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RF AND MICROWAVE TECHNOLOGY FOR DESIGN ENGINEERS

Single test instrument eases WLAN Tx/Rx analysis

To offer an order of magnitude improvement over conventional instruments in conducting radio layer measurements on WLAN decvices in production or during design, as per IEEE 802.11 standards, Anritsu Company has developed a fully integrated single instrument test solution. With the ability to perform these measurements 10x faster than existing test alternatives, the

MT8860A is a marked improvement over existing rack-and-stack solutions consisting of multiple instruments. These rack solutions also integrate golden radios from various WLAN chip manufacturers.

Because the MT8860A was developed in conjunction with first and second tier chip manufacturers, a universal golden radio is incorporated into the MT8860A. The result is that WLAN device makers have a single test set that provides highly accurate, repeatable measurements. Additionally, chip developers no longer have to design and support golden radios, allowing them to concentrate solely on chip development.

The MT8860A covers both the 2.4 GHz and 4.8 GHz to 6 GHz Indus-

trial Scientific and Medical (ISM) frequency bands bands and supports all 802.11 WLAN standards with options. Accurate high-speed transmitter power, frequency, carrier suppression, and harmonic measurements can be made with the test set. Each of the measurements can be conducted on all frequency channels and all specified power levels. A PCI bus design makes it simple to add measurement capability.

Besides measurement accuracy and speed and internal golden radio, the MT8860A offers many other unique features. These include a high-speed spectral processor so measurements can be conducted in a much shorter period of time, advanced triggering and gating features, as well as inputs for external golden radio and interfering signal sources. To simplify operation, the manufacturer has developed LANLook, an innovative Windowsstyled user interface that runs on any PC and allows for multiple trace results to be displayed simultaneously. Among the multiple displays that can be viewed are burst profile and spectral mask. In addition, LANLook is a Visual Basic program written with an open source code so that users can modify it to establish their own production test program. And it communicates with the MT8860A through a GPIB interface.

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