96270A



Tuote

Tuotekoodi: 4489610

Tekniset tiedot

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Product overview: 96270A 27 GHz Low Phase Noise Reference Source

Cover a broad range of your RF workload with a single instrument

The 96270A calibrates a broad workload of RF calibration devices, including:

• Spectrum analyzers, including higher frequency models
• RF power sensors
• Modulation meters and analyzers
• Measurement receivers
• Frequency counters
• RF attenuators and components
• High frequency oscilloscopes
• ...and more

The metrology associated with calibrating these items becomes simpler because you have fewer error sources and uncertainty contributions to consider than with traditional RF calibration systems.

“What you set is what you get” accuracy and signal purity

The 96270A delivers pure, accurate level signals directly to the UUT input just the way you set them on the front panel. This unique “What you set is what you get” feature helps you avoid losses, mismatch errors, and uncertainty contributions introduced by cables, other devices and interconnections, eliminating complex setups and time consuming methods otherwise required to obtain accurate results.

For low-level signals, use the 96270A with the rugged, precision leveling head in 50 ohm or 75 ohm versions. The head delivers lower frequencies up to 4 GHz directly to the UUT input with deep dynamic range, minimizing losses, noise, interference and mismatch errors, and maintaining the integrity of low-level signals throughout a 154 dB dynamic range, down to the very lowest levels at -130 dBm.

For more shallow level wider frequency range signals up to 27 GHz, use the 96270A with the microwave output with the high frequency leveling kit to realize the “What you set is what you get” signal delivery and accuracy benefits.

Avoid extensive measurements and calculations with self-characterization

The 96270A can “self-characterize” or profile its output to account for losses and attenuation of system components like cables, attenuators, splitters, and connecters, effectively creating a signal reference plane directly at the connection to the UUT input. This frequency/amplitude level correction profile is saved into 96270A memory, which can store up to 30 profiles for different output and interconnection configurations. Using a profile, the 96270A applies the level correction data automatically and delivers the user’s signal level setting accurately at the reference plane created at the UUT input. As a result, you save time, because you don’t have to measure, calculate and apply correction factors for each component in the signal delivery system.

More than just an RF calibrator

Many applications in R&D, manufacturing test and ATE need better performance than a general purpose signal generator can offer. If wide frequency coverage, frequency resolution, low harmonics, phase noise and spurious content, signal level and attenuation accuracy, and/or dynamic range are critical parameters, the 96270A is the ideal solution.

Cut the cost of your RF calibration system in half

As the central instrument in a high performance RF spectrum analyzer calibration system, the 96270A can cut your costs in half or even more. The 96270A replaces all of these parts of a “typical” RF calibration system:

Up to five signal sources (from audio/ function generators to RF and microwave signal generators and low phase noise sources)
• Power meters
• Power sensors
• Step attenuators
• Filters
• Pads
• Couplers
• 300 MHz frequency counter

The 96270A not only reduces the initial cost and time to purchase, install and configure RF system components, but it also reduces the costs to maintain and calibrate all of that equipment. For many spectrum analyzer models operating below 27 GHz, as well as for most power sensors, you only need a 96270A to perform the entire calibration.