

**RF MICROWAVE SOLUTIONS**



- ❖ State-Of-The-Art Solid-State GaN Pas, 600 MHz to 67 GHz
- ❖ Broadband, High- Power & High-Frequency Amplifiers
- ❖ Coaxial & Waveguide Calibration Kits
- ❖ Precision VNA Calibration Kits & Validation
- ❖ Cable Assemblies, Adaptors, Attenuators



- ❖ RF/Peak Power Meters To 40GHz, Fast Rise Times
- ❖ RF/Peak USB Power Sensors
- ❖ Signal Generators Up To 18GHz
- ❖ RF Volt Meters



- ❖ Noise Components & Instruments
- ❖ Programmable Noise Generators Up To 40GHz
- ❖ Low Voltage Surface Mount Noise source
- ❖ Calibrated Sources/ATE



- ❖ Phase Noise Analyzers Up To 50GHz
- ❖ Phase Shifters And Detectors
- ❖ Multi-Channel, Phase Coherent RF Sources
- ❖ Ultra-Low Phase Noise Synthesizers & Modules



- ❖ Satellite Link Emulator & Modeling Software
- ❖ 600 MHz Of Instantaneous Bandwidth Per Channel
- ❖ Timing Synchronization Up To 16 Channels
- ❖ Payload Emulation
- ❖ Static And Dynamic Link Emulation



- ❖ Broadband Bias Tees
- ❖ Broadband Baluns
- ❖ Broadband Pick Off Tees
- ❖ Impedance Analyzer – IPC-241A
- ❖ Signal Path Analyzer
- ❖ DC Blocks

**AVIONICS & FLIGHT LINE TEST SOLUTIONS**



- ❖ High Speed Avionics Network Test & Simulation
- ❖ MIL-STD-1553/ARINC 429/ARINC 664 Solutions
- ❖ 1G To 100G Ethernet & Fibre Channel Products
- ❖ Arbitrary Waveform Generator, PXI, LXI, VXI
- ❖ High Resolution Oscilloscopes In PXI, LXI, VXI
- ❖ Portable Data Loaders

**DATA ACQUISITION**



- ❖ Power Analyzers, Portable
- ❖ Real-Time Data Acquisition Systems
- ❖ All-In-One Systems
- ❖ Signal Conditioning
- ❖ Data Recording
- ❖ Components & Sensors

**TIMING / GPS / PNT**



- ❖ Frequency & Timing Standards
- ❖ Distribution Amplifiers
- ❖ NTP - Network Time Servers
- ❖ Auto Switches
- ❖ Rubidium Standards

**OPTICAL TEST**



- ❖ RFoF Transport Solutions Up To 50 GHz
- ❖ Spectral Purity Performance - SFDR, NF, OIP3
- ❖ Fiber Optic Delay Lines Up To 2ms, 50GHz, Fixed/Variable Minimum Phase Shift Over Temperature Performance
- ❖ Optical Switching, EDFA's, SNMP M&C, Rack IDU, And ODU Options

**RENTAL / USED EQUIPMENT / CALIBRATION SERVICES / LEASING**



- ❖ All Major Brands - Current Products
- ❖ Same-Day Shipping, Extended Warranties
- ❖ Satisfaction Guaranteed
- ❖ Flexible Rental Terms And Financing
- ❖ ANSI/NCSL Z540-1 Compliant Calibration Lab



**ENVIRONMENTAL & VIBRATION**



- ❖ Temperature/Humidity Chambers
- ❖ Altitude Chambers
- ❖ Thermal Shock Chambers
- ❖ HALT/HASS/AGREE
- ❖ Reach In Chambers, Custom/Modified
- ❖ Walk-In/Drive-In Chambers
- ❖ Battery Test Chambers
- ❖ PharmaEvent Stability Chambers



- ❖ Salt Spray Chambers
- ❖ Cyclic Corrosion Chambers
- ❖ Floor SO2 Gas Dosing Test Chambers
- ❖ Tabletop SO2 Gas Dosing Test Chambers



- ❖ Self-contained Shock & Vibration Event Recorders
- ❖ Impact Detectors For High-Value Transportation Monitoring
- ❖ Acceleration/ Temperature & RH Data Recording
- ❖ HIRTS-1 High-G Helmet Impact Recorders
- ❖ Environmental Data Analysis Software

**ETHERNET & PROTOCOL TEST SOLUTIONS**



- ❖ PCI Express up to 6.0 & CXL 3.x
- ❖ High-Speed Ethernet: 10/40G; 25/50/100G; 100/200/400/800G
- ❖ Storage Tech; SATA, SAS, NVMe-oF & FibreChannel
- ❖ USB 2.0, 3.x, 4.x, Thunderbolt
- ❖ quantumdata – HDMI/Display/Port/Video



- ❖ Ethernet PHY & POE Testing
- ❖ Physical Layer Test And Analysis
- ❖ Scalable Power Over Ethernet Test
- ❖ PSE Conformance Testing
- ❖ LLDP Analysis <sup>a</sup> Automated 802.3at PSE

**GENERAL PURPOSE TEST SOLUTIONS**



- ❖ Digital Oscilloscopes
- ❖ Spectrum Analyzers 9KHz to 26.5GHz
- ❖ Signal Generators & Counters
- ❖ Bench Power Supplies
- ❖ Data Acquisition and Meters
- ❖ Vector Network Analyzers

**ATE SOLUTIONS**



- ❖ Test System Design & Build To Print Services
- ❖ RF & Microwave, Digital & Analog
- ❖ Power Control/Distribution
- ❖ Pre-Configured Core Test Systems
- ❖ RF Signal Converters, Matrix Switching Systems
- ❖ Cable Test Instruments
- ❖ ATE Development, Service Provider
- ❖ ITA Design/BTP



- ❖ Wire, Cable And Harness Testers
- ❖ Rack And Portable AUTOMEG Testers
- ❖ Functional Cable Test systems
- ❖ RTS Real Time Scanning
- ❖ Bond, Loop & Joint Resistance Testing



- ❖ 19" ATE Enclosures - Fully Assembled
- ❖ EMI/RFI, Seismic, Data Center Enclosures
- ❖ Turn-Key Assembled With Accessories
- ❖ Customer Designs, STP Files, Build To Print
- ❖ Specialty Enclosures, Pre-Configured

**BOUNDARY SCAN / JTAG TEST SOLUTIONS**



- ❖ Boundary Scan Software & Hardware
- ❖ Turnkey JTAG Test Solutions
- ❖ ICT Test Fixture Design Services
- ❖ Advanced Connection Testing
- ❖ XJTAG Products Use IEEE.1149.X

**EMI / EMC TEST SOLUTIONS**



- ❖ High Resolution EMC Scanners
- ❖ X/Y/Z Axis Near Field Probe Automation
- ❖ Microwave Frequency Counters/Analyzers
- ❖ High Voltage Linear Amplifiers
- ❖ High Voltage/High Current Linear Amps



- ❖ Modular Shielded Enclosures
- ❖ Adaptable Anechoic Chambers
- ❖ Turntables, Doors, Vents, Panels, Feeds
- ❖ Design, Fabrication & Installation
- ❖ Screen Rooms
- ❖ Service - All Makes Of EMI/EMC Chambers