Maury Microwave Product Display Highlights at European Microwave Week 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 European Microwave Week 2024.

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

Product Overview

Device Characterization

Manual impedance tuners offer great positional repeatability with an LCD readout for carriage position and high matching range utilizing two probes to maintain performance across the band. They are ideal for use as a variable impedance source for applications such as device characterization or for maximizing power transfer between a generator and a load.

Low-loss pulsed bias tees (MBT-series) simultaneously enable the industry's widest bandwidth, lowest insertion loss, and lowest return loss in a coaxial bias tee up to 18 GHz. Its unique design makes it ideal for pulsed applications.

Bidirectional airline couplers (LLC-series) represent a breakthrough in high-power coupler technology, offering high directivity and low insertion loss for broadband performance.

Interconnect

Adapters include calibration-grade metrology adapters, ColorConnect™ color-coded precision adapters, QuickTest adapters with push-on/pull-off capability, and Test Essentials™ lab adapters designed for daily use in RF/microwave labs and production facilities.

Torque wrenches (metrology-series and TW-series) are recommended for tightening coaxial connectors in order to obtain optimum repeatability and prolong connector life. They employ a "break" design, so it is impossible to over-torque a coupled junction.

Precision Calibration

Connector gage kits enable the measurement of linear interface dimensions of most coaxial connectors. Identifying recessed, protruding, and non-concentric contact pins will avoid partial connections and unrepeatable measurements and prevent damage to mated connectors.

Characterized device (CD) SOLT calibration kits improve calibration accuracy when compared to SOLT kits based on polynomial definitions. Each calibration kit is provided with individually characterized short, open, and fixed load standards, whose S-parameters can be loaded into commercial VNAs directly or when used with the Maury Microwave Insight™ software platform.

CD calibration verification kits are designed for 1-port and 2-port VNA calibration validation for well-matched and mismatched DUTs. Each kit comes with individually characterized verification standards and is used for calibration validation by comparing the user-measured S-parameters of the appropriate verification standard and the factory-measured S-parameters.

Boonton RF Power Analysis

The PMX40 RF power meter provides design engineers and technicians with the utility of a traditional benchtop instrument, the flexibility and performance of modern USB RF power sensors, and the simplicity of a multi-touch display. The PMX40 supports the RTP5000, RTP4000, and CPS2000 families of power sensors.

RTP real-time RF power sensors (RTP4000 and RTP5000 Series) provide accurate power measurement 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.

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.

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

Broadband calibrated noise sources (NC346 Series) are designed for precision noise figure measurement applications. Each module's low VSWR reduces multiple reflections and significantly increases the measurement accuracy for most noise figure test configurations.

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.