Agilent Technologies' PNA Network Analyzer Metrology Option Sets New Standard in Precision S-Parameter Measurements

Agilent Technologies

SANTA CLARA, Calif., Oct. 17, 2013 – Agilent Technologies introduced a metrology option for its PNA family of network analyzers that offers national metrology institutes and calibration laboratories around the world the ultimate in S-parameter measurement accuracy.

Stability and measurement accuracy are key characteristics metrology laboratories look for in a network analyzer. Most solution providers, however, fail to characterize the thermal stability of their instruments. With no specific data on stability, laboratories are unable to determine its impact on resulting measurements.

Agilent's new metrology option employs a unique technique for accurately characterizing the thermal stability of its network analyzers, independent of the effects from cables and adapters. The technique provides 48 hours of stabilization data that accurately characterizes instrument drift stored on the analyzer's hard drive. This data can be used to calculate measurement uncertainty.

In addition, the new metrology option has optimized the raw performance of the PNA family to address the specific measurement needs of metrology laboratories. For example, all front-panel loops were removed to improve stability. The PNA's raw source match and load match were also optimized. Breakthrough receiver linearity was realized by specialized hardware techniques based on Agilent's in-house semiconductor processes.

"Minimizing uncertainty is absolutely essential to our customers and others working in metrology labs around the world," said Gregg Peters of Agilent's Component Test Division. "Our new PNA metrology option was specifically designed by metrologists for labs requiring the ultimate in S-parameter measurement accuracy. Thanks to the unequalled stability and unsurpassed measurement accuracy it delivers, the Agilent PNA network analyzer is now setting a new standard in precision S-parameter measurements."

Agilent's PNA family of network analyzers includes the PNA-L, PNA and PNA-X Series, covering frequencies from 300 kHz to 1.05 THz. The PNA-L is designed for general-purpose network analysis; the PNA is the world's highest-performing vector network analyzer; and the PNA-X provides complete linear and nonlinear component characterization in a single instrument with a single connection. The PNA family offers advanced connectivity via LAN, USB and GPIB; an easy-to-use open architecture based on the Microsoft Windows operating system; and an extensive embedded help system. The PNA family's CPU and operating system can be upgraded as technologies evolve.

For more information, visit www.agilent.com [1].

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[1] http://www.agilent.com