



TEST AND MEASUREMENT SOLUTIONS

TEST SYSTEMS, CHAMBERS,
PRODUCTS, ACCESSORIES,
AND SERVICES

***COMMITTED TO A SMARTER,
MORE CONNECTED FUTURE***

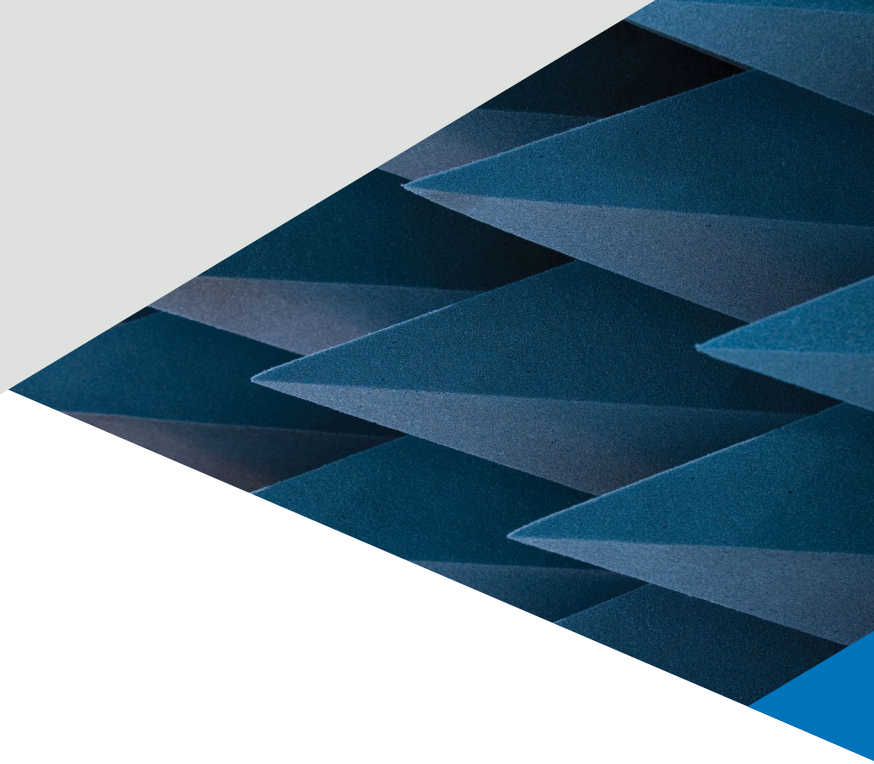
 **ETS·LINDGREN**[®]
An ESCO Technologies Company



ANTICIPATING THE NEEDS OF AN EVOLVING UNIVERSE

SOLUTIONS FOR TODAY AND TOMORROW

ETS-Lindgren is the proven leader in test and measurement solutions. Our ability to create real-life test scenarios and solutions enable customers around the globe to verify, measure, isolate, contain, and ultimately bring life-changing products to their markets – faster. Every day, when people use cell phones, drive a car, undergo a medical test, or listen to music, more than likely they are benefitting from the technological investments and innovative systems and components developed by ETS-Lindgren.



For more than 75 years, wherever signals must be generated or interference regulated, ETS-Lindgren has cut across industries and market sectors to create a track record of success making many aspects of modern life possible. Our products validate and set standards in research, development, production, and service in such industries as:

- Aerospace
- Automotive
- EMC
- Government/Defense
- IT/Telecom
- Medical/Healthcare
- Utilities
- Wireless

We have designed and installed thousands of chambers worldwide and our workforce holds more than 80 patents in shielding, absorber, and related technologies.

As a division of the ESCO Technologies' (NYSE: ESE) portfolio, this worldwide partnership ensures ETS-Lindgren has robust financial backing and resources to invest in operational efficiencies, long-term industry research and development, as well as the best talent in the world.

ETS-Lindgren. Committed to a Smarter, More Connected Future.

CERTIFICATIONS AND ACCREDITATIONS



ACCOMPLISHMENTS

At ETS-Lindgren, our achievements reflect a long history of innovation, engineering excellence, and trusted partnerships that help customers solve complex testing challenges with confidence.

Explore our complete portfolio of products, solutions, and services by following the QR code for a full listing.



**A2LA Accredited
Calibration Laboratory**



Certified Quality
ISO 9001:2015 certified across all
global manufacturing facilities.



Certified Quality
ISO 14001:2015 certified at
Beijing and Tianjin facilities.



Certified Quality
ISO 45001:2018 certified at
Beijing and Tianjin facilities.

PRODUCT QUICK FINDER

	PRODUCT	PAGE
	Absorber	34
	Accessories	52
	Amplifiers	42
	Antennas	38
	Chambers	
	EMC	20
	RF Microwave/Hardware-in-the-Loop (HiL)	24
	Wireless/Over-the-Air (OTA) and APM	22
	Filters	
	HEMP/ EMP	48
	Powerline	46
	Telephone, Communication, Control, and Signal Line	50
	GTEM!™ Test Enclosures	28
	Positioners	36
	Probes, Monitors, and Test Controllers	40
	RF Shielded Doors	32
	RF Shielding	30
	Services	56
	Software	44
	Test Enclosures	26
	Test Systems	
	EMC Chamber and GTEM! Test Environments	8
	OTA, APM, MIMO, and SISO Test Environments	10
	5G mmWave Test Environments	14

TEST SYSTEMS

The world is changing faster than ever. As our planet becomes increasingly dominated by electronics, the importance of our work in test and measurement grows exponentially and in harmony. As the world's largest provider of market-leading test and measurement solutions and equipment, ETS-Lindgren's test systems are the innovative and investigative forces behind some of the biggest names and revolutions in a myriad of industries. Whether ensuring the performance of mobile networks, delivering the cause and effect of electronic interference for government and utilities, or certifying the compliance standards of radiated emissions in today's ever-evolving automotive sector, ETS-Lindgren is your total solutions partner.



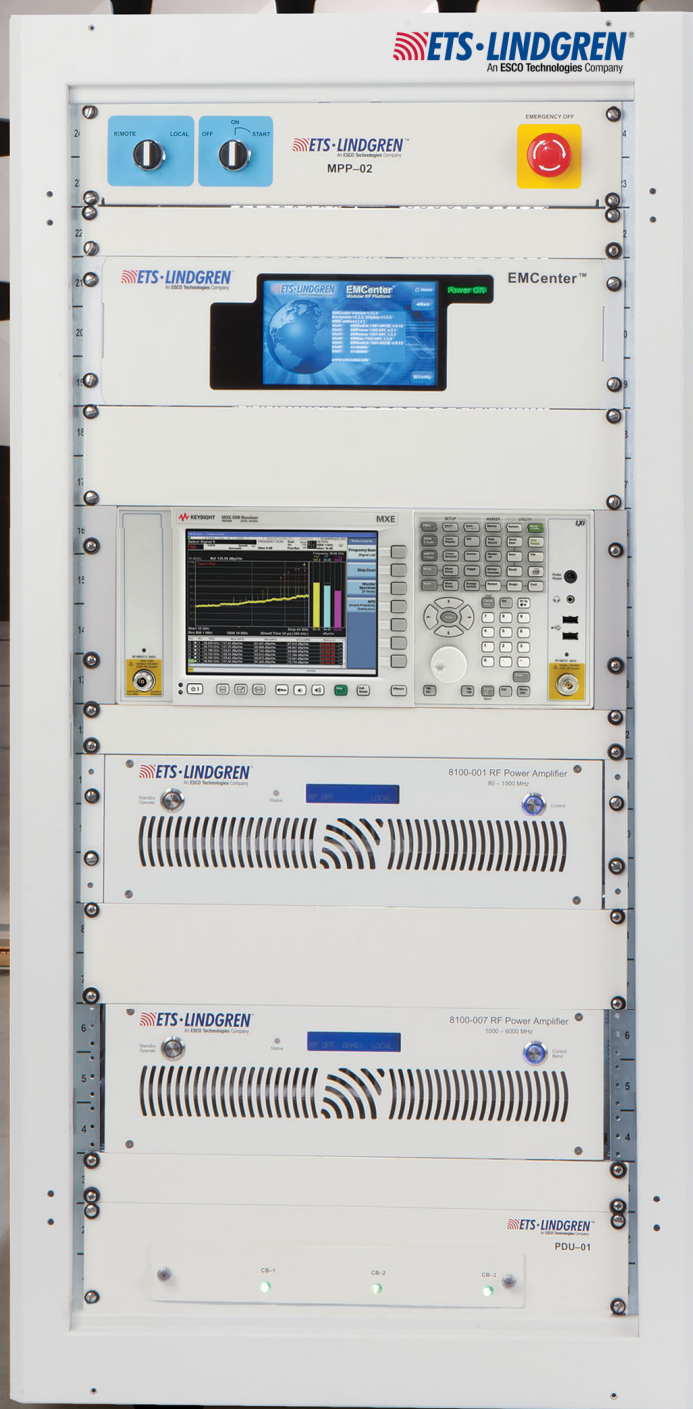
TEST SYSTEMS

<u>ITEM</u>	<u>PAGE</u>
Test Systems	
EMC Chamber and GTEM!	8
OTA, APM, MIMO, and SISO	
Chamber Test Environment	10
OTA, APM, MIMO, and SISO	
Enclosure Test Environment	12
5G mmWave Chamber Test Environment	14
5G mmWave Enclosure Test Environment	16



TEST SYSTEMS: EMC CHAMBERS, GTEM! ENCLOSURES, and EMCenter™

ETS-Lindgren's test systems for EMC chambers and GTEM! test enclosures provide dependable testing to a wide variety of EMC standards and test requirements. Our experts will integrate your test environment, instrumentation, and software to provide you with a reliable test system with repeatable results.

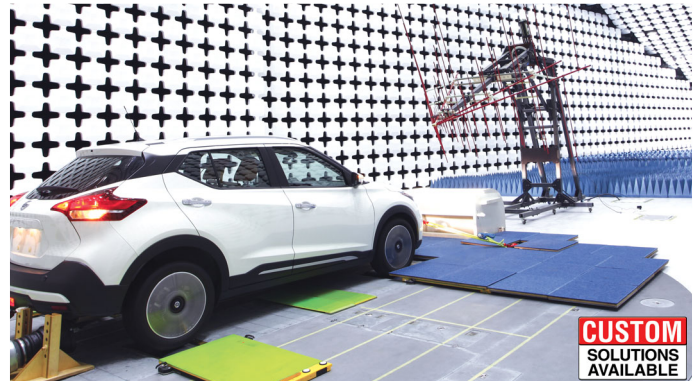


Commercial EMC Chamber Test Systems



Commercial EMC test system integration simplifies testing in anechoic chambers, including management of towers and turntables.

Automotive Chamber Test Systems



Automotive chamber test systems are semi-anechoic chambers with integrated positioners and are designed for compliance with many industry standards.

E-Vehicle and E-Motor Chamber Test Systems



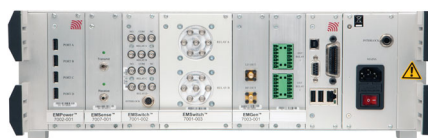
E-Motor and E-Vehicle chamber test systems are integrated systems, designed to meet the emerging requirements for performance validation and compliance testing of E-Motors and E-Vehicles. This includes designs supporting both full vehicle and Electric/Electronic Sub-Assembly (ESA) testing.

GTEM! Test Systems



GTEM! test systems are totally integrated test systems that include TEM and EUT coupling functions.

EMCenter Modular RF Platform

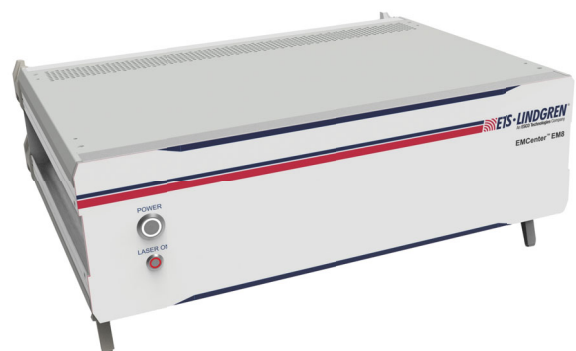


Shown with optional plug-in card modules.



EMCenter is a modular platform with an integrated microcontroller, touch screen control, and a backplane that accepts up to seven plug-in card modules, each one with a specialized RF instrument. Everything is contained in a 3U-high chassis that can be used alone on a desktop, or mounted in a rack.

EMCenter EM8 Field Monitor



ETS-Lindgren's EMCenter EM8 is capable of significantly higher data collection speeds with the ability to store up to eight instrument plug-in cards, which can all be controlled and used simultaneously.

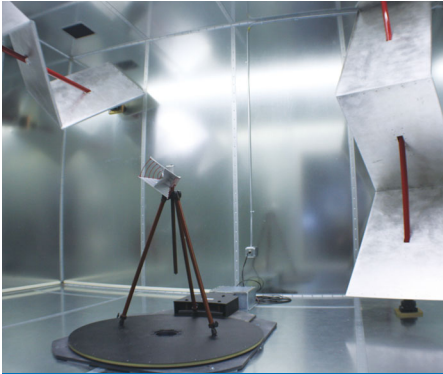


TEST SYSTEMS: OTA, APM, MIMO, and SISO CHAMBERS

ETS-Lindgren's Antenna Measurement Systems (AMS) for Wireless and Over-the-Air (OTA) chambers are designed to provide excellent testing performance with easy integration and use. Available in anechoic or reverberation configurations, our experts will integrate your test environment, instrumentation, and software to provide you with a reliable test system with repeatable results.

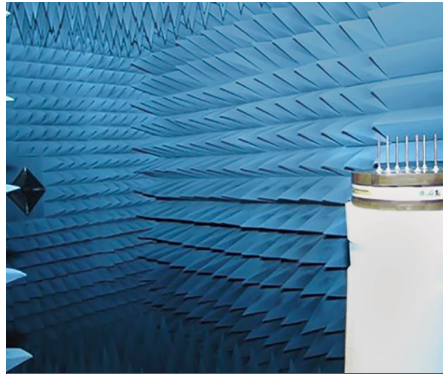


AMS-7200 Reverberation Chamber Wireless Test Systems



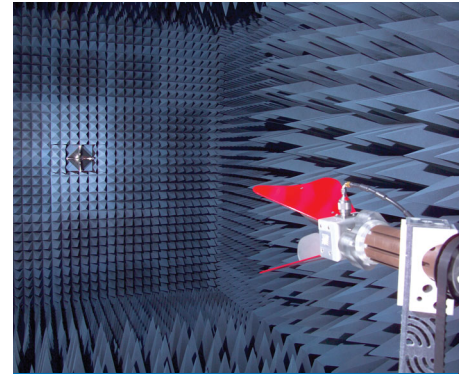
AMS-7200 test systems are designed to perform wireless SISO TRP, TIS as well as MIMO OTA measurements for large form factor devices in a reverberation chamber.

AMS-8100 Anechoic Chamber Wireless Test Systems



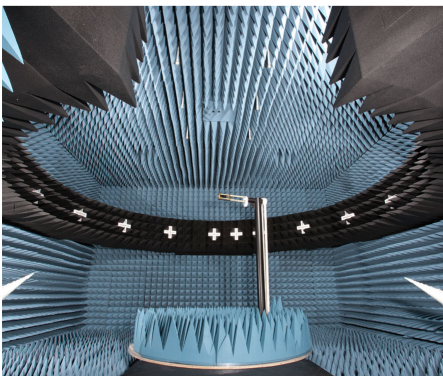
AMS-8100 test systems include a compact, fully anechoic rectangular chamber and are designed for testing general antenna devices.

AMS-8500 Anechoic Chamber Wireless Test Systems



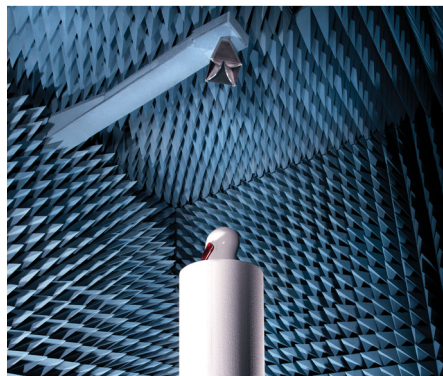
AMS-8500 test systems include a full-sized, fully anechoic rectangular chamber, with a 360° phi/theta Multi-Axis Positioning System (MAPS).

AMS-8700 Anechoic Chamber Wireless Test Systems



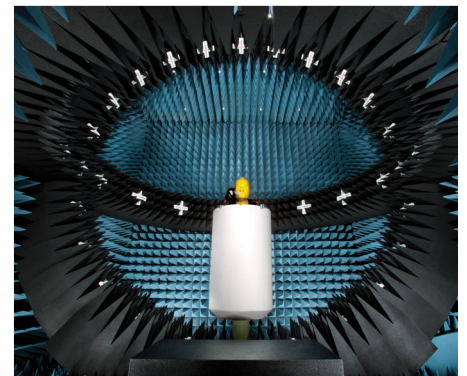
AMS-8700 test systems are fully anechoic chamber test systems for MIMO OTA measurement of wireless devices in a simulated, multi-path environment.

AMS-8800 Anechoic Chamber Wireless Test Systems



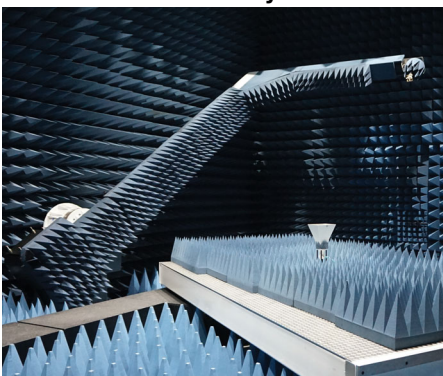
AMS-8800 test systems are fully anechoic rectangular chamber test systems, with a theta rotational arm for spherical scanning of wireless devices.

AMS-8900 Anechoic Chamber Wireless Test Systems



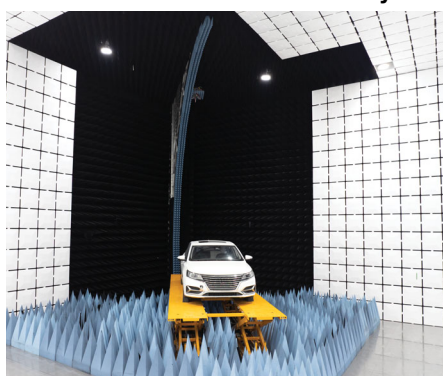
AMS-8900 test systems are a multi-antenna array system in a fully anechoic chamber, designed for high-speed testing of wireless devices. (Above photo shown with MIMO test system option.)

Automotive APM Anechoic Chamber Wireless Test Systems



ETS-Lindgren's Automotive APM test system combines a fully anechoic test chamber with an antenna positioning system to enable testing of full vehicles.

Vehicle Antenna Measurement Arc (VAMA) Anechoic Chamber Wireless Test System



ETS-Lindgren's VAMA test system allows customers to collect data through near-field measurements in a more compact chamber.



TEST SYSTEMS: OTA, APM, MIMO, AND SISO TEST ENCLOSURES

ETS-Lindgren's portable Antenna Measurement Systems (AMS) are designed for ease-of-installation and ease-of-use. These systems are self-contained units that can easily be moved around and between your test labs as required. Our experts will integrate your test environment, instrumentation, and software to provide you with a reliable test system with repeatable results.



AMS-7000 Reverberation Portable Wireless Test Enclosure Test Systems



The AMS-7000 is a Wireless OTA Reverb Antenna Measurement System designed to perform accurate and repeatable SISO and MIMO TRP and TIS measurement. This test enclosure uses two z-fold tuners, a DUT turntable, and a measurement antenna turret to improve isotropicity and homogeneity.

AMS-8040 Reverberation Portable Wireless Test Enclosure Test Systems



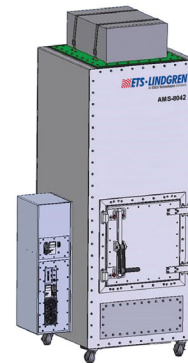
The Model AMS-8040 Antenna Measurement System is a self-contained enclosure for performing OTA testing of wireless devices in free space. Measurements supported include pre-certification, design verification, production sample, desensitization, and regression testing.

AMS-8041 Anechoic Portable Wireless Test Enclosure Test Systems



The AMS-8041 Antenna Measurement System is a self-contained enclosure for evaluating wireless device OTA performance. Similar to the AMS-8040 in size, the AMS-8041 adds an RF path to the DUT that provides for passive antenna pattern testing in addition to active OTA measurements.

AMS-8042 Anechoic Portable Wireless Test Enclosure Test Systems



The AMS-8042 Antenna Measurement System supports short-range length OTA testing of automotive RADAR modules and other wireless and mmWave components in a production or R&D environment.

AMS-8050 Anechoic Portable Wireless Test Enclosure Test Systems



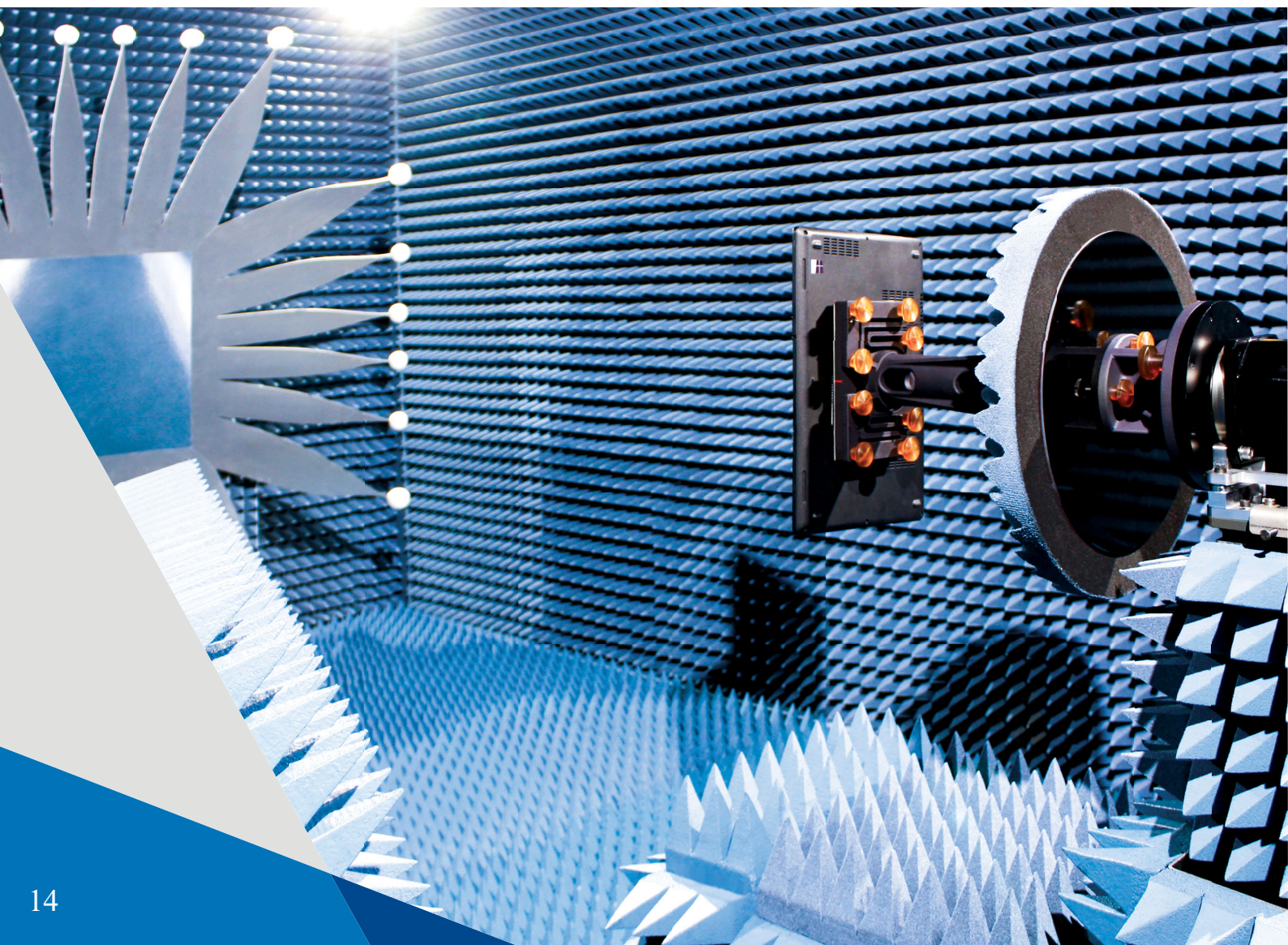
The AMS-8050 Antenna Measurement System utilizes a freestanding reach-in cart configuration that is on casters. Its split-shell design allows a roll-in-place installation through standard doorways and hallways, as well as portability for sharing among labs and work areas.



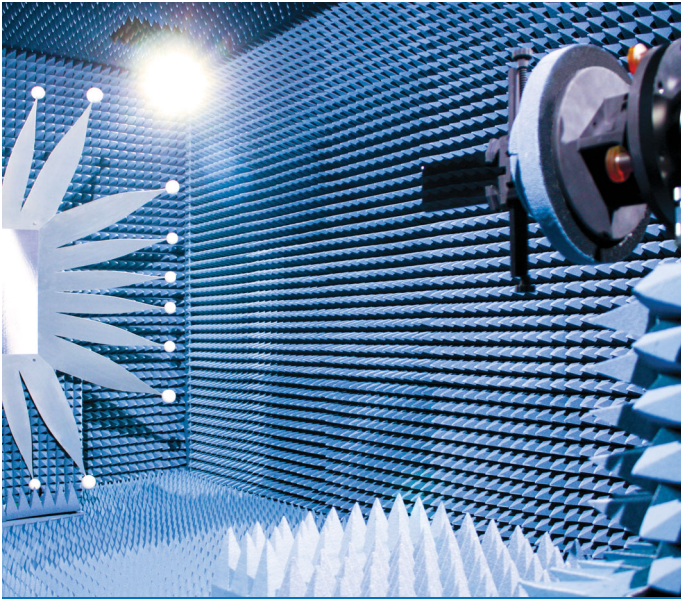
TEST SYSTEMS: 5G mmWAVE CHAMBERS

ETS-Lindgren's AMS-5700 series supports mmWave active and passive antenna pattern measurements. The models in this series cover a vast spectrum of quiet-zone sizes, frequency ranges, and scanning methods. Large quiet zones are accomplished by utilizing a compact antenna test range (CATR) design using a wave-shaping reflector. Combined-axis designs that move the device under test (DUT) in azimuth and elevation provide highly flexible measurement antenna options, such as variable range length and easy swapping of the antenna to cover wide frequency ranges. Bulky and heavy devices can be best handled by distributed-axis systems where the DUT must only be azimuth-rotated while the measurement antenna moves to scan the elevation axis. ETS-Lindgren provides several models in this series, each optimized to cover particular test variables.

As wireless technology evolves, ETS-Lindgren is actively developing FR3 and 6G test solutions to support the next generation of wireless innovation. The flexible architecture of the AMS-5700 series is designed to scale, with many existing configurations uniquely positioned to adapt and support emerging FR3 and sub-THz testing requirements.

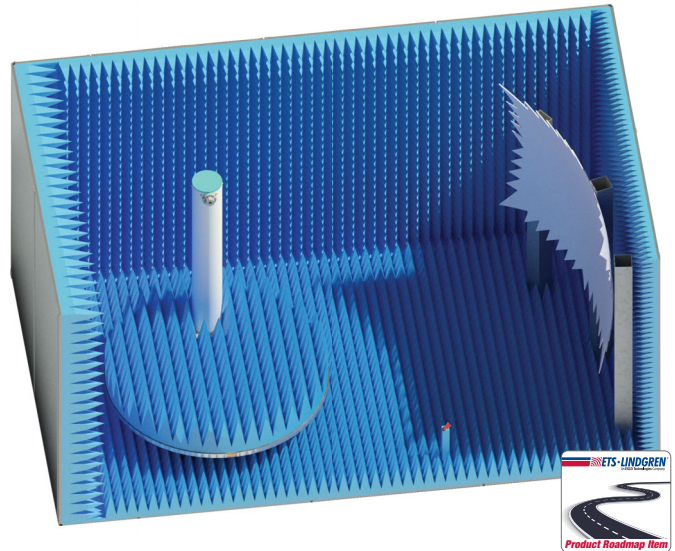


AMS-5703 Anechoic Chamber 5G mmWave Test Systems



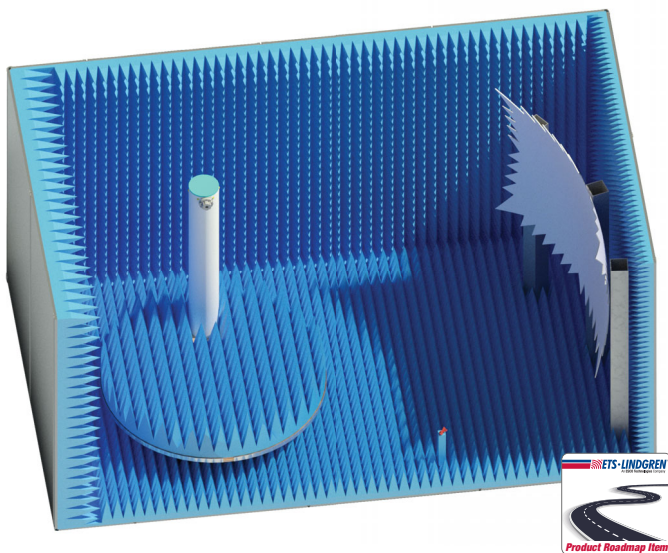
ETS-Lindgren's AMS-5703 is our most popular compact antenna test range (CATR) thanks to its 60 cm QZ and heavy-duty positioning system. This chamber is a favored do-it-all system that handles everything from smart phones to gNodeB base stations comfortably within the QZ.

AMS-5707 Anechoic Chamber 5G mmWave Test Systems



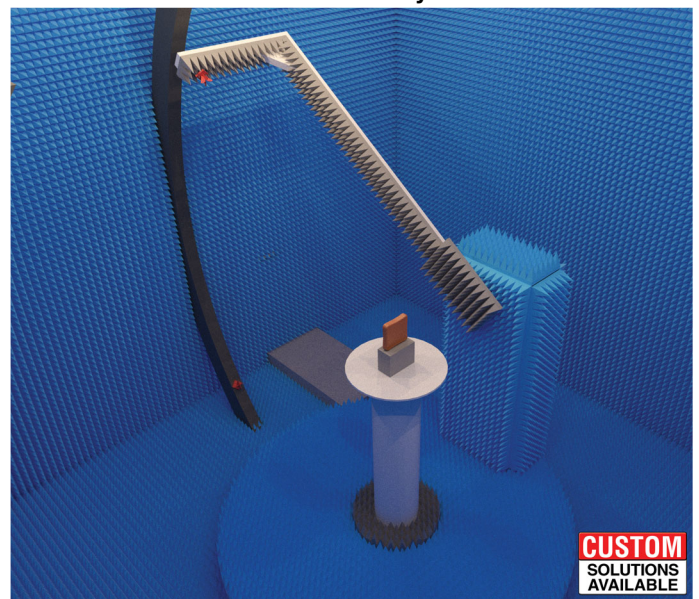
ETS-Lindgren's AMS-5707 is a walk-in indirect far-field CATR with a 100 cm QZ. This chamber can be configured for various measurement frequency ranges specific to the transceiver and antenna system under test. The CATR features a heavy-duty DUT positioner with 100 kg (220 lb) weight handling.

AMS-5708 Anechoic Chamber 5G mmWave Test Systems



ETS-Lindgren's AMS-5708 is a walk-in indirect far-field CATR with a 150 cm QZ. The chamber can be configured for various measurement frequency ranges specific to the transceiver and antenna system under test. The CATR features a heavy-duty DUT positioner with 100 kg (220 lb) weight handling.

Custom Anechoic Chamber 5G mmWave Test Systems

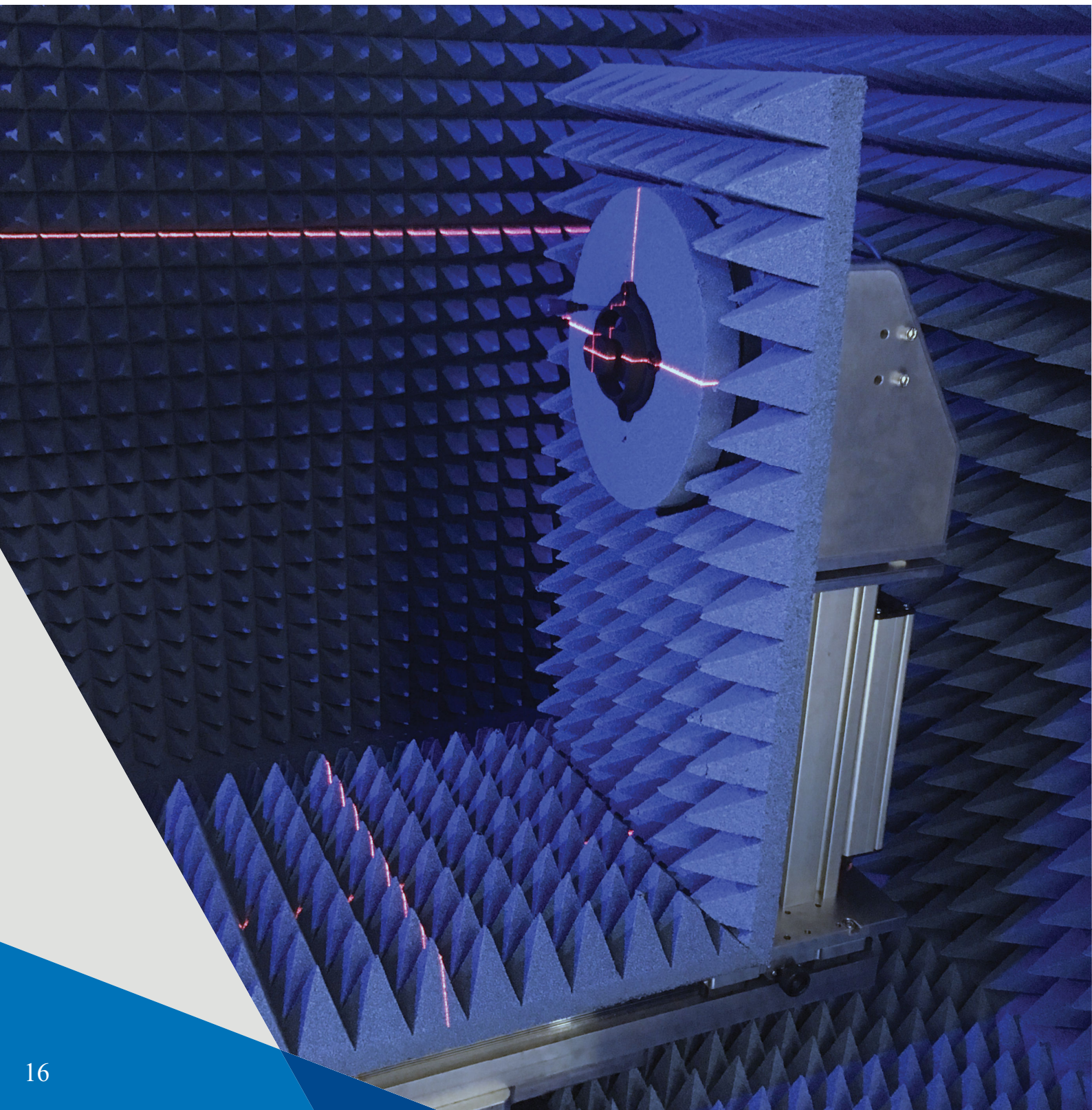


While the AMS-5700 models cover a high percentage of 5G test requirements, custom systems are a specialty of ETS-Lindgren. Our engineers love a challenge, so if our existing models don't quite cover your requirements, we excel at creating Custom Solutions and adaptations that will.



TEST SYSTEMS: 5G mmWAVE TEST ENCLOSURES

ETS-Lindgren's Antenna Measurement Systems (AMS) for Wireless and Over-the-Air (OTA) chambers are designed to provide excellent testing performance with easy integration and use. Opt for either anechoic or reverberation configurations, and our expert team will seamlessly integrate your test environment, instrumentation, and software. The result is a dependable test system that consistently produces repeatable results.



AMS-5700 Anechoic Portable 5G mmWave Test Enclosure Test Systems



The AMS-5700 is a compact 2D antenna performance measurement system that offers versatility in application and frequency range. It can be moved by cart for easy resource sharing.

AMS-5701 Anechoic Portable 5G mmWave Test Enclosure Test Systems



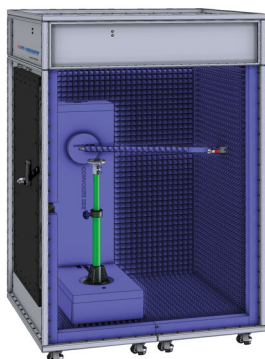
The AMS-5701 is a distributed-axis spherical-pattern antenna measurement system with a highly flexible application and frequency range. Passive and active antenna pattern tests are supported.

AMS-5702 Anechoic Portable 5G mmWave Test Enclosure Test Systems



The AMS-5702 is a combined-axis far-field measurement test system that provides 3D radiated performance measurements of 5G mmWave wireless devices.

AMS-5704 Anechoic Portable WiGig Test Enclosure Test Systems



The AMS-5704 is a distributed-axis spherical-pattern measurement system targeting the WiGig frequency range. Passive and active antenna pattern tests on WiGig (802.11ay and 802.11ad) devices are supported.

AMS-5705 Anechoic Portable 5G mmWave Test Enclosure Test Systems



The AMS-5705 is an indirect far-field compact antenna test range (CATR) system with a 30 cm QZ. The system meets 3GPP and CTIA quality-of-quiet-zone and phase-validation requirements for 5G NR bands n257 to n262.

AMS-5706 Anechoic Portable 5G mmWave Test Enclosure Test Systems



The AMS-5706 is a reach-in indirect far-field compact antenna test range (CATR) with a 45 cm QZ. This system is a unique approach that slots between a built-in-place chamber and a portable chamber.

AMS-5709 Anechoic Portable 5G mmWave Test Enclosure Test Systems



The AMS-5709 is a 5G FR2 MIMO transceiver performance validation system for CTIA test methods. It houses a measurement antenna array cluster, multi-axis 3D device positioner, and laser-alignment tool to accurately position the device.

PRODUCTS AND ACCESSORIES

For more than 75 years, ETS-Lindgren has designed and manufactured high-performance products and accessories for test and measurement applications. Our comprehensive portfolio includes chambers, absorbers, antennas, positioning systems, filters, RF power amplifiers, software, and laboratory accessories that support EMC, wireless, RF/microwave, aerospace, automotive, healthcare, and defense applications. Engineered for precision, reliability, and long-term performance, our solutions help customers improve measurement accuracy, increase laboratory efficiency, and address evolving industry standards with confidence. Backed by decades of engineering expertise and a commitment to continuous innovation, ETS-Lindgren delivers integrated solutions that enable customers around the world to test, measure, and innovate with confidence.



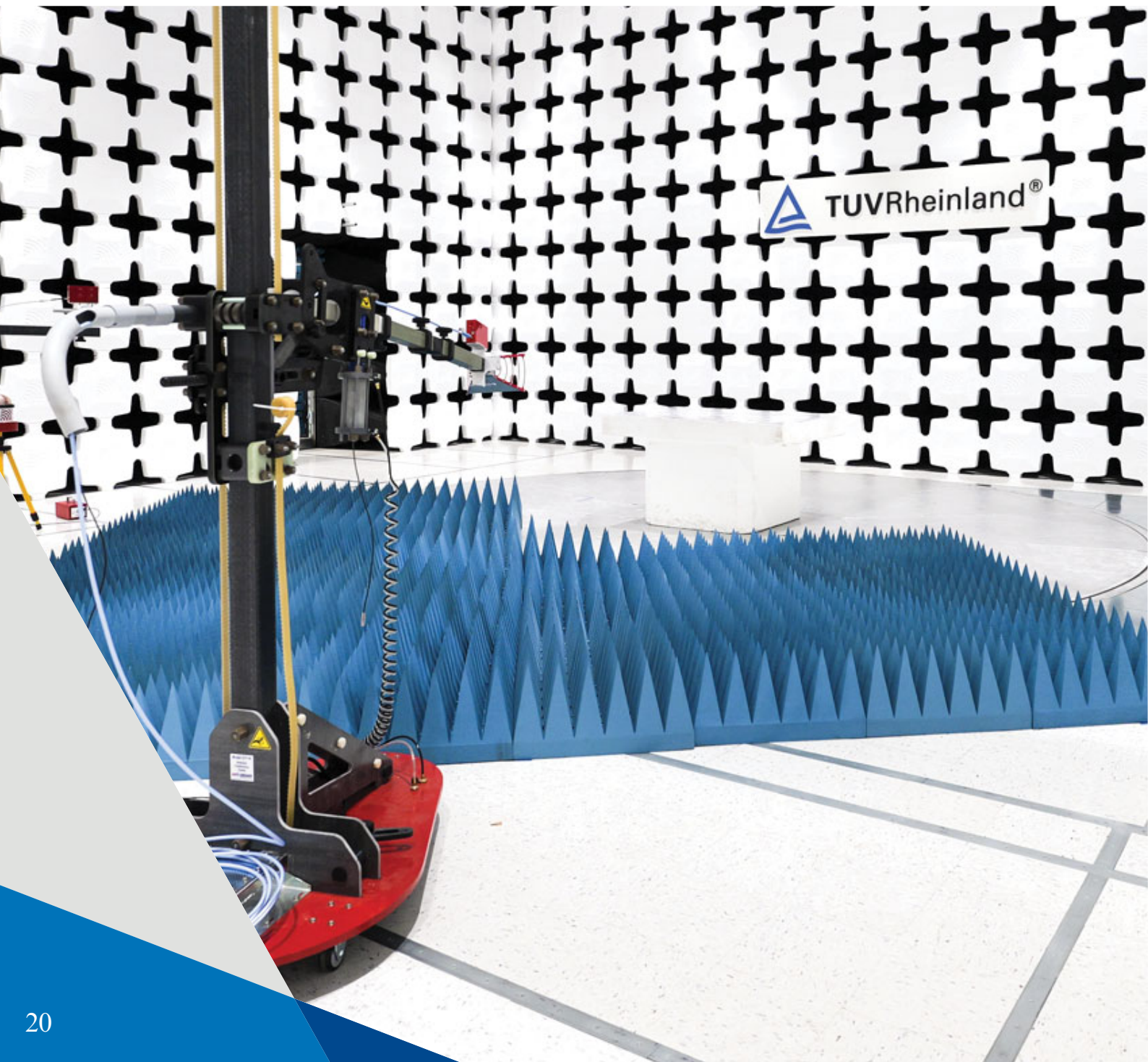
PRODUCTS AND ACCESSORIES

<u>ITEM</u>	<u>PAGE</u>
Chambers	
EMC	<u>20</u>
Wireless/Over-the-Air (OTA) and APM	<u>22</u>
RF Microwave/Hardware-in-the-Loop (HiL)	<u>24</u>
Test Enclosures	<u>26</u>
GTEM! Test Enclosures	<u>28</u>
RF Shielding	<u>30</u>
RF Shielded Doors	<u>32</u>
Absorber	<u>34</u>
Positioners	<u>36</u>
Antennas	<u>38</u>
Probes and Monitors	<u>40</u>
Amplifiers	<u>42</u>
Software	<u>44</u>
Filters	
Powerline	<u>46</u>
HEMP/EMP	<u>48</u>
Telephone, Communication, Control, and Signal Line ..	<u>50</u>
Accessories	<u>52</u>

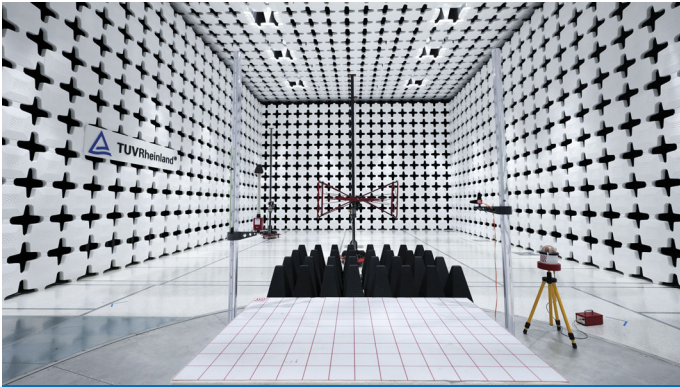


CHAMBERS: EMC

For decades, ETS-Lindgren's EMC chambers have provided the foundation for accurate, reliable electromagnetic compatibility testing worldwide. Available in anechoic, semi-anechoic, reverberation, and custom configurations, our chambers are engineered to meet a wide range of compliance, certification, and research requirements. Complementing every chamber is a comprehensive portfolio of absorbers, instrumentation, positioning systems, software, and services—providing complete, integrated test solutions from a single trusted source.

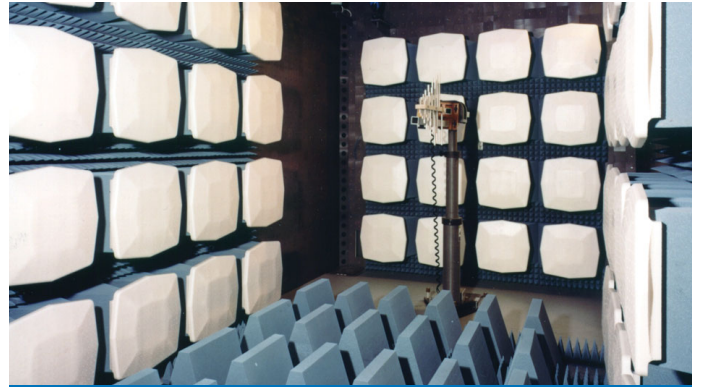


FACT™ EMC Chamber Series



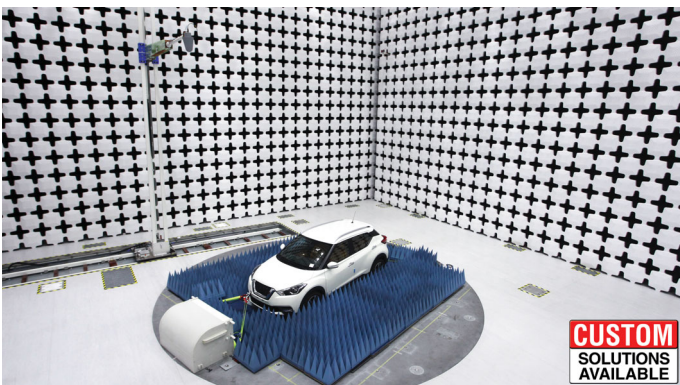
Free-Space Anechoic Chamber Test (FACT) site EMC chambers are semi- or fully anechoic chambers that provide an EMC test environment, ideal for most international commercial EMC test requirements. FACT chambers are available in 3-meter, 5-meter, and 10-meter sizes.

SpaceSaver™ EMC Chamber Series



SpaceSaver EMC chambers are small and compact semi- or fully anechoic chambers for pre-compliant emission measurements and fully compliant immunity testing.

Automotive EMC Chamber Series



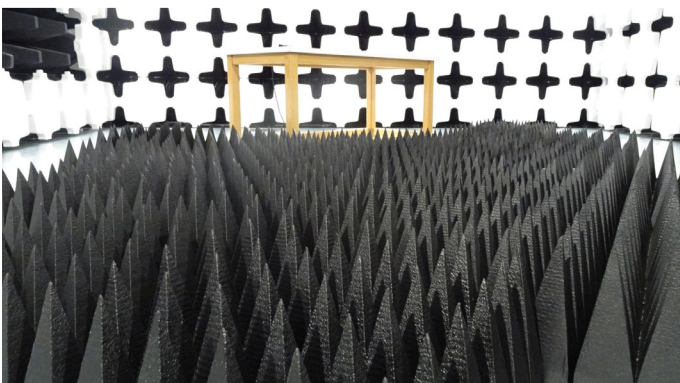
Automotive chambers are a specialized version of our FACT series of semi-anechoic chambers, designed for full vehicle testing. Please see page 9 for test system information.

E-Motor and E-Vehicle EMC Chamber Series



ETS-Lindgren's E-Motor and E-Vehicle chambers are semi-anechoic chambers designed to meet the emerging requirements for performance validation and compliance testing of E-Motors and E-Vehicles. Please see page 9 for test system information.

MIL-STD EMC Chambers



MIL-STD chambers are designed to test in compliance with a variety of standards, including MIL-STD 461 and DO-160.

SMART™ Series Reverb EMC Chambers



Statistical Mode Averaging Reverberation Test Site (SMART) series of EMC chambers are reverberation chambers designed for creating an electromagnetic environment (EME) for immunity testing. High speed options available.

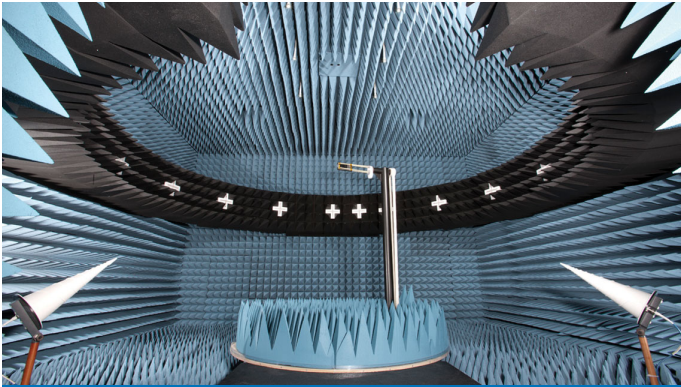


CHAMBERS: WIRELESS OTA AND APM

ETS-Lindgren is a recognized leader in Wireless Over-the-Air (OTA) and Antenna Pattern Measurement (APM) test solutions. Our comprehensive portfolio includes fully anechoic, compact range, reverberation, and custom test chambers engineered to support accurate, repeatable measurements for wireless, aerospace, defense, automotive, and emerging communications applications. Complementing every chamber is a complete range of antennas, positioners, absorbers, software, instrumentation, and services—providing fully integrated test solutions from a single trusted source.

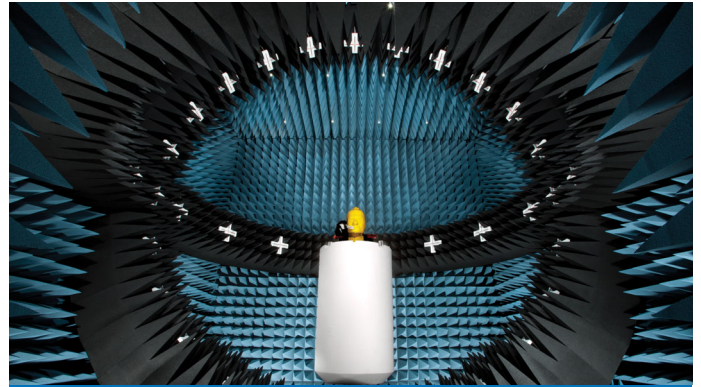


MIMO OTA Measurement Chamber Series



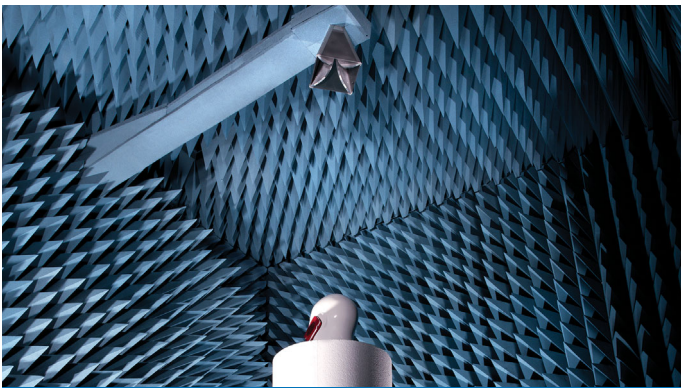
MIMO OTA chambers are ideal for measurement of wireless devices in a fully anechoic, simulated multi-path environment. Please see page 11 for test system information.

Multi-Antenna Array Measurement Chamber Series



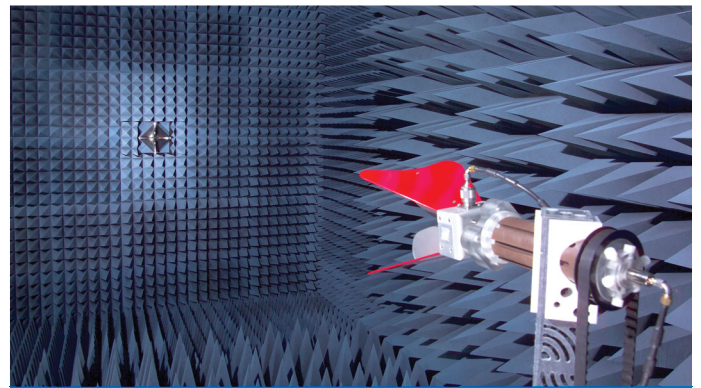
Multi-Antenna Array chambers provide high speed testing of wireless devices in a fully anechoic test environment. Please see page 11 for test system information.

Spherical Scanning Measurement Chamber Series



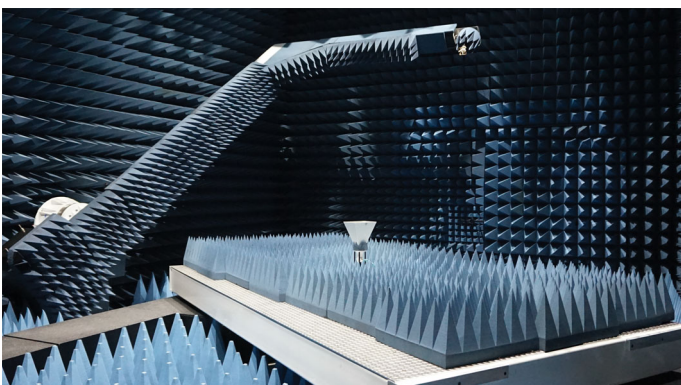
Spherical scanning measurement chambers are fully anechoic rectangular chambers with a theta rotational arm for spherical scanning of wireless devices. Please see page 11 for test system information.

Antenna Pattern Measurement Chamber Series



Antenna Pattern Measurement (APM) chambers are fully anechoic chambers in either a rectangular or tapered chamber configuration, with a 360° phi/theta Multi-Axis Positioning System (MAPS). Please see page 11 for test system information.

Automotive Antenna Pattern Measurement Chamber Series



Automotive Antenna Pattern Measurement (APM) chambers are designed for testing full vehicles in a fully anechoic environment. Please see page 11 for test system information.



CHAMBERS: RF MICROWAVE

ETS-Lindgren designs and manufactures RF/microwave test chambers for demanding commercial, aerospace, defense, and research applications. From engineering and fabrication to installation and integration, we deliver chamber solutions tailored to your requirements. A complete portfolio of absorbers, antennas, positioners, instrumentation, software, and services creates fully integrated RF/microwave test environments.

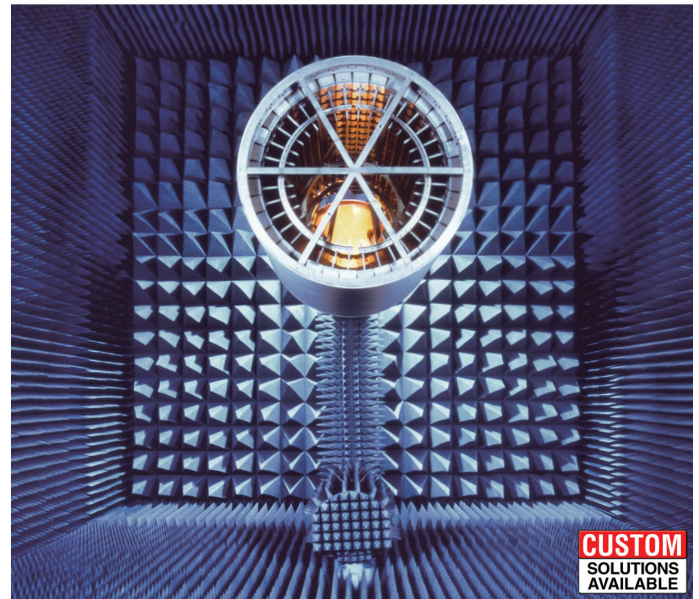


Full Aircraft RF Microwave Chamber Series



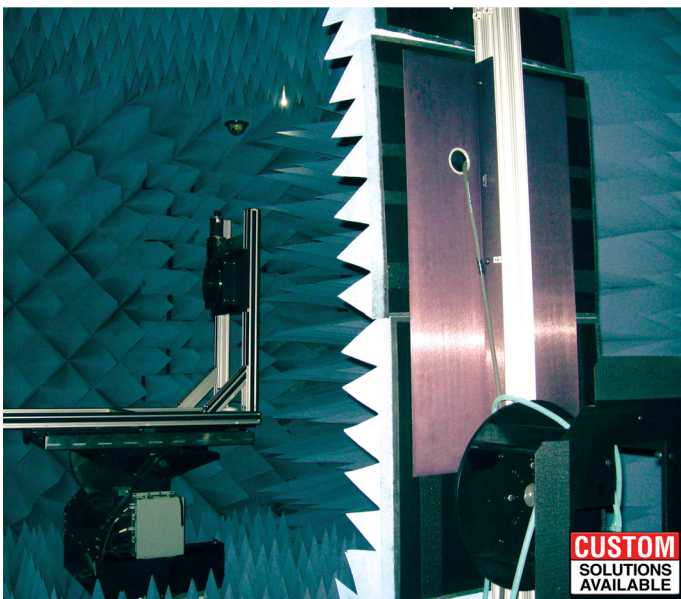
Full aircraft chambers are capable of testing full aircraft in a semi-anechoic or fully anechoic test environment. Optional components such as positioning systems and antenna systems are available. Please contact ETS-Lindgren for details.

Satellite and Hardware-in-the-Loop Chamber Series



Satellite chambers are designed for performance testing of satellites in a fully anechoic test environment. Our Hardware-in-the-Loop (HiL) chambers have been designed for testing the functionality of the device in a fully anechoic test environment.

Near-Field Microwave Chamber Series



Near-Field microwave chambers are fully anechoic and designed for the housing of near-field scanners used in the measurement of electrically large antennas.

RCS and Antenna Compact Ranges



Radar cross-section (RCS) and antenna compact ranges utilize anechoic material layouts specifically designed to integrate reflectors for radar and large antenna measurements.



TEST ENCLOSURES

ETS-Lindgren designs and manufactures test enclosures with a deep understanding of every system component and the scientific principles behind their performance. This integrated approach delivers optimized performance across a wide range of standard and custom enclosure configurations.



Bench-top Test Enclosures



Bench-top test enclosures offer a general RF test system for small- to medium-sized DUTs in an upright, bench-top configuration. Some models can be customized with filter and feedthrough options.

Copper Bench-top Test Enclosures



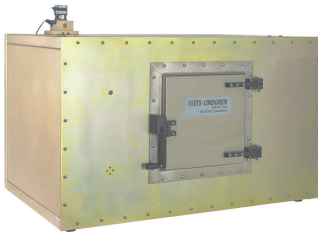
Copper bench-top test enclosures offer high performance with copper shielding, designed for fast, convenient EMI/RFI testing and verification.

Portable Test Enclosures



These self-contained, portable test enclosures are designed for testing wireless devices in a development, production, and/or quality assurance environment. Tabletop and rack mount configurations are available.

Portable Test Enclosures



Mini-Reverb test enclosures provide a convenient and affordable reverberation test environment for product design and development applications.

5G Test Enclosures



5G test enclosures are capable of making single axis passive antenna performance measurements for 5G/mmW antennas with or without antenna feed ports. Please see page 17 for test system information.

Compact Shielded Test Enclosures



Compact shielded test enclosures are portable options for making design verification, pre-certification, and production line measurements. Please see page 13 for test system information.

Antenna Measurement Test Enclosures

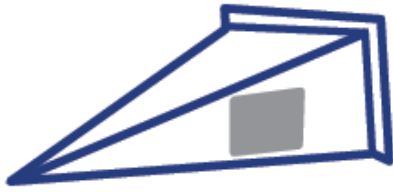


Antenna measurement test enclosures are fully anechoic, RF test enclosures ideal for antenna pattern measurements. Please see page 13 for test system information.

Shielded Rack Enclosures (SREs)



ETS-Lindgren's SREs protect rack-mounted equipment from RF signals transmitted by external sources, while containing any RF noise created by the instrumentation within the enclosure.



GTEM!

ETS-Lindgren's Gigahertz Transverse Electromagnetic Mode (GTEM!) Test Enclosures provide a fast, efficient solution for emissions and radiated immunity testing, reducing test time compared to Open Area Test Sites (OATS) and many anechoic chamber applications. As the originator of GTEM! technology, ETS-Lindgren continues to set the industry standard with the proven performance and worldwide acceptance of the original GTEM! Test Enclosure.



Model 5402 GTEM! Test Enclosures



Model 5402 GTEM! test enclosures are compact, bench-top, portable test enclosures designed to test smaller DUTs in a portable test environment. Please see page 9 for test system information.

Model 5405 GTEM! Test Enclosures



Model 5405 GTEM! test enclosures are designed for testing small- to medium-sized DUTs. Please see page 9 for test system information.

Model 5407 GTEM! Test Enclosures



Model 5407 GTEM! test enclosures are designed to test medium to large DUTs. Please see page 9 for test system information.

Model 5411 GTEM! Test Enclosures



Model 5411 GTEM! test enclosures are designed for testing large DUTs. Please see page 9 for test system information.



RF SHIELDING

ETS-Lindgren is the proven leader in shielding, with thousands of shielded enclosures installed worldwide. We provide solutions for challenging environments including test and measurement, industrial, government, and medical. All shielding products displaying the Red Edge™ logo are certified to provide the highest protection level possible for EMP and IEMI applications.

For RF shielded doors, please see page 32.



Series 71 Screen RF Shielded Rooms



Series 71 screen rooms provide the benefit of RF shielding in a “hear-through, see-through” testing environment.

Series 81 Shielded Rooms/ Government Shielded Rooms



Series 81 shielded rooms/government shielded rooms are modular steel enclosures, offering high performance shielding for the best attenuation of magnetic and electric fields, as well as plane waves.

Series 101 Pan-Type Shielded Rooms



Series 101 shielded rooms are pan-type modular steel enclosures, offering high performance shielding for the best attenuation of magnetic and electric fields, as well as plane waves.

Welded Shielded Rooms



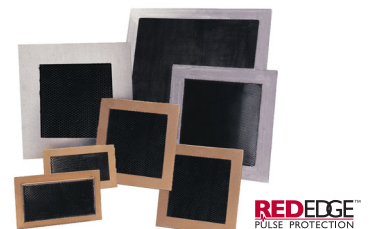
Welded rooms utilize welded construction for the most reliable and highest performance available.

Red Edge Series EMP Shielding



Red Edge series EMP shielding provides Pulse Protected System (PPS) protection against EMP events.

EMI/RFI Shielded Waveguide Air Vents



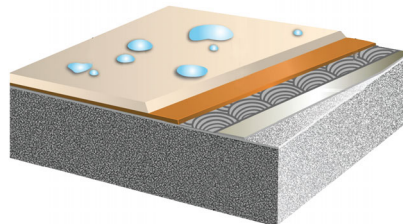
Shielded waveguide air vents improve airflow and maintain RF shielding effectiveness in industrial and government test environments.

Waveguide Filters (Fiber Optic) and Feedthroughs (Pipe Penetrations)



Both waveguide filters and feedthroughs provide a means of bringing fiber optic cables, and signal lines into a shielded room while maintaining the room's RF shield integrity.

RF Shielded Flooring

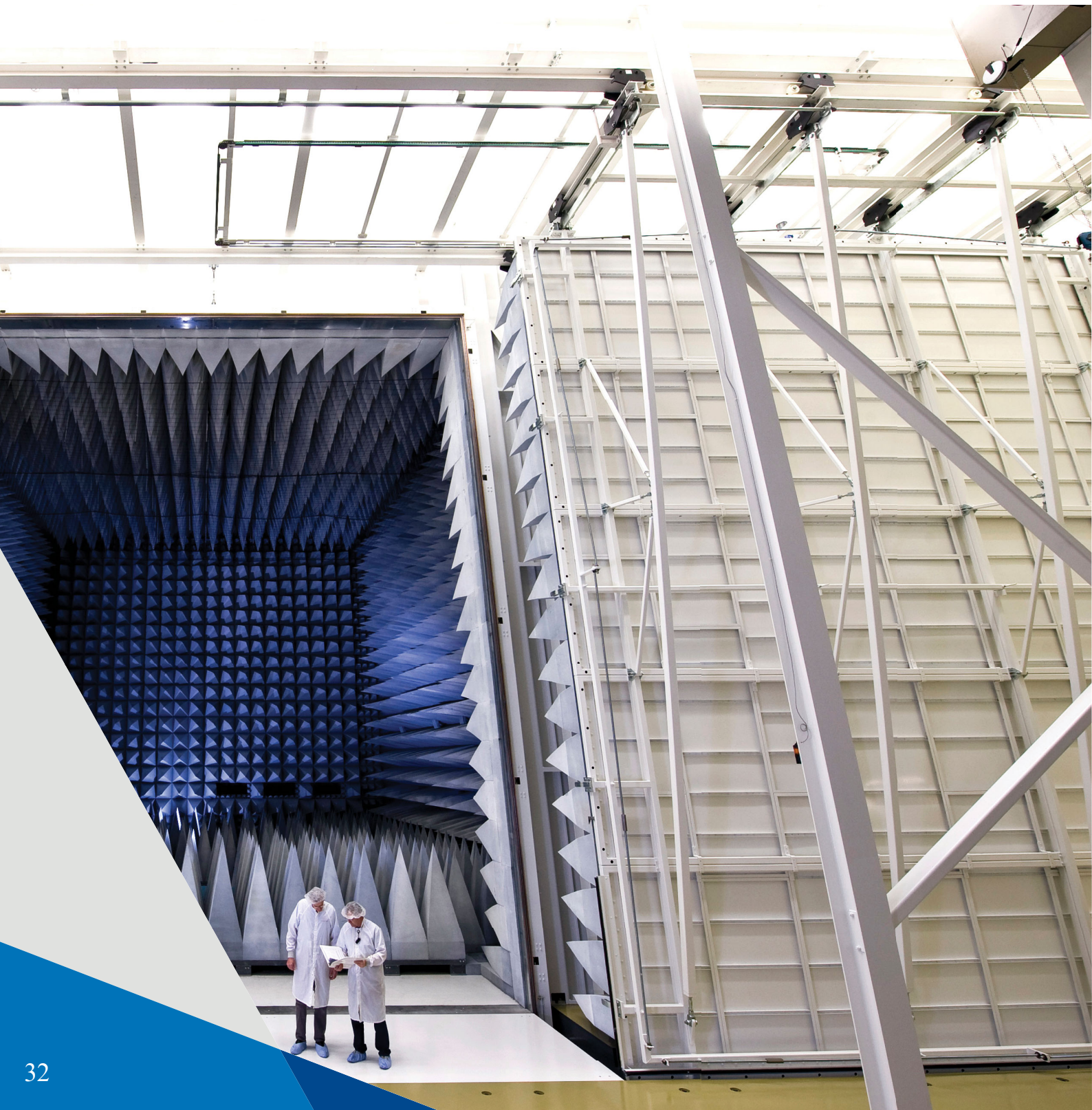


RF shielded floors are available in both monolithic and modular cell-type, providing an ideal foundation for all RF shielded rooms.



RF SHIELDED DOORS

ETS-Lindgren is the leading manufacturer of RF shielded doors for the test and measurement, industrial shield, and medical markets. Automatic and manual swing and sliding doors are available in standard configurations. Should you require a customized door solution, please contact your ETS-Lindgren representative for assistance. So, whether it's a single personnel door or a door large enough to accommodate aircraft, ETS-Lindgren has the ideal door solution for your project.



EVO™ Manual Door



EVO Manual Door is designed to provide reliable, low maintenance service for use in a rigorous environment.

EVO™ Air Door



EVO Air Doors offers revolutionary, leading-edge shielded technology in a lightweight, mechanically operated, high performance shielded door.

Single Knife Edge Shielded Swing Door



The Single Knife Edge door's design offers superior reliability, performance and longevity.

Double Knife Edge Shielded Swing Door



The Double Knife Edge door's durable design makes it ideal for frequent use environments.

RFD-60 Shielded Swing Door



RFD-60 doors are high performing swing doors with internal-type recessed hardware and special hinges.

RFD-100 Shielded Swing Door



RFD-100 doors are high performing swing doors that are easy to open/close due to their bearing mechanism design.

RFD-F/A-100 Shielded Swing Door



The RFD-F/A-100 swing door performs up to 40 GHz and can accept an additional load of ferrites and short absorbers.

RFD-AWD Shielded Swing Door



The RFD-AWD provides an all-weather RF door designed for high performance and ease of operation.

Auto-Latching Shielded Swing Door System



Auto-Latching shielded door system maintains a high level of RF shielding effectiveness with auto-latching convenience.

PHD Pneumatic Shielded Hinged Door



PHD doors are pneumatically operated, RF shielded hinged doors suitable for RF shielded chambers and rooms.

SRFSD-100 Shielded Sliding Door



SRFSD-100 shielded doors are designed for chambers and rooms where a very large opening is required.

RFSD-100 Shielded Sliding Door



RFSD-100 doors provide shielding performance up to 40 GHz and can be equipped with ferrite/pyramidal absorber for anechoic chamber requirements.

SSD Shielded Sliding Door



SSD doors are ideal when the maximum door opening is required, but limited space prevents a swing door from being used.



ABSORBER

ETS-Lindgren has an extensive absorber product line, with solutions for EMC and RF microwave applications. Workstations running advanced numerical modeling software are used to develop our absorber products, which are then prototyped and tested to validate predicted results. Along with our standard absorber, ETS-Lindgren has the ability to create customized absorbers with special formulations and physical geometries to meet unique requirements.



DuraSorb™ DSH Series EMC Absorber



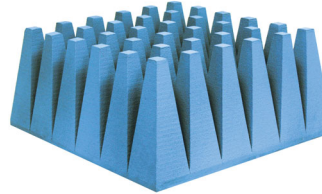
DuraSorb EMC absorber is a hybrid polystyrene anechoic absorber, combining broadband performance with rigid, closed cell construction.

DuraSorb™ DSM Absorber



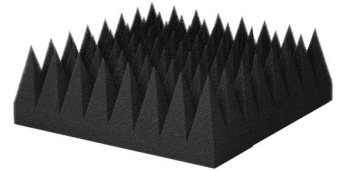
This advanced absorber combines the benefits of volumetrically loaded polystyrene technology with high-performance capabilities, making it ideal for a wide range of testing environments.

FerroSorb™ FS Series EMC Absorber



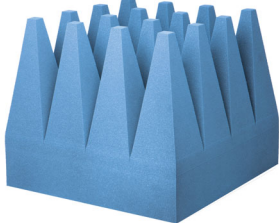
FerroSorb FS series EMC absorber combines a high performance carbon-loaded foam absorber with precision-manufactured ferrite tile.

Filter Foam Microwave Absorber



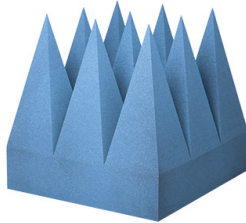
Filter foam is a medium power microwave absorber available in pyramidal and wedge-type cuts.

PCL Series EMC Absorber



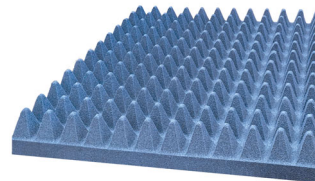
PCL series EMC absorber is an ultra-broadband absorber and is optimized for MIL-STD-461 applications.

EHP Pyramidal Series Microwave Absorber



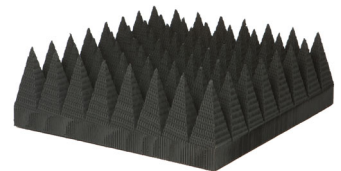
EHP pyramidal microwave absorber is designed for use over a wide frequency range and is suitable for several test applications.

Convex™ Series Microwave Absorber



Convex microwave absorber has a convoluted front surface, creating a gradual transition from free-space to loaded substrate.

HP Series Microwave Absorber



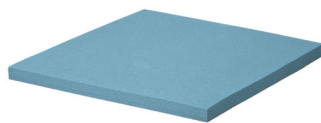
HP series microwave absorber is a high power, low flammability absorber that is ideal for high vacuum applications.

Wedge Cut Microwave Absorber



Wedge cut microwave absorber is ideal to use where pyramidal absorbers would generate too much backscatter.

Flat Laminate Microwave Absorber



Flat laminate absorber provides moderate performance and is flexible and easy-to-cut for placement around positioners, near-field scanners, etc.

Walkway Microwave Absorber



Walkway microwave absorber provides a walking surface for personnel and is compatible with anechoic chamber reflection requirements.

Precision Machined Ferrite Tile



Ferrite tile is a high performing, precision machined tile with a tuned dielectric backing layer.

FlexSorb™ Flexible Absorber

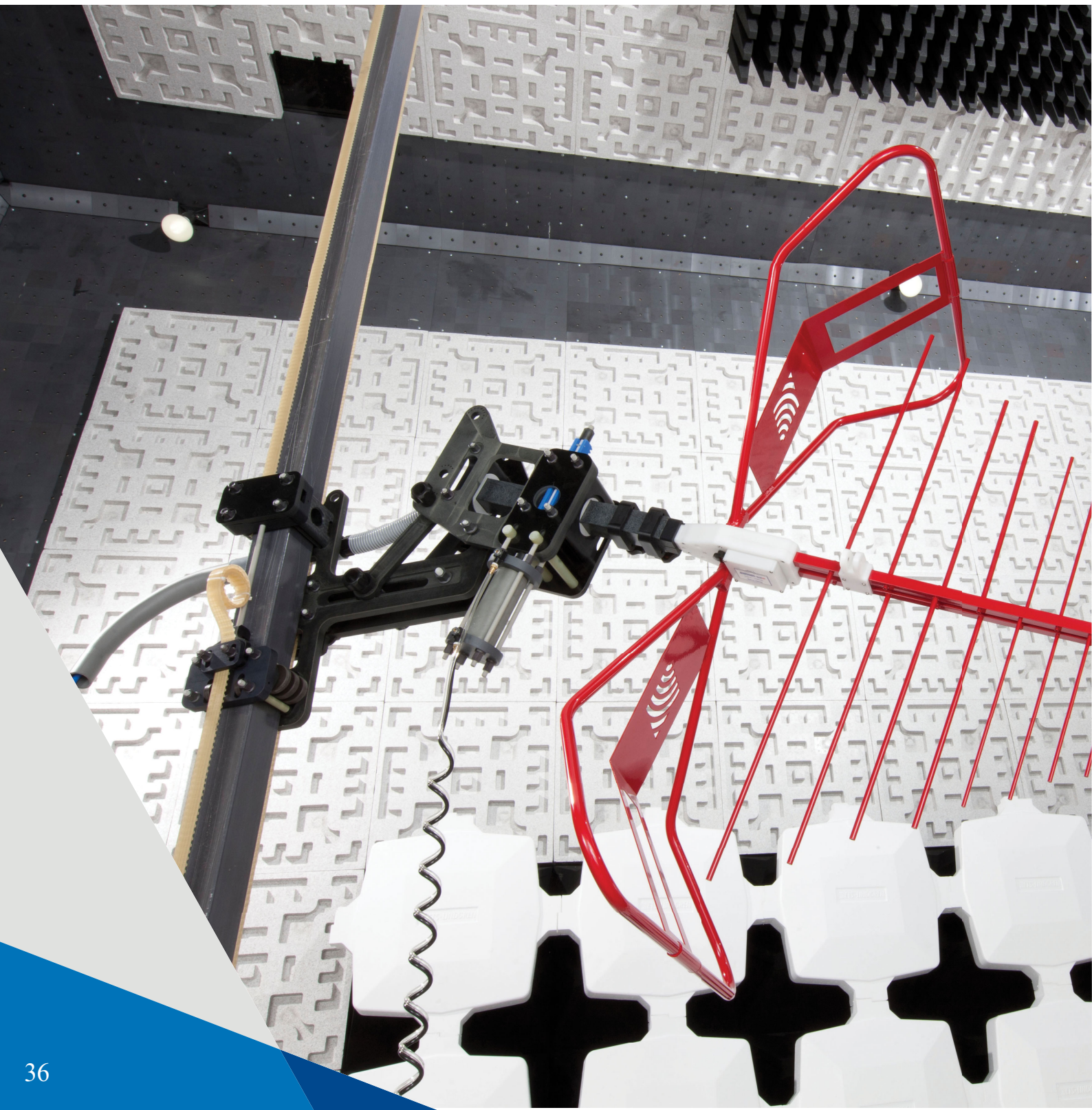


FlexSorb allows for increased flexibility without impacting reflective performance, power handling, or fire retardant properties.



POSITIONERS

ETS-Lindgren has long been a leader in precision positioning systems for EMC measurement applications. Building on our pioneering development of the first commercially available antenna towers and turntables for EMC testing, we now offer a comprehensive portfolio of positioning solutions for EMC, antenna pattern measurement, and wireless testing applications.



Boresight Antenna Tower



The Model 2171B antenna tower is a reduced footprint tower with bore sight capability, keeping the EUT within the beam of the measurement antenna.

Boresight Plus Antenna Tower



The Model 2171C antenna tower is a reduced-footprint tower with positive and negative boresight capability, keeping the EUT within the beam of the measurement antenna throughout height scans.

Space-Saving Antenna Tower



The Model 2175 MiniMast™ antenna tower has a space-saving design, ideal for use in compact chambers.

Manual Antenna Tower



The Model 1052 is a manually operated, portable positioner when quick measurements or pre-scans are needed.

Tripod Positioner for Small to Medium Antennas and Probes



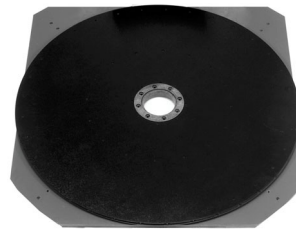
The Model 4-TR tripod is a portable and collapsible tripod for small- to medium-sized antennas and probes.

Tripod Positioners for Large Antennas



The Model 7-TR tripod has a wide footprint for physically large antennas. Air polarization and optional cross booms are available.

Manual Turntable



The Model 1062-1.2B is a low profile, manually operated, nonmetallic turntable designed for pre-scan measurements.

Low Profile Turntable



The Model 2165 LoPro™ is a portable turntable that sits virtually flush with the floor. For indoor/outdoor use. 1.2 m or 2.0 m available. Load rating: 272 kg (600 lb).

Light-Duty Turntable Series



Series 2188 turntables are indoor, variable speed turntables. 1.2 to 2.0 m diameters, custom units available. Std. load rating: 1,000 kg (2,200 lb).

Medium-Duty Turntable Series



Series 2187 turntables are indoor/outdoor, variable speed turntables. 2.0 to 3.0 m diameters, custom units available. Std. load rating: 1,200 kg (2,645 lb).

Heavy-Duty Turntable Series



Series 2181 turntables are indoor/outdoor, variable speed turntables. 2.0 to 6.0 m diameters, custom units available. Std. load rating: 9,000 kg (19,841 lb).

Single-Axis Light-Duty Positioning System



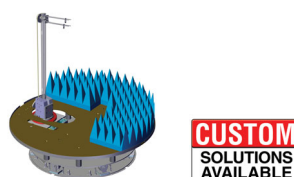
The Model 2006 is an economical solution for azimuth (polar) pattern measurements of passive and active devices. Std. load rating: 25 kg (55 lb).

Precision Mobile Multi-Axis Positioner System



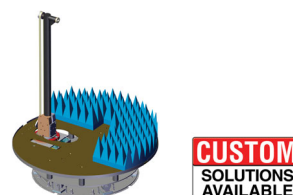
The Model 2304 provides smooth rotation of a test object in both theta and phi axes in a mobile format for maximum flexibility of use.

Multi-Axis Light-Duty Positioning System



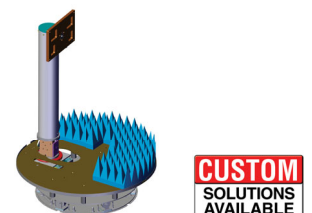
The Model 2112 is a light-duty positioning system, available in custom heights, for testing wireless handsets. Std. load rating: .45 kg (1 lb).

Multi-Axis Medium-Duty Positioning System

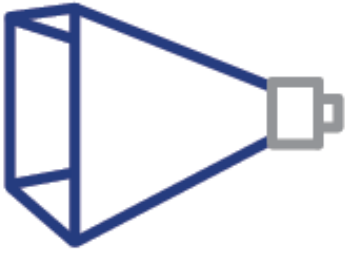


The Model 2117 is a medium-duty positioning system, available in custom heights, for medium-weight DUTs. Std. load rating: 11.3 kg (25 lb).

Multi-Axis Heavy-Duty Positioning System



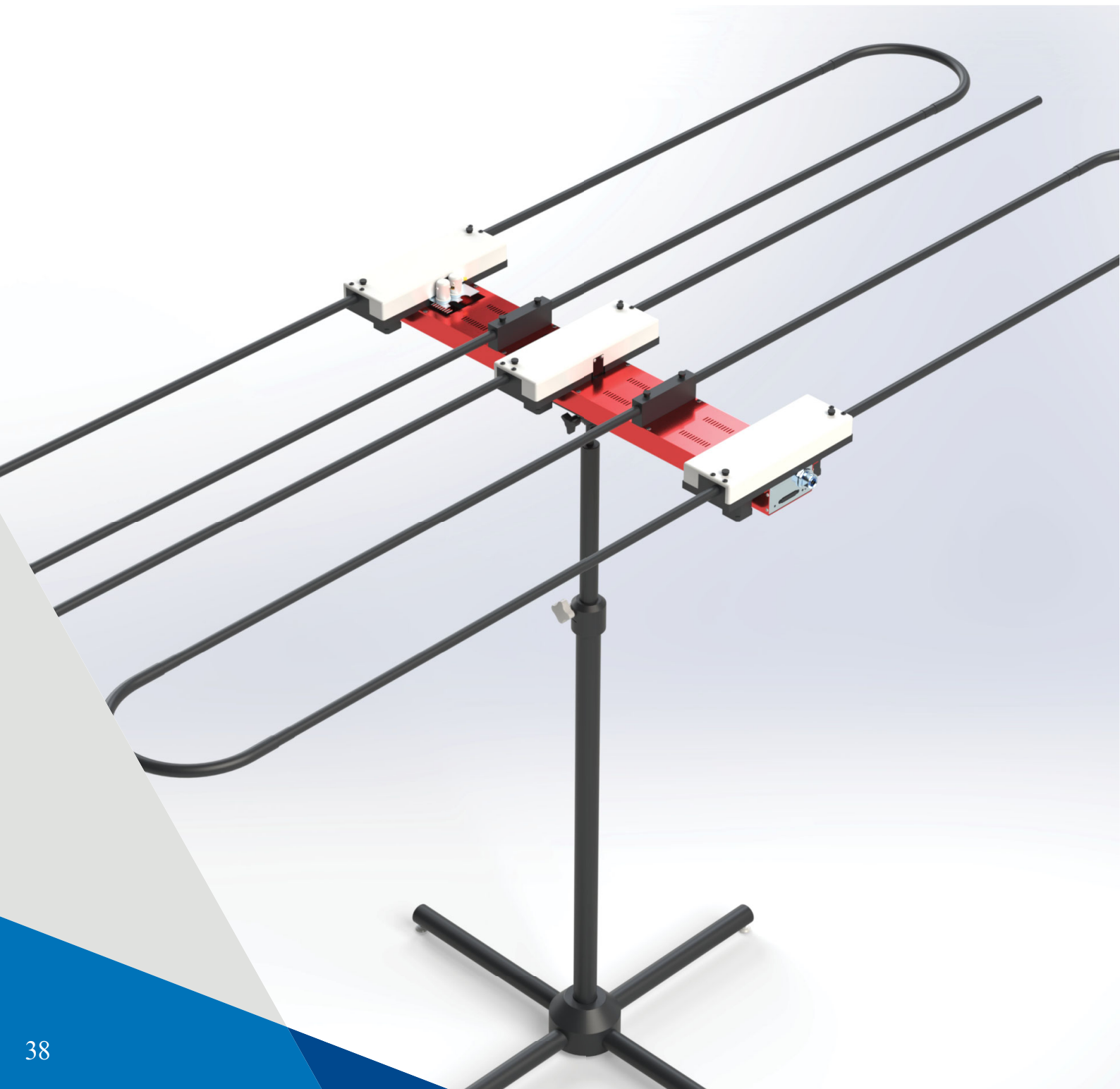
The Model 2122 is a heavy-duty positioning system, available in custom heights, for heavier DUTs and phantom mounts. Std. load rating: 35 kg (75 lb).



ANTENNAS

ETS-Lindgren designs and manufactures high-performance antennas using advanced computational modeling, precision engineering, and rigorous testing in our A2LA-accredited laboratory. Our comprehensive portfolio supports EMC, wireless, and RF applications, delivering the performance, accuracy, and reliability required for today's most demanding test environments.

In addition to our standard antenna offerings, our experienced engineering team specializes in custom antenna design solutions. By tailoring antenna geometries, performance characteristics, and integration features, we develop solutions that address unique test requirements, specialized applications, and complex measurement challenges.



Biconical and Mini-Bicon Series



The Biconical and Mini-Bicon series are omnidirectional broadband antennas for use in EMC measurement and spectrum monitoring.

BiConiLog™ Series



The BiConiLog series of antennas are extremely broadband EMC antennas for pre-scan and compliance measurements.

Log Periodic Series



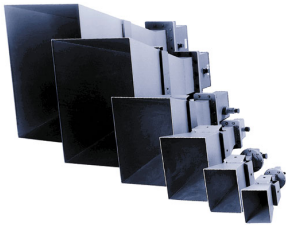
Log periodic antennas are high gain, low VSWR broadband antennas for EMC measurements and applications where directivity is required.

Conical Log Spiral Antenna



The conical log spiral antenna is broadband and circularly polarized for sensing or generating circularly polarized waves.

Standard Gain, Octave and Conical Horn Series



Standard gain/octave horns are high gain, linearly polarized and ideal as reference antennas for immunity testing and sources for tapered chambers.

Double-Ridged Waveguide Horn Series



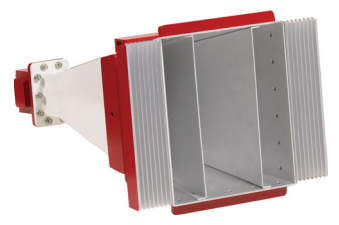
Double-Ridged waveguides, one of ETS-Lindgren's most popular antenna series, are high gain, multi-octave, linearly polarized horns.

Open Boundary Quad-Ridge Horn Series



Our open boundary quad-ridge horns are multi-octave, dual linearly polarized and high gain, making them ideal for sensing two orthogonal field components.

Field Generating Pyramidal Horn Series



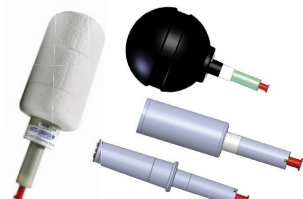
Field generating pyramidal horns are optimized to generate the highest power density in the near field.

Tuned Dipole Series



The "original" EMC antenna. These tuned dipoles are accepted by many as the most precise for EMC measurements.

Precision Sleeve Dipole and Resonant Loop Series



Precision sleeve dipoles and resonant loops are designed to meet the CTIA 0.2 dB azimuth symmetry requirements for the ripple test and calibration.

Loop and Magnetic Field Coil Series



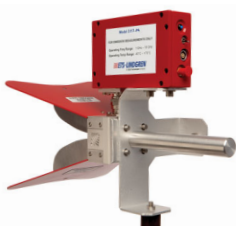
Loop and magnetic field coils are shielded and unshielded, active and passive coils and loop antennas, for ELF to HF ranges.

Electric Monopole (Rod) Series



Electric monopoles (rods) are active and passive short monopole-type antennas for ELF to HF ranges, and ideal for MIL-STD and CISPR 25.

Pre-Amplifiers



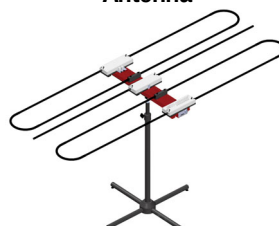
ETS-Lindgren offers some of our most popular, EMC emission antennas with pre-amplifiers. For best performance, these are calibrated as a single unit.

Custom Antenna Solutions



ETS-Lindgren can custom design, test, manufacture, and calibrate the antenna solution that best fits your needs.

Intell-I-Tune™ Log Periodic Antenna

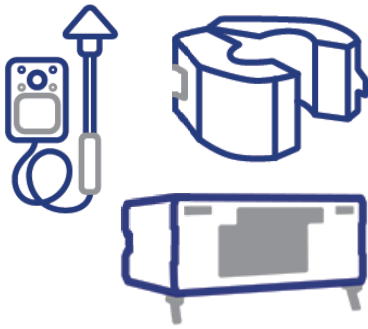


The Model 3170 Intell-I-Tune Antenna Solution is a high-performance radiating antenna that simplifies radiated susceptibility testing across the 30 to 200 MHz frequency range.

Field Generators



Field generators engineered to deliver precise, repeatable electromagnetic fields for EMC testing. Built for dependable performance in demanding laboratory environments.

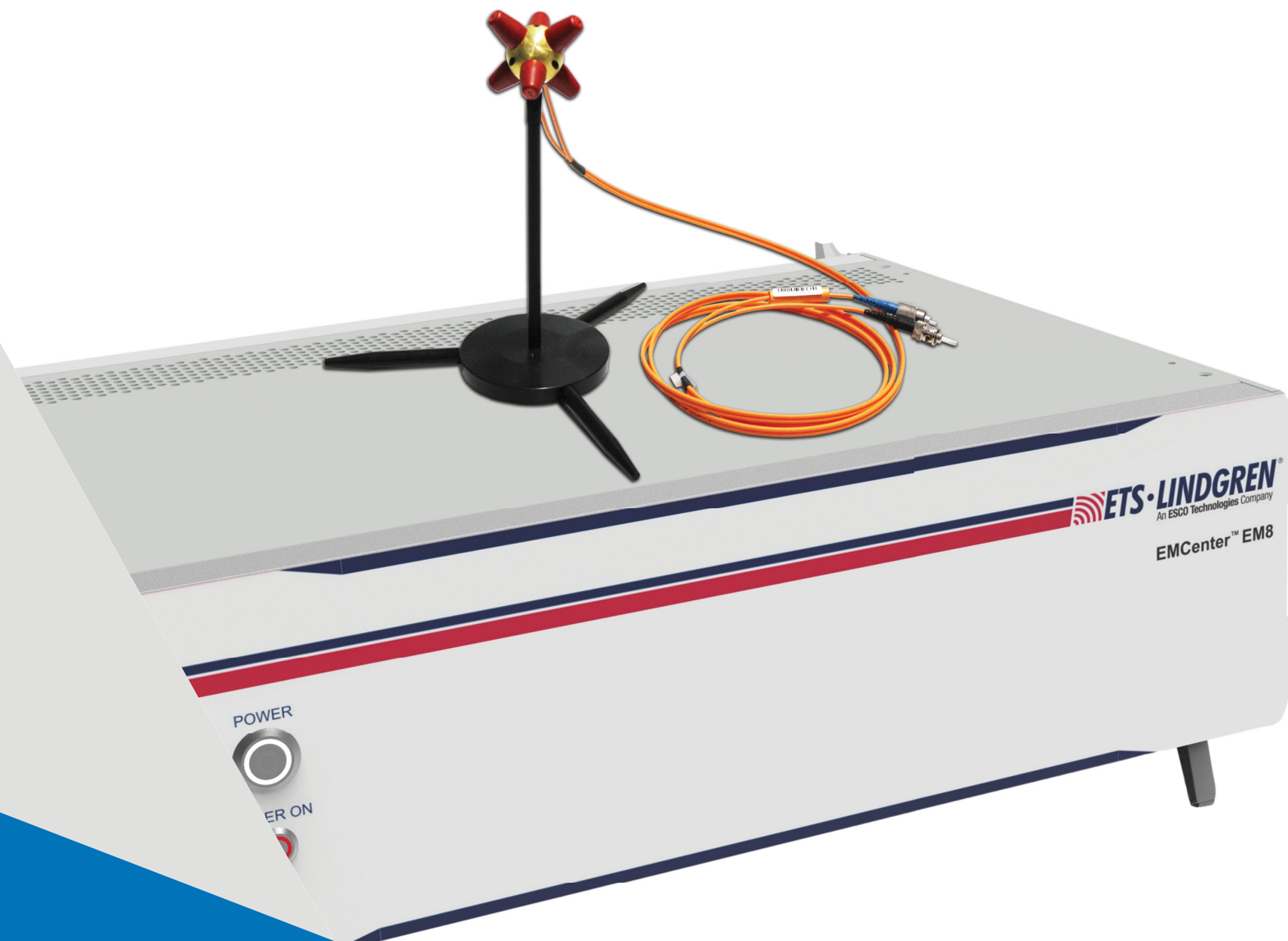


PROBES, MONITORS, AND TEST CONTROLLERS

ETS-Lindgren's probes provide excellent, reliable performance and meet or exceed the requirements for Health & Safety, Automotive, MIL-STD, and Commercial EMC standards.

ETS-Lindgren offers a complete ecosystem of E-field probes, test controllers, and software to simplify EMC testing. E-Field probes can be monitored using the original EMCenter™ EMC automation platform or the EM8 High-Speed Test Controller with an EMSense™ plug-in card for each probe. Together, these solutions provide fast, accurate field monitoring, seamless system integration, and support for both new and legacy test systems.

EMSense model numbers vary depending on your probe type and application. Contact ETS-Lindgren to determine the best probe and controller solution for your EMC test requirements.



Battery Powered E-Field Probe Series



ETS-Lindgren's battery powered E-Field probes enable fast and accurate EMF measurements with industry-leading performance specifications. For added ease of use, batteries are field-replaceable.

EMSense™ Laser Powered E-Field Probe Series



ETS-Lindgren's laser-powered EMSense Electric Field Probes embody the latest innovations in isotropic sensor design, low noise and miniaturized electronics.

EMSense Platinum E-Field Probe



The EMSense Platinum is a high-speed, laser-powered electric field probe designed for precise, real-time field monitoring from 20 MHz to 18 GHz.

EMSense 10 E-Field Probe



The EMSense™ 10 is a high-performance electric field probe that delivers accurate, continuous field measurements across the 10 kHz to 10 GHz frequency range.

EMSense 18 E-Field Probe



The EMSense 18 is a broadband electric field probe designed for precise, continuous field monitoring across the 20 MHz to 18 GHz frequency range.

EMSense 40 E-Field Probe



The EMSense 40 is a high-performance electric field probe that delivers accurate, real-time field measurements across a broad 10 MHz to 40 GHz frequency range.

Low Frequency Health and Safety Meter Series



Our low frequency Health and Safety meters provide accurate measurements of electromagnetic fields in low frequency applications.

Microwave Oven Survey Meter Series



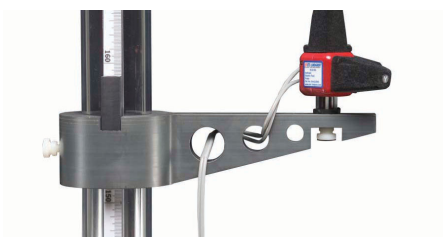
Available in handheld, bench-top and area monitors, ETS-Lindgren's series of microwave oven survey meters provide accurate microwave oven leakage measurements.

Fiber Optic Converters



Fiber optic converters allow a PC to be used for quick processing of data from ETS-Lindgren's EMF probes. Please see page 45 for ProbeView EMF software information.

Probe Stands



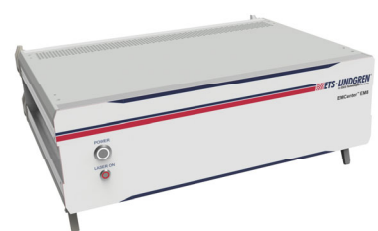
Designed for accurate and repeatable probe positioning when performing field uniformity calibrations, ETS-Lindgren's probe stands are both easy-to-use and durable.

EMCenter Field Monitor

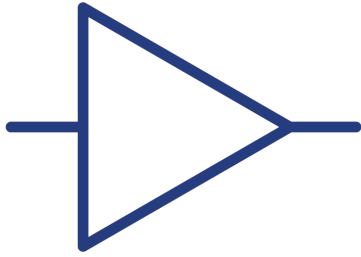


The EMCenter with optional EMSense probe control plug-in card provides easy gathering and processing of data from all ETS-Lindgren EMC E-Field probes.

EMCenter EM8 Field Monitor



ETS-Lindgren's EMCenter EM8 is capable of significantly higher data collection speeds with the ability to store up to eight instrument plug-in cards, which can all be controlled and used simultaneously.



AMPLIFIERS

ETS-Lindgren offers a comprehensive portfolio of RF power amplifiers designed to meet the demands of virtually any EMC test application. Engineered for high output power, efficiency, and reliability, our amplifiers deliver the performance required for accurate and repeatable testing.



Automotive Amplifier Series



Automotive power amplifiers are designed primarily for automotive applications that include ISO 11451-2 testing requirements.

Commercial EMC Amplifier Series



Commercial EMC amplifiers are designed primarily for commercial applications, including IEC/EN 61000-4-3 and IEC/EN 61000-4-6 test requirements.

DO-160 Amplifier Series



RTCA DO-160 power amplifiers are ideal for component testing to RTCA DO-160 requirements.

MIL-STD Amplifier Series



MIL-STD power amplifiers are designed primarily for military applications that include MIL-STD-461 CS114 testing requirements.



EMQuest Data Acquisition and Analysis Software

File Edit Equipment Run Tools Debug Window Help ETS Maintenance

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Parameters Graph Table

Antenna Pattern

Azimuth = 7.6
Elevation = -39.6
Roll = -50.4

Relative Pattern (dB)

Y
X
Z

0
-5
-10
-15
-20
-25

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Parameters Graph Table

Polarization

Theta Angle (°)	Phi Angle (°)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)	Power (dBm)
180	2	0	15	30	45	60	75	90	105	
0	4.27	11.49	18.98	22.55	24.62	25.79	26.29	26.16	25.1	
15	12.71	17.45	20.21	21.87	23.05	23.91	24.38	24.63	24.1	
30	17.31	19.54	20.90	21.50	21.94	22.29	22.67	22.98	22.1	
45	20.27	21.36	22.17	22.65	22.83	22.90	22.77	22.68	22.1	
60	21.96	22.94	23.72	24.16	24.36	24.35	24.15	23.87	23.1	
75	23.00	24.01	24.80	25.25	25.42	25.34	25.19	24.93	24.1	
90	24.40	25.15	25.70	25.95	25.72	25.50	25.04	24.77	24.1	
105	25.37	25.74	25.97	25.75	25.21	24.39	23.52	22.35	21.1	
120	26.47	26.27	25.39	25.25	24.24	22.92	21.18	18.72	17.1	
135	26.46	25.97	25.30	24.05	22.29	19.93	17.31	16.64	15.1	
150	26.01	24.90	23.59	21.67	18.91	14.73	12.38	15.06	11.1	
165	26.35	24.79	22.42	19.03	14.21	13.94	16.85	21.77	21.1	
180	26.97	25.24	22.28	16.70	11.82	16.18	22.04	25.10	21.1	

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Parameters Graph Table

Total Radiated Power

Azimuth = 108.8
Elevation = -43.1
Roll = 62.0

Power (dBm)

Y
X
Z

30
29
28
27
26
25
24
23
22
21
20
19

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Parameters Graph Table

Test Information

- Operator/Comments
- Parameters
- Frequency Range
- Equipment
- Corrections
- Paths
- Output
- User Defined
- Notification
- Antenna Equipment

Two-Axis Dual-Polarization Pattern Measurement

Measurement Configuration Data Format

Primary Axis Control

Upper Limit: 175.0°

Lower Limit: 0.0°

Step Size: 5.0°

Positioner: ☒ Phi Angle ☒ Theta Angle

Polarization (Channel 1/Channel 2)

☒ Theta/Psi ☐ Psi/Theta

Antenna Position

Transmit Height: 0.0 m

Separation Dist: 0.0 m

Secondary Axis Control

Upper Limit: 365.0°

Lower Limit: 0.0°

Step Size: 5.0°

Positioner: ☒ Phi Angle ☐ Theta Angle

Secondary Axis Measurement Mode

Stepped Acquisition

Slew Correction: 0%

Pattern Type

☒ Spherical ☐ Planar ☐ Cylindrical

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Parameters Graph Table

Total Radiated Power

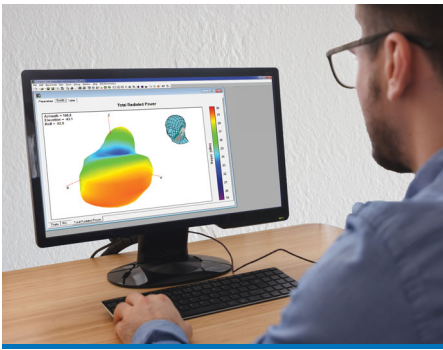
Azimuth = 108.8
Elevation = -43.1
Roll = 62.0

Power (dBm)

Y
X
Z

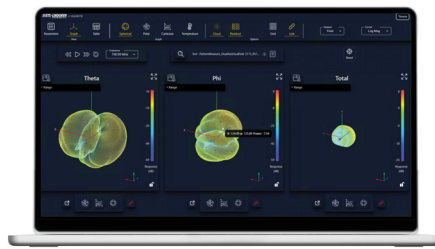
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SPECTRA *emquest*[™]



SPECTRA *emquest* antenna measurement software offers a wide range of fully parameterized test methods for measuring basic antenna performance metrics, as well as testing both radiated and conducted performance of various wireless devices in both SISO and MIMO test configurations.

SPECTRA *emquest* APM



SPECTRA *emquest* APM is a next generation software that automates antenna pattern measurements with advanced data acquisition, analysis, and visualization. Deliver accurate, repeatable results for antenna development and wireless performance testing.

TILE![™] 8 Totally Integrated Laboratory Environment EMC Software



With native Python scripting, scalable architecture, open integration, and AI-enabled for continuous innovation, TILE! 8 is built to help laboratories work smarter today, and adapt to tomorrow.

VisionTRX[™] Visual Monitoring System



VisionTRX allows automated visual monitoring of test subjects during exposure to the required electromagnetic field strengths. Functioning either independently or seamlessly with TILE! Software, VisionTRX provides extensive time-saving capabilities with vast potential in your lab.

VALET[™] Voice-Activated Interface



ETS-Lindgren's Voice-Activated Lab Environment (VALET) delivers tomorrow's measurement systems today. Using a custom voice-activated interface, VALET provides the highest level of hands-free convenience, efficiency, and control for your test environment.

ProbeView[™] II EMF Probe Software

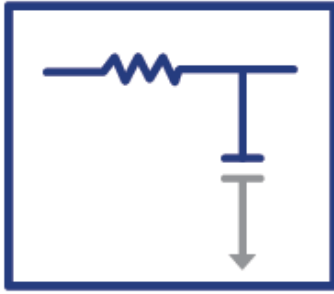


ProbeView II graphical analysis tool for real-time or post-measurement data sets reads data from EMF probes and offers user-selectable viewing options (numeric or graphical), selectable logging, simultaneous display of peak-hold and current field strength data, and graphical representations of field strength versus time.

Software Maintenance Support Program



For TILE! 8 and SPECTRA *emquest* users, ETS-Lindgren offers a maintenance program which includes features such as support, software updates, enhancements, and online user group access.

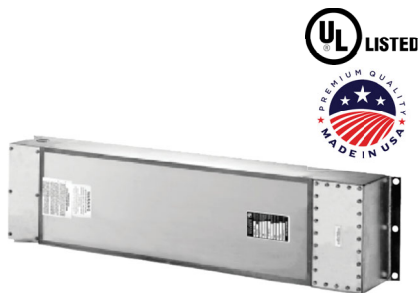


FILTERS: POWERLINE

ETS-Lindgren offers a comprehensive portfolio of powerline filters for general-purpose, specialized, and custom applications. Available in a wide range of configurations, performance levels, and current ratings, every filter is manufactured in our Cedar Park, Texas facility to ensure exceptional quality and performance.

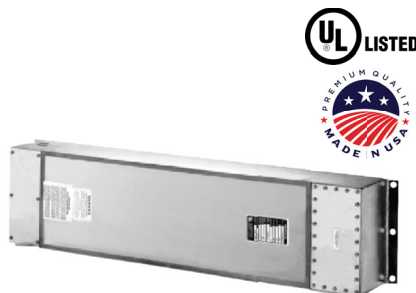


LRX Series Single Line Filters



LRX series single line filters are individual circuit filters, providing superior performance for stringent requirements.

LRX Series Dual Line Filters



LRX series dual line filters provide superior performance for stringent requirements in a dual line, single phase filter.

LPRX Series Wall-Mount Filters



LPRX series filters are multiple circuit filters providing superior performance for stringent requirements in a wall-mounted configuration.

LFPRX Series Floor-Stand Filters



LFPRX series filters are multiple circuit filters, providing superior performance for stringent requirements in a floor-stand configuration.

LRW Series Single Line Filters



LRW series single line filters provide moderate performance for standard requirements.

LRW Series Dual Line Filters



LRW series dual line filters provide moderate performance for standard requirements.

LRE Series Multiple Line Filters

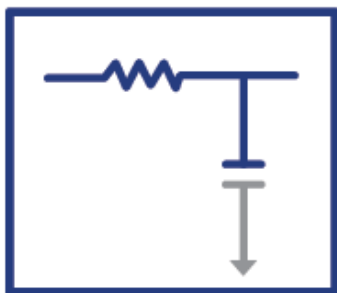


LRE series filters are multiple line, commercial filters, providing moderate performance for standard requirements. These filters are available in two, three, and four circuits.

N900X Series Multiple Line Filters



N900X series filters are very high performing EMC, Tempest and government secure application filters, with low power dissipation.



FILTERS: HEMP/EMP

ETS-Lindgren's EMP filters protect against damage to electronic equipment and loss of data caused by a sudden and intense Electromagnetic Pulse (EMP) and High-Altitude Electromagnetic Pulse (HEMP).

Manufactured using Red Edge Technology, these EMP filters are acceptance tested to MIL-STD-188-125 by Little Mountain Test Facility at Hill Air Force Base in Ogden, Utah, a facility owned by the U.S. government and managed by Boeing. Our EMP filters are also listed by ETL to UL 1283.

All ETS-Lindgren filters are manufactured in our Cedar Park, Texas facility.

REDEGE™

PULSE PROTECTION



LRX-EMP Series Single Line Filters



LRX series single line filters are individual circuit filters, providing superior performance for stringent requirements.

LRX-EMP Series Dual Line Filters



LRX series dual line filters provide superior performance for stringent requirements in a dual line, single phase filter.

LPRX-EMP Series Wall-Mount Filters



LPRX series filters are multiple circuit filters providing superior performance for stringent requirements in a wall-mounted configuration.

LFPRX-EMP Series Floor-Stand Filters



LFPRX series filters are multiple circuit filters, providing superior performance for stringent requirements in a floor-stand configuration.

HEMP Series Two Line



HEMP filters are single unit, EMP powerline pulse protection filters available in three individually filtered lines with ratings of 277/480 VAC, 10 A to 1250 A.

HEMP Series Three Line



HEMP filters are single unit, EMP powerline pulse protection filters available in four individually filtered lines with ratings of 277/480 VAC, 10 A to 1250 A.

HEMP Series Four Line

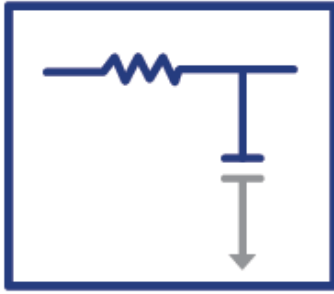


HEMP filters are single unit, EMP powerline pulse protection filters available in four individually filtered lines with ratings of 277/480 VAC, 10 A to 1250 A.

LKV Series Power Filters



The LKV-4500 Series Power Filters are high-current, three-phase EMI power filters with a low KVAR feature, delivering exceptional attenuation, reliable power quality, and protection for mission-critical facilities.



FILTERS: TELEPHONE, COMMUNICATION, CONTROL, SIGNAL LINE

ETS-Lindgren designs and manufactures a comprehensive portfolio of telephone, communication, data, control, and signal line filters for a wide range of commercial, industrial, and secure facility applications. Every filter is manufactured in our Cedar Park, Texas facility to ensure exceptional quality, performance, and reliability.



LTC Series Dual or Multi-Line Filters: Control Systems



LTC series filters for control systems are two to 12 line LTC filters for in and outbound signal, sensor, voice, and data communication. 10 Ω , 40 Ω , and 100 Ω models available.

LTC Series Dual or Multi-Line Filters: Digital Systems



LTC series filters for digital systems are two to 12 line LTC filters for in and outbound signal, sensor, voice, and data communication. 20K, 1M, and 10M baud models available.

LTC Series Dual or Multi-Line Filters: P.A./Alarm Systems



LTC series filters for P.A./alarm systems are two to 12 line LTC filters for use with P.A. or alarm systems. 8 Ω , 16 Ω , 140 Ω , and 5000 Ω models available.

LTC Series Dual or Multi-Line Filters: Security Systems



LTC series filters for security systems are two to 12 line LTC filters for in and outbound signal, sensor, voice, and data communication. 20 Ω model available.

LTC Series Dual or Multi-Line Filters: Signal and Sensors



LTC series filters for signal and sensors are two to 12 line LTC filters for in and outbound signal, sensor, voice, and data communication. 100 Ω , 200 Ω and 300 Ω models available.

LTC Series Dual or Multi-Line Filters: Telephone Lines



LTC series filters for telephone lines are two to 12 line LTC filters for either digital or voice/analog POTS. 10K, 56K, and 128K baud models available for digital, 600 Ω voice/analog POTS model available.

LTC Series Dual or Multi-Line Filters: Specialty



LTC series for specialty applications are ideal for communication lines entering and/or leaving shielded, computer, communication terminal, and information facilities.

LPTC Series Panels and Cabinets for Filters



LPTC series panels and cabinets are specifically designed for dual circuit LTC filters.



ACCESSORIES

ETS-Lindgren's line of EMC test accessories complements your test system with practical solutions that improve efficiency and simplify everyday testing. Products including shielded cameras, LED lighting systems, antenna transport cases, copper test benches, and low dielectric test tables are designed to enhance test setup, equipment protection, operator visibility, and overall laboratory performance.



Product Cases



Provides a safe way to store and ship delicate equipment. Moisture and chemical resistant, these cases are designed to have uniform wall strength.

Camera Systems



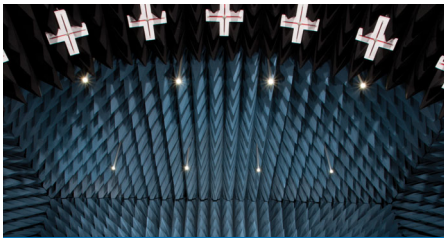
ETS-Lindgren offers shielded cameras for visual monitoring of areas where EMI field strengths are present.

LED Chamber Lighting



LED lighting offers RF noise-free operation, low heat, and long life. For new or existing EMC, microwave, wireless, test chambers.

Fiber Optic Chamber Lighting



Fiber optic chamber lighting is a cost-effective solution for illuminating the interior of anechoic chambers with cool, white light.

Copper-Top Test Benches



Copper-Top test benches are test tables designed with an integrated copper top for MIL-STD testing.

Low Reflection EUT Tables



Low reflection EUT tables are lightweight and designed to produce low reflection in EMC test environments.

Phantom Hand Only Kits



These hands mount directly to the positioning device. Available grips include mono block and slide for voice, fold for voice, data mode, and PDA devices.

Phantom Head Kits

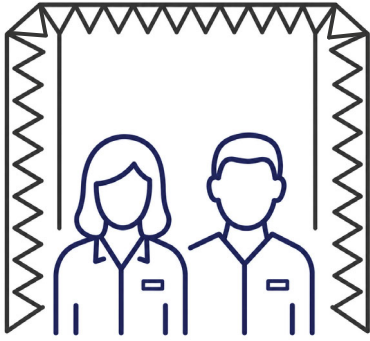


Realistic phantom head supporting accurate OTA, SAR, and wireless device performance testing.

Phantom Head and Hands Kits



This kit incorporates anatomically representative head and hands phantoms with interchangeable grips for voice, data, fold, slide, and PDA devices.



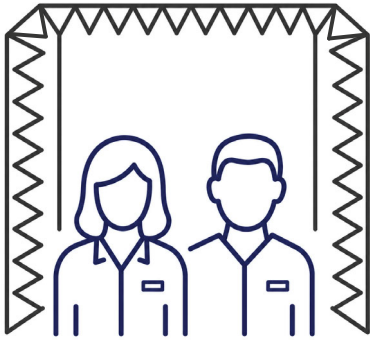
SERVICES

ETS-Lindgren, the leader in Test Solutions, is also the leader in Service Solutions. From education to consulting, product testing to calibration, ETS-Lindgren has dedicated experts committed to the success of our customers. ETS-Lindgren understands how downtime can impact our customers' development, production, and testing schedules. Let ETS-Lindgren assist in maintaining your chambers and training your employees to ensure optimal utilization of your assets.



SERVICES

<u>ITEM</u>	<u>PAGE</u>
Services	56



SERVICES

ETS-Lindgren employs more than 800 professionals at locations in the Americas, Europe, the Middle East, and Asia. In addition, we have a global network of independent representatives and distributors reaching into almost every corner of the world. Our customers benefit with local service and support from specialists who are backed by the global resources of ETS-Lindgren.

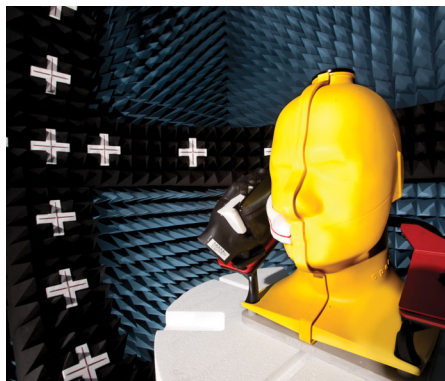


Engineering and Consulting



ETS-Lindgren has the in-house experts that can design integrated systems, manufacture custom components, perform site surveys (including EMI and vibration), and oversee project management.

Testing Services



ETS-Lindgren offers wireless product testing at our Cedar Park, Texas facility. Our experts will ensure that your testing is done thoroughly and accurately in our accredited labs.

ETS-U™ Educational Programs



From basics to more advanced topics, ETS-Lindgren offers the ETS-U Educational Program. Topics include EMC, Wireless OTA, MIL-STD, and Medical.

Product Calibration



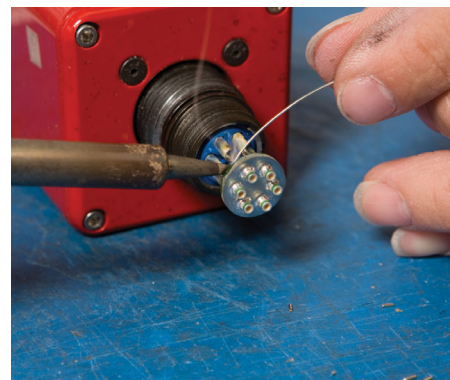
Our A2LA accredited calibration facility can perform calibration on most manufacturers' EMC antennas, current clamps, probes, LISNs, cables, and attenuators.

Calibration Service Plus!™ Program



With Calibration Service Plus!, ETS-Lindgren will handle all of the scheduling and logistics involved with calibrating your antennas, probes, LISNs, current clamps, couplers, and attenuators.

Product Repair



ETS-Lindgren offers repair of most components, including antennas, probes, and current clamps. On-site repair is also available for positioners, doors, and chambers.

Technical Support



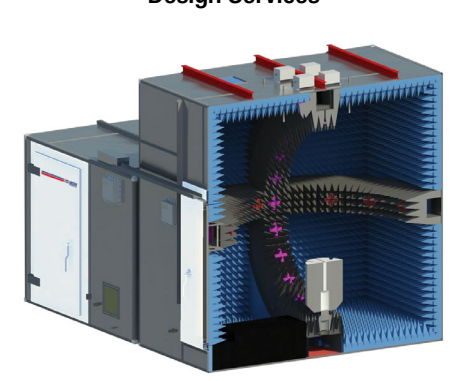
Technical Support is your trusted partner for every stage of your product experience. Whether you need documentation, help troubleshooting an issue, expert guidance on product performance, or assistance with warranty repairs, our team is here to deliver quick, accurate, and thorough support.

Field Services



Our field services are a global network of personnel available for chamber maintenance and repair, positioner maintenance and repair, site surveys, on-site chamber testing, calibration, and training.

Building Information Modeling (BIM) Design Services



Our BIM experts can design a virtual model, allowing our customers to visualize a completed project before it begins. This results in a reduction of construction delays, rework, and unnecessary expenses.

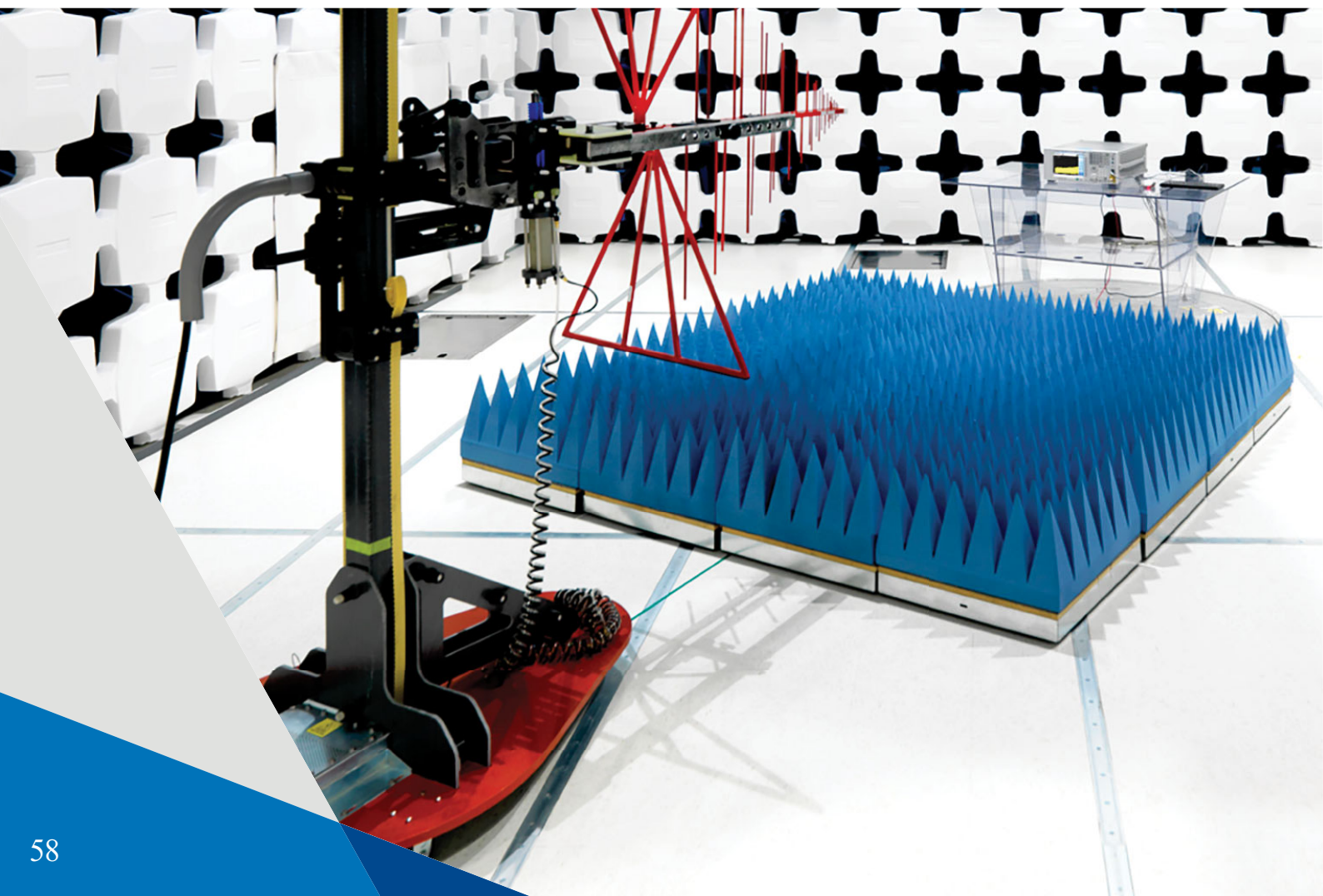
MORE THAN PRODUCTS. A COMPLETE TEST & MEASUREMENT PARTNER.

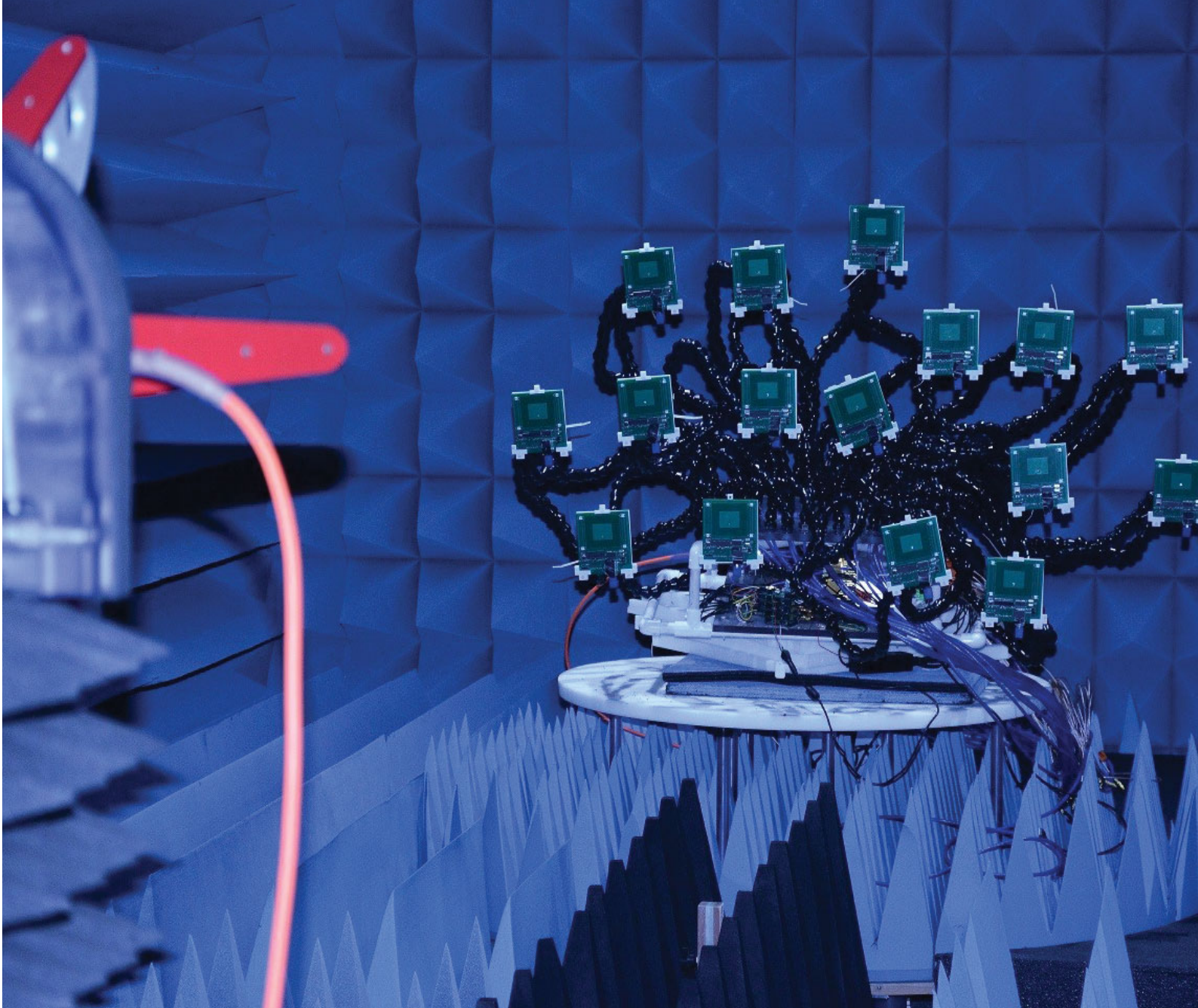
Every test environment is unique, requiring solutions that deliver precision, performance, and long-term reliability. That's why organizations around the world rely on ETS-Lindgren as more than an equipment supplier. We provide complete test and measurement solutions—from individual components to fully integrated facilities—backed by engineering expertise, application knowledge, and lifecycle support.

Together, our comprehensive portfolio and global team help customers simplify compliance, improve measurement confidence, and prepare for tomorrow's testing challenges.

WHY ETS-LINDGREN?

- Complete test and measurement solutions
- Industry-leading engineering expertise
- Standards leadership and application knowledge
- Global manufacturing, service, and support
- Custom solutions for unique requirements
- Lifecycle partnership from concept to modernization





ADVANCING INNOVATION WITH PURPOSE.

For more than eight decades, ETS-Lindgren has helped customers overcome complex test and measurement challenges with smarter, more efficient solutions. From individual components to fully integrated test environments, we combine engineering expertise, manufacturing excellence, and global support to deliver solutions that perform today and adapt to tomorrow's requirements.

As technologies evolve and standards continue to advance, our commitment remains unchanged—to provide the products, services, and expertise our customers need to innovate with confidence throughout the entire lifecycle of their test facilities.

ETS-Lindgren. Committed to a Smarter, More Connected Future.

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MORE CONNECTED FUTURE**

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