SUPPLIER OF HIGH QUALITY TEST EQUIPMENT FROM INDEPENDENT, CREATIVE, CUSTOMER-CENTRIC PARTNERS.

**KNOWLEDGE, TRUST & EXPERTISE**

We are a US-owned and operated business with 20 years industry experience. Our dedicated and skilled staff strives to provide the most accurate and precise test and measurement equipment and support available to our customers through our strategic partnership with industry leading manufacturers. This allows our customers to increase their product's quality, reliability and safety.

**COMMITMENT TO QUALITY**

ISO 9001 certified quality management processes highlight our commitment to quality. Our staff fully embraces the concept of quality through continual improvement. We strive to provide our customers a consistent and rewarding experience from our products and services and continued customer satisfaction is the ultimate goal of our quality management system.

**LOCAL SERVICE & SUPPORT**

We have built our reputation on providing superior services and assistance to our customers. Prompt services for reduced downtimes is our highest priority. Our experienced service personnel span the globe, providing repair, calibration, installation and training for all the solutions we provide. Our goal is your satisfaction with every interaction with our company.
**ESD3000 - Electro Static Discharge Simulator**
The only 30kV ESD simulator which is both AA rechargeable battery powered and completely hand-held, eliminating any need for a tethered base unit. 16kV model is expandable to 30kV. IEC 61000-4-2 Edition 2 compliant. Additional discharge networks available for MIL, DO160 & ISO standards.

**IMU4000 / IMU3000 - Multifunction Generators**
Compact generators for EFT, SURGE, 10-700, Ring Wave, Dips/Interrupts, ESD, Common Mode, Differential Mode, Magnetic Field. User configurable. Additional circuits can be added using only a screwdriver.
Small and compact design. 4kV, 6kV and 8kV versions.
External CDN’s up to 690V/200A 3 phase, 1000V/100A DC & Ethernet/Data Line. ANSI coupling.
Full compliance to IEC 61000-4-2, -4, -5, -8, -9, -11, -12, -16, -19 & -29. TEMA3000 automation software.

**MIL3000 - Military and DO-160 Test Generator**
Mainframe and plug-in module design. Can perform tests according to MIL-STD-461 CS106, CS115 & CS116 as well as DO-160 Section 17 & Section 19.
Meets all requirements with an easy to use automated test system.
TEMA3000 automation software.

**AVI3000 - Indirect Lightning Test System**
All 6 waveforms and all test modes in one compact generator. Will meet DO-160 Level 3 and MIL-STD-461 CS117 internal test levels under any load.
Small coupler for cable bundle testing.
Solid state switching for unmatched pulse repeatability and reliability.
Different system available for Level 5 testing.

**ISO17025 Accredited Calibration**
We can deliver new equipment with accredited calibration!

**EMC Partner - The largest range of impulse generators available**
9 kHz - 6 GHz, up to 12 kW Class A Amplifiers
- Quiet operation through use of variable speed fans based on internal operating temperature
- Fault Tolerant - Prana amplifiers continue working with the loss of one or more power transistors or RF power modules

Class A Solid State Power Amplifiers
- Modular design for service & upgrading
- Easy & quick remote diagnostics through Ethernet port
- Self protecting with temperature probes & voltage/current monitors
- 3 year standard warranty

Bulk Current Injection (BCI) Probe
10 kHz - 400 MHz up to 500W input power. Reliable, efficient & robust.
CIT-10 - Conducted Immunity Test System
Turnkey test system for IEC 61000-4-6, ISO 11452-4, MIL-STD-461 CS114 and similar standards. Internal signal generator and RF power amplifier produce output signals up to 150W within a frequency range 100kHz to 400MHz. Signals are measured with one of up to 3 internal RF voltimeters. Forward and reverse power can be measured by optional internal directional couplers. Full software control and operation.
- Automated testing
- Excellent cost-performance ratio
- Complete range of CDNs available
- Can be used for automotive BCI testing

Radiated Immunity Test Systems
Turnkey test systems for IEC 61000-4-3 and MIL-STD-461 RS103 up to 6 GHz. Control unit includes signal generator, directional coupler, RF power meter and relay switching unit. Power amplifiers, antennas, field strength meters, cables and control software complete the package.
Relay switching unit which conveniently switches between 2 or 3 power amplifiers and antennas helps automate the test procedure.
- Software control and reporting
- Automated switching for faster, more convenient testing with minimized operator error

Field Strength Meters
Specially designed for field strength measurements and field homogeneity measurements during radiated immunity tests according to IEC 61000-4-3. PC connection via fiber optic link. Excellent uniformity. Small size. Laser powered version also available for continuous operation. High resolution, high speed and low noise.

GTEMs
Low-cost alternative for radiated emissions and immunity measurements. Ideal for design qualification and pre-compliance tasks. Sizes from 250mm to 2000mm septum heights. Numerous electrical and mechanical options including internal illumination, filters, windows, feed-throughs and fans.
Antennas & RF Test Accessories for Commercial, Automotive & Military Applications

**Antennas for Emissions & Immunity Testing**
We offer a large range of high performance antennas for EMC applications from 9 kHz up to 40 GHz.
- Horn Antennas - 200 MHz to 40 GHz (double ridged, standard gain & dual polarized horns)
- Log Periodic Antennas - 30 MHz to 18 GHz (standard LPDA, hybrid LPDA, stacked LPDA & dual polarized LPDA)
- Biconical Antennas - 20 MHz - 18 GHz (balun with removable biconical elements)
- Dipole antennas - 30 MHz - 3 GHz (telescopic or defined length dipole elements)
- Loop Antennas - 9 kHz - 400 MHz (active loops, Van Veen 3D loops, Rx loops, Tx loops, Helmholtz coils, radiating loops)
- Rod Antennas - 9 kHz - 300 MHz (vertical active rod, vertical passive rod)

**Pre-amplifiers**
Broadband pre-amplifiers with high gain and low internal noise. Useful for measurement of very low limits.

**Attenuators & Pulse Limiters**
Diode pulse limiters with built-in high power 10 dB or 20 dB attenuator and fuse lamp to protect sensitive measuring equipment. Fuse lamp visually indicates overload conditions quick and reliable & prevents expensive equipment damage. Bulbs are replaceable. BNC or N connectors.

**Helmholtz Coils**
Specially designed to create precisely defined magnetic fields. The generated fields are in a strong linear relation to coil current. Precise field strength calculation. Ideally suited for calibration of magnetic field probes and sensors.

**Line Impedance Stabilizing Networks (LISN's)**
High power 3 phase LISN's. Supplies the necessary mains voltage and current to the DUT. Couples interferences generated by the DUT and supplies it to the receiver. Provides a well defined impedance to the DUT. Filters unwanted disturbances coming from mains supply. Protects the mains from unwanted disturbances created by the DUT.
- CISPR 16-1-2 socket LISN's
- CISPR 16-1-2 wing terminal LISN's
- Automotive LISN's
- Military LISN's
- Telecomm LISN's & more
Turntables
From small, economic designs to large designs capable of supporting the heaviest loads. Flush mount, low-profile surface mount & dual turntables. Installation in both anechoic chambers and Open Area Test Sites (OATS). Optimized EMC performance through use of specially shielded drive units which are well below the requirements. High positioning accuracy. We have the expertise to upgrade old EMC chambers with the newest, top of the line equipment.

CO3000 Controller

Antenna Stands & Antenna Masts
Antenna stands are specially designed for measurements at a constant height. Manual, electric or pneumatic polarization options. Hand crank option for easy height adjustment and manual tilt option. Custom designs for heavy antennas. Antenna masts for automatic height, tilt & polarization change. High accuracy. Compliant with CISPR 16-1-4 & ANSI C63.4 Boresight requirements. Drive unit shielded & RF suppressed -20 dB under Class B.

Field Probe Positioners & Absorbing Clamp Positioners

Reduce test time. Increase accuracy. Automate.
EMI Hardened Camera/Audio Systems & Fiber Optic Converters

**Camera Systems**
We offer a wide range of EMI hardened camera systems for optical monitoring of DUT's. From small, economic cameras for GTEM applications to full HD, high performance applications in large EMC chambers.
- Signal transmission via fiber optics
- Full HD 1080p from sensor to display
- Motorized pan & tilt
- Up to 30x optical zoom
- Iris Control Technology for low light chambers & LED displays
- Immunity: Standard models 200 V/m. HIRF model up to 3,000 V/m
- Emissions: CISPR 25, Class 5 - 20dB on most models

**Audio Intercom Systems**
Designed for acoustic surveillance of DUT's & communication into and out of EMC chambers. Audio intercom can be added to camera systems or offered as a stand alone solution. Consists of EMI shielded satellite with microphone and speaker/headset and transceiver. Satellites are equipped with automatic gain control, ensuring a constant sound level independent of distance and level of the source.
- Digital audio transmission through fiber optics
- Up to 6 channels in one controller
- Immunity: 200 V/m up to 18 GHz
- Emissions: CISPR 22 Class B

**Controllers**
Convert the optical signals from the camera and/or audio system to electrical signals. Handle high speed digital signals needed to transfer high resolution videos in an uncompressed format. LAN interface available for remote PC control. PECOS software ideal for documentation, storing/recalling data, event triggering and EMC automation software interface.

**Fiber Optic Converters**
Bidirectional transmission of electrical signals into and out of EMC chambers through fiber optics. Highly immune against RF energy & very low emissions. Set of 2 converter boxes either mains or battery powered. Converter types: Ethernet, USB, CAN, RS232, HDMI, LIN & more.
EMP Impulse Generators & Accessories for MIL-STD Applications

**MIL-STD-461 - RS105 EMP Test Systems**
Sizes to meet all needs from 1.8m up to 25m heights. Standard, off the shelf systems and custom designs to meet space constraints. High voltage Marx generators with easy setup and control. Mobile or permanent, indoor and outdoor installations possible.

**MIL-STD-461 - RS105 EMP Accessories**
Ground plane field sensors. Free field sensors. Ultra fast derivative voltage sensors. Designed to measure fast electric or magnetic fields and high voltage impulses for RS105 tests.

**MIL-STD-188-125 1/2 - Pulsed Current Injection (PCI)**
Short pulse generators. Intermediate pulse generators. Charge line pulse generators. Software or front panel control.

**MIL-STD-1275E - Surges on 28 Vdc electric circuits**
Up to 400 A EUT operating current with optional external diode module. Different LISNs available. Computer controlled.

**Analog Fiber Optic Links**
Transmission of analog signals from 80 Hz to 3.5 GHz. Automatic gain control through USB port. Rechargeable battery powered.
**S1000 / S1010 High Performance Signal Generators**

Generate, encode and modulate RF signals for global digital standards and simulate real-time impairments. Compact, cost-effective multi-channel platform for complex and versatile testing in one platform. 31 virtual signal generators for simultaneous simulation with multiple sources. Modulators for TV standards and digital radio (AM, FM, Sirius, XM etc.). GNSS constellation simulator. The S1000 has a revolutionary architecture and the patented signal processing algorithm combines multiple technologies into a single piece of test equipment for today’s acceptance testing requirements.
- 31 virtual signal generators in one box with 2 independent RF outputs
- Real-time impairment simulation
- 50 MS/s real-time streaming
- Upgradeable hardware and user friendly operation with automated testing

**IZT RecPlay - RF Recording & Playback System**

Ideal platform for RF receiver design validation of analog and digital radio, broadcast standards and telecom systems, GNSS and automotive infotainment systems. Includes wideband recorder with integrated RF receiver, external server for data streaming and S1000 signal generator. With a real-time bandwidth of up to 25 MHz and a frequency range of 9 kHz to 3 GHz (6 GHz and 18 GHz options available), the recorder covers the whole FM broadcast band simultaneously. The replay generator has a bandwidth of 120 MHz which allows the combination of multiple recorded and calculated scenarios.
- Excellent RF performance and low RF emission
- Many hours of continuous recording and playback
- Diversity and multi-frequency setup
- Software for signal review, analysis and post-processing

**IZT C3040 - Satellite Link Emulator**

Cost-effective, time saving solution with exceptional functionality for satellite and aircraft RF link testing. Accurate, comprehensive and repeatable simulation of uplink, payload and downlink in the IZT C3040 lets system engineers create realistic scenarios for testing their product in a laboratory environment. Input and output frequency up to 3 GHz
- 100 MHz instantaneous bandwidth
- Simulation of uplink, payload and downlink
- Accurate synchronization of multiple C3040’s possible