Test Tool Kit unlocks enterprise-grade accuracy and cutting-edge features in your test and measurement environment. The PN400 performance specifications are suitable to replace a costly dedicated phase noise tester in the lab. Precise phase noise and VCO testing, comprehensive software and powerful Signal Hound spectrum analyzers combined in one superior system.

New Advanced Tool Kit Features

Single Device Phase Noise Measurements	✓
Jitter Measurements	✓
Traces	✓ (6)
Markers	✓ (6)
Automatic Signal Search	✓
Trace Smoothing	✓
Automatic Spur Rejection	✓
Amplitude Noise Measurements	✓
Cross Correlation	✓
VCO Testing	✓
Peak Tracing	✓
Full SCPI Automation	✓
Measurement Speed	
10Hz-10MHz offset (BB/SP/SM devices)	1 second



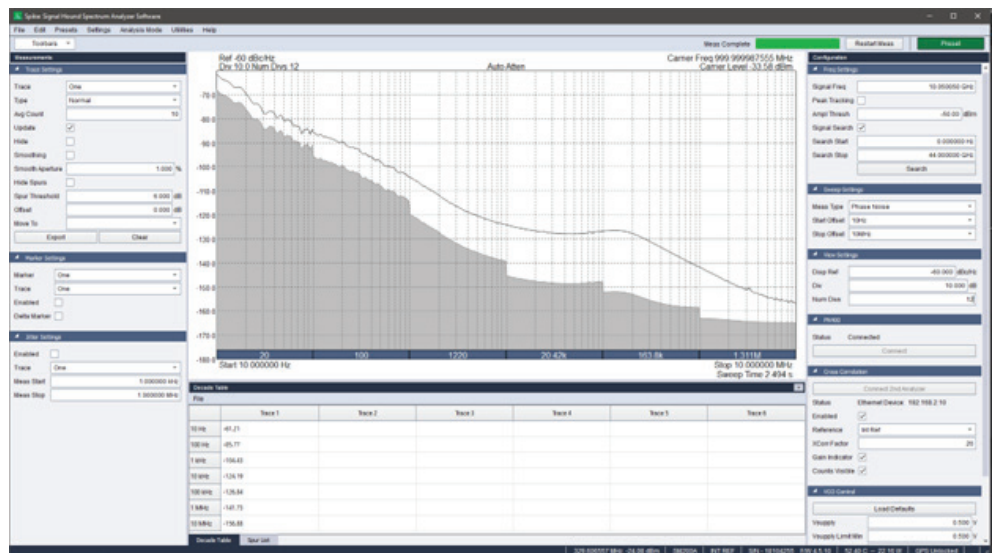


The PN400 Phase Noise and VCO Test System minimizes the need for bulky and outmoded test systems. It fits easily in a desktop bench scenario and it is portable.

Cross-correlation methodology is at the core of the PN400. For the most demanding phase noise applications, measurement utilizing cross-correlation provides a level of sensitivity beyond the capabilities of a single spectrum analyzer. By combining the power and performance of two SM series spectrum analyzers (required for operation of the PN400), users can unlock the features of specialized test equipment, as well as utilize each individual spectrum analyzer for a wide-range of applications – all facilitated through Spike.

Combined with the PN400 hardware, the new VCO characterization mode in Spike’s licensed phase noise test tool kit enables automatic sweeps across a configurable VCO tuning range. Accurate and low noise voltage sources combined with easy-to-use software support efficient characterization for R&D and manufacturing lines. The features go even further. Configurable automation, measurement of phase noise and amplitude noise (or a combination of both) and automatic signal detection are just a few of the valuable capabilities included in the tool kit.

Accuracy and reliability are critical aspects of any test and measurement process. Reduce interruptions in workflow and achieve fast and exact analysis with Signal Hound’s precision phase noise and VCO test system.



Spike software configured for a cross-correlation phase noise measurement, comparable to performance of industry-standard test systems