EM-ISight Standard Reach

The EM-ISight-SR is a fully flexible EMI/EMC measurement system built on a laboratory grade 6 axis articulated robotic platform designed to support multiple applications and industries. System can be applied to the test of networking, automotive, integrated circuits, aviation, military, and electronics. Used as compliance system for IEC-61967-1-6 or a pre-compliance / development tool, the abundance of features meet most requirements for research, design and analytical needs. This platform is the smallest in the fleet and is ideal for applications where small pitch with vector analysis is needed.

Integration of vector probes with 360 degree rotation allows users to measure phase and wavefront of a complex signal. Customizable features allow the end user to have complete control of the measurement process using the fully automated software. The footprint of the system means that it can be introduced to most measurement environments with multiple options for frequency, hardware and software upgrades to choose from. The system can be housed in the optional isolation chamber, and has an assessed noise floor (sensitivity) of below -145 dBm* when used with high end spectrum analyzers.

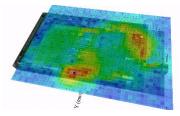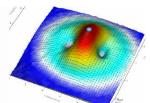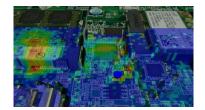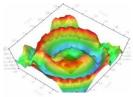|	
System Software **Windows 10/11 Pro 64 Bit**	Data Visualization: 2D/3D/4D heatmaps with layers, vector rotation, and frequency distribution. Search and Noise Removal: Automated/user live peak search with delta and digital noise elimination. Probe Calibration: Dimension scan, vision system GUI teaching, and probe positioning in X/Y/Z and Phi. Data Export: Integration with tools like Ansys; automated reports to MS Word. Topology and Scanning: Dynamic touch detection, multi-meshing, and real-time sweep updates. Performance Analysis: Limit exceed searches for peak, average, band power, theta max, RMS, and power signatures. Visualization Modes: AVI plotting in 3D/4D; vector probe alignment for phase/wavefront analysis.
Applications	Integrated circuits and PCB fixtures : Mobile devices, modules : De-Sense testing (receiver circuits), Power integrity, Signal integrity : Wearables Health and fitness tools, streaming devices : Medical Devices : Electronic device emissions and susceptibility testing : Quality Control Auditing processes to ensure compliance and reliability : Portable Computing : Access Points : Memory Modules and Systems : High-Speed Connectors Ethernet (Gigabit & Beyond) : Serial Communication (e.g., USB, Thunderbolt) : Cube satellite Communication
Frequency Options	9kHz-6GHz: 9kHz-20GHz: 9kHz-40GHz DC-200kHz: 8GH: 26GHz: 44GHz: 70GHz: 110GHz: 220GHz
Measurement Units	dBm; dBuV; dBuA; dBuV/m; V/m ; dBuT
Reach and Movement	Number of axes : 6 (X, Y, Z, Yaw and θ) Denso RC8 Controller: Typical reach*: X & Y axis 300 x 300mm Z Axis : 260mm (with probe and BDU): Resolution : X / Y & Z axis = 10um (APREL Kinematic Upgrade) Rotation θ axis : 360° Vector Field Assessment : 1.0° Step : Vision Calibrated using Vision Plate and VCS
Probe Options	Fully Calibrated & Characterized Vector Probes - Hxy, Exy, : Hz, Ez 1mm Exy, 2mm Hxy Standard Options
Operating Voltage	110V or 220V AC Robotics: 5V USB Vision System
Upgrade Highlights	Far-Field Approximation: Hearing Aid Compatibility C63.19 2019: Electromagnetic Susceptibility: Multi-Span: RF-ISight advanced analysis tool for Import/Export of Simulation data.

Available Upgrades on Next Page

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System Options

Available Options	EM-ISight-SR	EM-ISight-ER	EM-ISight-LR	EM-ISight-ESD
DC-200MHz Low Frequency Module includes Tesla Field Strength Measurement Function for Battery and Vehicles Includes Hxy/Hz Probe and LNA	•	•	•	•
10GHz to 72GHz Frequency Option	•	•	•	
10GHz to 110GHz Frequency Option		•	•	
Vector Probes (standard for all XY types)	•	•	•	•
Full Probe Rotation 360º (standard)	•	•	•	•
2mm Hxy & Exy Vector Probe (standard)	•	•	•	•
2mm Ez (optional)	•	•	•	•
2mm Hz (optional)	•	•	•	•
1mm Exy & Hxy Vector Probe (optional)	•	•	•	•
1mm Ez (optional)	•	•	•	•
Scan Volume 300 x 300 x 200mm	•	•	•	•
Scan Volume 500 x 500 x 400mm		•	•	•
Scan Volume 1,050 x 1,050 x 900mm			•	
Vision System for DUT Capture, Device Teaching and Measurement Parameters (standard)	•	•	•	•
Off Axis (horizontal scanning) includes 5 Scanning locations 2 x Horizontal & 3 x Cartesian		•	•	
Far Field Approximation		•	•	•
Ubiquitous Server Module	•	•	•	•
Advanced Measurement Suite Option, Includes Phase, s11/s22, Vector Network Analyser and Multi Span Support for Analysers	•	•	•	•
Active Phase Module, Supports the measurement of digital devices operating in normal conditions, includes Contact Probe and optional Exy/Ez/Hxy/Hz Characterized probes	•	•	•	•
RF-ISight Advanced measurement module, Power Density, Poynting Vector, Phase Passive/Active, Wavefront, Vector and Antenna Assessments and Backscatter: Includes Module for Import and Export of Simulation Data	•	•	•	•
ESD Measurement Upgrade		•	•	
ESD Launch Pad kit Option, includes probes, contact discharge, air discharge and ESD immunity measurement suite				•
Hearing Aid Compatibility for C63.19 20013 & 2019	•	•	•	•
Modular Workstation Options		•	•	
Mobile Isolation Chamber (shield)	•			
Shielded Enclosure	•	•	•	•
Advanced Device Positioner	•	•	•	•
ESD Extended Ground Plane				•
ESD 61000 workstation and ground plane				•
Calibration set for High frequency, includes horn, MSL and LNA (50-72GHz/50-110GHz)		•	•	
Electromagnetic Susceptibility Measurement Suite Includes 3V/m or 10V/m Support, RF Amplifier, DVM and Ez Probe	•	•	•	•
Extended Maintenance Program (software/hardware) Includes software updates and support beyond first 12 months	•	•	•	