Maury Microwave Product Display Highlights at MAPCON 2024

Maury Microwave products, which encompass amplifiers, device characterization, interconnects, precision calibration, RF power analysis, channel emulation, low phase noise instrumentation, and additive white Gaussian noise (AWGN) generation, empower innovation from RF through sub-THz. Explore the comprehensive solutions from Maury Microwave on display at MAPCON 2024.

Visit info.maurymw.com/mapcon-2024 to learn more about Maury Microwave solutions.

Product Overview

Boonton RF Power Analysis

RTP real-time RF power sensors (RTP4000 and RTP5000 Series) provide accurate power measurements up to 40 GHz over an 80 dB dynamic range. With Real-Time Power Processing™, they deliver an industry-leading 100,000 measurements with no gaps in the acquisition and zero measurement latency. Both families can be used as standalone USB power sensors connected to a computer running the Boonton Power Analyzer software, which provides numerical and trace views of the pulsed, modulated, or CW signals being measured. Synchronized multi-channel measurements are supported.

Device Characterization

Automated impedance tuners (NT-series) are designed for on-wafer applications with maximum VSWR at the probe tip. Models are available that address sub-THz passive load pull, hybrid-active load pull, and noise parameter solutions within the 110-330 GHz range. The sub-THz models can generate wide-ranging load and source impedance conditions across the Smith Chart with ease and coupled with our patented closed-loop feedback motor control ensures exceptional measurement accuracy and repeatability. Integrating the NT-series into a passive on-wafer load pull measurement system enables engineers to maximize tuning range and minimize phase skew, which are both critical test considerations for power amplifier developers and circuit designers.

Holzworth Low Phase Noise Instrumentation

RF synthesizer modules (HSM Series) utilize proprietary non-PLL technology to offer the ultimate mix of fast switching speed and low phase noise. The compact form factor and multiple control interfaces make the module ideal for system integration.

Interconnect

ColorConnect™ color-coded precision adapters (CC-series) have been designed for lab and field use where quality, performance, ease-of-identification, and ease-of-use are critical. Following the IEEE P287 high-frequency connector/adapter color convention, ColorConnect precision adapters offer clear indications of compatibility and intermatability. ColorConnect™ makes it a simple matter to avoid and eliminate damaged equipment, degraded equipment reliability, degraded performance, and lengthy maintenance times due to improper mating (and attempted mating) of incompatible adapters. ColorConnect Precision Adapters are available with SMA, Type N, 3.5mm, 2.92mm, 2.4mm, and 1.85mm connectors up to 67 GHz.

Test Essentials™ lab adapters (TE-series) have been designed for daily use in microwave/RF labs and production facilities and offer one of the industry's best price/performance values. Test Essentials feature excellent electrical performance, rugged construction for durability, repeatable mating, and high reliability. Test Essentials are available with SMA, Type N, 3.5mm, 2.92mm, 2.4mm, and 1.85mm connectors up to 67 GHz.

Noisecom RF Noise Generation

Amplified noise modules (NC1000 Series) produce AWGN as high as +13 dBm and have bandwidths up to 18 GHz. The high-power modules are designed to test noise immunity for Cable TV equipment, secure communication channels, and military jamming systems.

Calibrated coaxial noise sources (NC3000 Series) are well suited for receiver testing, noise figure measurements, or applications that require broadband noise and fast switching times. Several models include output isolators and voltage regulators that provide excellent stability over varying temperature and voltage ranges.

Through-hole and surface mount noise modules (NC500 and NC500SM Series) are an economical solution for built-in test requirements. They contain complete bias circuits and require no external components. Some models contain additional gain stages for high power ENR output (51 dB). The surface mount package is suitable for mounting on a microstrip. The modules have extremely flat output power versus frequency characteristics that are insensitive to temperature and voltage variations.