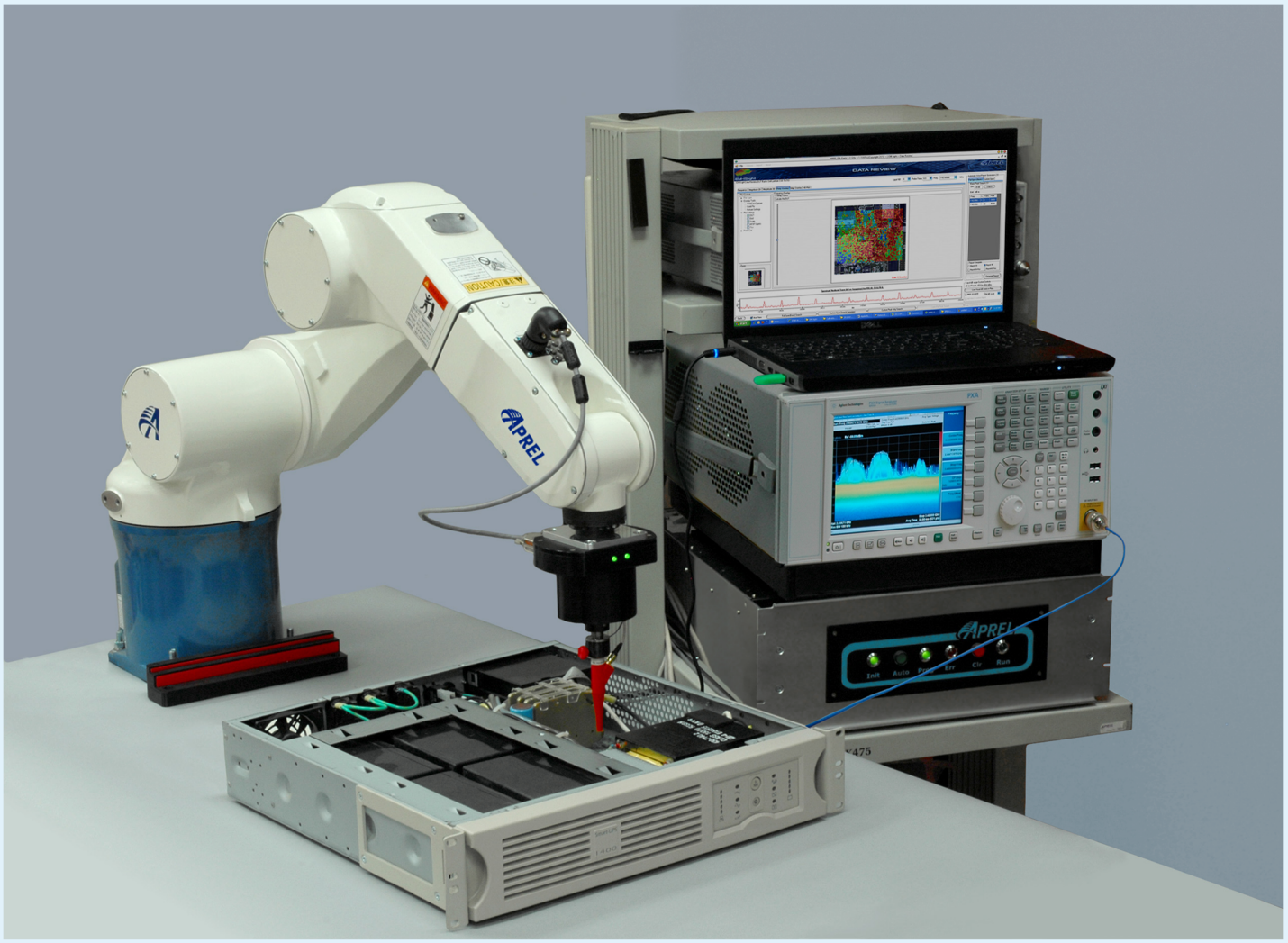
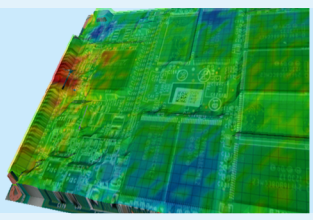
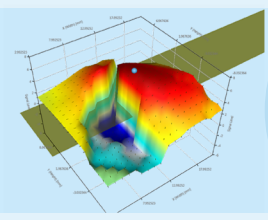
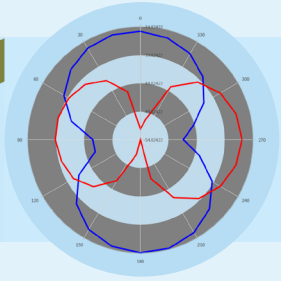
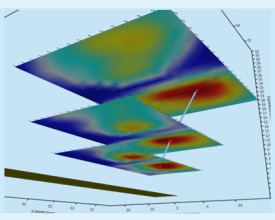
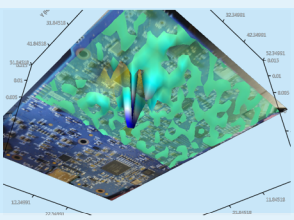
5G / IoT Near-Field Scanning Solution up to 110GHz

EMI/EMC | Signal/Power Integrity
Maximum Permitted Exposure (MPE) | Power Density
Beamforming | Antenna Gain/Directivity | Path Loss
Stochastic Waves | Poynting Vector Analysis



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Specification

Frequency Range	Hz to 110GHz
System Options	5G / IoT & Advanced Near-field Analysis Antenna beamforming, gain & directivity EMI/EMC Near-Field Scanning MPE / Power Density Signal Integrity / Power Integrity Electrostatic Discharge (ESD) Contact Probe PCB / IC Analysis
Probe Options	Electric, Magnetic & Contact Probe Options DC-300kHz / 9kHz-6GHz / 9kHz-20GHz / 9kHz-40GHz / 50GHz to 110GHz
Probe Size	0.02mm / 1mm / 2mm / 4mm / 5mm
Near-Field Sensitivity	< -140dBm
Linearity	+ /- 0.1dBm
Plane Wave Field Sensitivity	0.01 W/cm^2
Cross Detection	0.01 mm
Probe Calibration	Spherical - Gain, Directivity Near-Field - S11, S22, and Coupling Loss
Standard Software Functions **Supports Windows 8/10 64B**	High resolution scan (> 0.02mm) Smart scan with dynamic peak search function Real-time topology analysis using vision and dynamic touch detection Field distribution presented in 2D, 3D or 4D including Backscatter, Poynting Vector, Gain, S11, S22, S12, S21, and Phase Source direction plots (vector, polar & phase) Customizable reports based on user requirements automatically exported to MS Word Delta plot measurement function & frequency distribution plots AVI export function for real-time visualization of field and frequency distribution
Vision System	10.7 MP CCD camera, Low distortion lens, real-time image capture & scan setup
Key Scanning Dimensions	Six Axis (Cartesian and off axis movement) with 3 independent scan zone regions Scan Volume = ER 500mm^3 / LR 1,000mm^3 Minimum Step Resolution = ER 0.02mm / LR 0.06mm
Software Options	Far Field Approximation Spurious Emission Fast Scan (30MHz to 1GHz) Ubiquitous Server Option (Python and National Instrument Support) RF-ISight Advanced RF Analysis Application Electrostatic Discharge (ESD current mapping, frequency/time domain analysis)
Supported Hardware	Spectrum/Signal Analyzer Oscilloscope Vector Network Analyzer Vector Signal Generator Wireless Test Set (base station simulator)
Applications	IEC TC106/IEEE JWG12 H-Field analysis for 5G wireless transceivers Antenna chip analysis and characterization Maximum Permissible Emissions (MPE) and Power Density (PD) for V and W bands Near/Far Field analysis for automotive
Power	ER 220V Single Phase / LR 220V 3 Phase

ER Extended Reach / LR Long Reach

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