

InCal VNA Calibration

Simplify calibration and achieve accurate, reliable microwave measurement on multi-port devices using fully automated calibration

ATE Systems has developed a revolutionary calibration methodology that removes the human factor from network analyzer calibration, eliminating sources of error such as connecting incorrect standards, improperly torquing standards, applying excess test cable flexure, and so on. No longer is an experienced, highly trained operator needed to obtain accurate test data.

This solution from ATE greatly speeds up the calibration process by eliminating the need to connect and disconnect calibration standards. In fact, once the system is configured it is never necessary to connect a calibration artifact again.

Since calibration no longer requires making changes to the hardware configuration, the calibration process can be fully automated. Calibration can be invoked at any time, even when the DUT is connected.



- Measurement and calibration solution for RF and microwave devices
- Automated in-situ calibration of single and multiport devices
- Used with Agilent PNA network analyzers
- Calibration can be accomplished without removing the DUT
- Establishes reference plane at the DUT ports
- Reduces calibration time, eliminates manual error
- Calibration verified to TRL-level accuracy
- Achieves accurate and reliable RF/microwave measurements
- Fixture removal for testing non-connectorized devices

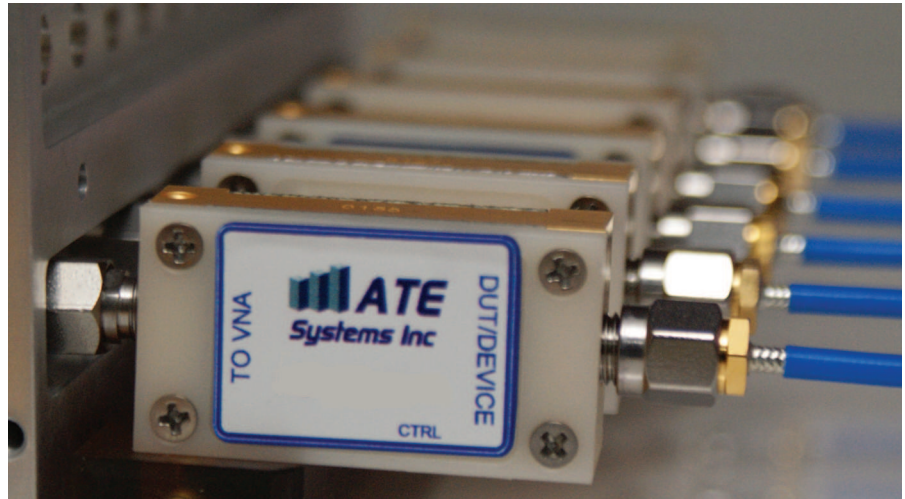


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The amount of time required for VNA calibration, and the potential for operator error during calibration, increase geometrically with the number of test ports. Automation of the calibration process addresses both of these issues. Because of the modular nature of the implementation from ATE, support for very high port-count devices is finally practical.

A typical system configuration consists of a network analyzer, an Instrument Correction Module (ICM) and a number of Fixture Correction Modules (FCM's). The ICM establishes a calibrated reference plane at the VNA test ports, and the FCM's at each DUT port translate the reference plane from the VNA down to each of the DUT ports.

The nature of the calibration automation solution from ATE



makes it very well suited to testing in design validation and production environments. Test fixtures for complex multi-function devices can be designed with integrated calibration artifacts to allow the calibrated reference planes to be established right at the device test ports.

The calibration methodology can also be extended to testing devices

with connectors not supported by calibration kits or even non-connectorized interfaces such as surface mount pads.

If test throughput, measurement accuracy, operator skill, or overall efficiency in testing are issues you would like to improve, consider the benefits that ATE Systems has to offer.



ATE Systems is a technology innovator and developer of microwave, RF, and high-speed test systems.
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