HA7062C
PHASE NOISE ANALYZER

NEW! Now with 40MHz Measurement Offset Capability

The HA7062C inherits the same ANSI Z540 calibrated accuracy as its predecessor; as well as industry leading data acquisition speeds, ease of use, and extremely high reliability. The additional features that come with revision C include: expanded measurement offsets to 40MHz, input splitter bypass ports for higher channel-channel isolation, and independent baseband input ports.

REAL TIME CROSS CORRELATION COVERING 10MHz to 20GHz

ELIMINATION OF CROSS-SPECTRUM COLLAPSE

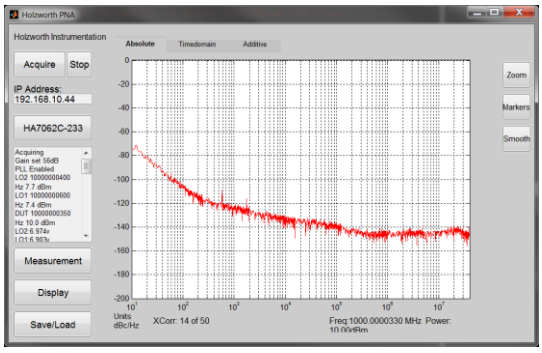
HA7062C AM/PM cross check eliminates data irregularities. Holzworth's latest real time cross correlation architecture offers simultaneous AM/PM measurements. This unique feature was integrated to eliminate cross-spectrum collapse which is a proven phenomena causing incorrect high/low measurements.

Z540 NIST TRACEABLE CALIBRATION

Make no assumptions. Accuracy of phase noise test data is a common speculation. All Holzworth analyzers come with a NIST traceable calibration. The ANSI z540 calibration standard is a mandatory procedure for Holzworth phase noise analyzers. Phase noise data that cannot be traced to an industry accepted standard is open to speculation.

INTUITIVE INTERFACE

Holzworth Instrumentation has been measuring the phase noise of 100% of its own shipped products since the company was founded in 2004. There is an understanding that the user interface is as important as the capabilities of the actual hardware.



The highly intuitive HA7062C interface is a driver-free, MATLAB™ Runtime based GUI that will operate on any standard PC. No MATLAB™ license required.

Originally targeted for use in high throughput manufacturing, the HA7000C Series is optimized for accurate measurement speed while offering the flexibility to be controlled via LABVIEW™ or any other VISA control interface.

HA7062C
PHASE NOISE ANALYZER

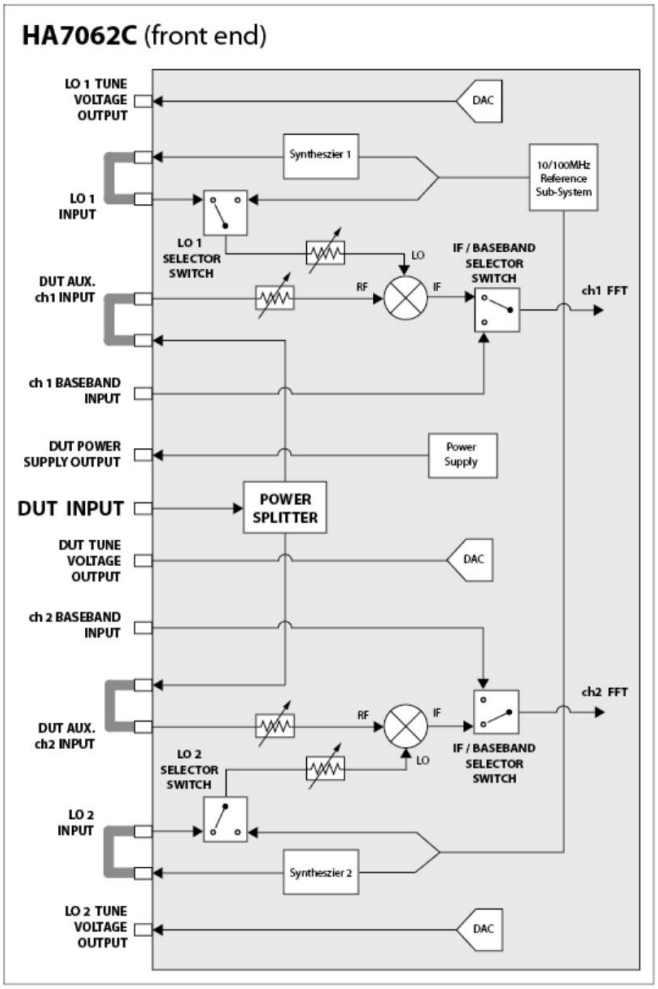
ARCHITECTURE OUTLINE

The HA7062C core combines the best of traditional analog phase noise measurement front-ends with the latest technology in real time cross correlation analysis. The digital analysis system uses an advanced DSP with a powerful cross correlation engine. 3 LO Modes help to achieve industry leading phase noise levels at the fastest possible acquisition speeds:

1. INTERNAL LO MODE uses a pair of Holzworth HSX Series RF synthesizers for LO generation. These HSX LOs provide the most optimal phase noise available on the market to further increase the acquisition speed of the already blazing fast HA7000 Series.

2. INTERNAL LO BYPASS MODE is a powerful function that provides the lowest possible noise floors for DUTs at 10MHz and 100MHz. This automatic feature bypasses the onboard synthesized LOs, to use the system's internal references.

3. EXTERNAL LO MODE allows for the use of external LOs to achieve the lowest noise floors at the fastest acquisition speeds.



RESIDUAL PHASE NOISE - AUTOMATED TOOLBOX

The HA7062C takes the guess work out of making additive phase noise measurements. The system is equipped with a unique *Quadrature Monitor* for setting proper system quadrature when using external delay lines. When using Holzworth pre-calibrated electric delay lines, the system takes over completely and sets quadrature on the fly. No more guess work.

PERFORMANCE SUMMARY

DUT Tuning Range	10MHz – 6GHz (base), 12GHz, 20GHz
Measurement Floor	
Internal LO Mode	< -180dBc/Hz
Internal LO Bypass Mode	< -185dBc/Hz
External LO Mode	< -190dBc/Hz
Measurement Speed (per correlation)	<1s (1kHz-40MHz), <15s (1Hz-40MHz)
Measurement Offset	0.1Hz to 40MHz
Warranty	**3 years**