



SOLUTIONS FOR ELECTROMAGNETIC PULSE (EMP)

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

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



BECAUSE PASSIVE RESISTANCE ISN'T ENOUGH.

ETS-LINDGREN DEFIES THE ODDS

More than plot twists in the latest espionage thriller, the danger is real. The EMP threat to disable or destroy Critical Infrastructure Systems with High Altitude Electromagnetic Pulse (HEMP) or Intentional Electromagnetic Interference (IEMI) high power radio frequency (RF) weapons is not fictitious. While you may not be able to prevent an EMP event, you can control the outcome.

Recognized the world over for our shielding and protection expertise, we've also been instrumental in the development of protection products and standards that have helped shape government policy. Our innovative new products and strategies defy the conventional wait-and-see approach, instead providing enhanced, proactive security and protection.

ETS-Lindgren is *committed to smarter, more secure EMP protection.*



EMP Protection That Defies. It's a bold claim to be sure and one that we make with complete confidence. That's because only ETS-Lindgren provides an entire line of integrated EMP protection solutions that are backed by:

- **Proven Performance** – EMP protection that has been independently tested and certified by Little Mountain Test Facility at Hill Air Force Base in Ogden, Utah, the premier survivability and reliability HEMP testing center owned by the U.S. government and managed by Boeing.
- **Unmatched Experience** – More than 30 years experience as an innovator of systems and components for the detection, measurement, and management of electromagnetic, magnetic, and acoustic energy.
- **Capabilities to Any Scale** – In-house certified Building Information Modeling (BIM) capabilities, critical to the planning, designing, and constructing of buildings and infrastructures, resulting in cost-effective, well-managed project execution.
- **Global Reach** – Internationally recognized as the preeminent provider of integrated EMP solutions with manufacturing facilities and sales offices around the world.

ETS-LINDGREN DEFIES BOUNDARIES

Traditional security protection measures are no longer enough to keep critical assets, infrastructures or systems safe from HEMP or IEMI. As ETS-Lindgren continues to set the standard for shielded protection, we continue to work with clients in many of these Critical Infrastructure Sectors, as defined by the Department of Homeland Security, which include:

From small IEMI weapons, carried by an automobile or concealed in a backpack, to nuclear devices detonated 18 miles or higher above the surface of the earth, destruction can be delivered with both close-range accuracy or wide-ranging impact.

- Energy (Electricity, Petroleum, and Natural Gas)
- Defense Industrial Base
- Communications
- Healthcare and Public Health
- Emergency Services
- Water and Wastewater Systems
- Transportation Systems
- Food and Agriculture
- Information Technology
- Financial Services
- Nuclear Reactors, Materials, and Waste
- Chemical
- Commercial Facilities
- Critical Manufacturing
- Dams
- Government Facilities





PRODUCTS AND SOLUTIONS

INTEGRATED EMP SOLUTIONS

Whether you need to mitigate externally radiated pulses in free space, block conducted EMP from entering via wiring and cabling, or ensure continuous operation, ETS-Lindgren's fully integrated EMP solutions provide protection for all areas of critical infrastructure.

MODULAR WALL PANEL SYSTEMS

Depending on your requirements, ETS-Lindgren offers a choice of RF shielded rooms crafted with welded-steel construction; modular double-layer, steel-clad wood panels; single-layer steel pan-type shielding; and architectural shielding. Choose from various interior or exterior finishes.

SHIELDED EQUIPMENT ENCLOSURES

Our TEMPEST Information Processing Systems (TIPS) ensure RF shield protection for rack-mounted equipment.

SHIELDED DOORS

Select from several RF shielded door options that provide a fail-safe performance of up to 120 dB shielding effectiveness and continue to maintain shield integrity even after repeated use.

POINTS OF ENTRY

Every point of entry for air, water, fire suppression, signal and data lines create the potential to degrade the integrity of the RF shielded room or chamber. ETS-Lindgren's uniquely designed waveguides, pipe penetrations, fiber optic feedthroughs as well as signal and data filters prevent the entry or escape of electromagnetic signals.

POWER LINE FILTERS

Available in either two or four individually filtered lines, with ratings of 277/480 VAC, 10 A to 1200 A, ETS-Lindgren's EMP/HEMP power line filters offer excellent multi-stage, over-voltage and EMI/RFI protection. For service entry ampacity greater than 1200 A, filters can be wired in parallel. Filters are also compliant with MIL-STD-188-125-1A, released by the Defense Threat Reduction Agency (DTRA) in July 2021.

RED EDGE™ PULSE PROTECTION

Red Edge Pulse Protection delivers two levels of protection. The first level protects equipment. The second level ensures continuous data operation with a fully independent and uninterrupted power source – located inside your protected suite or remotely with separate protection.



SERVICE SOLUTIONS

ETS-Lindgren has dedicated experts committed to our customers' continued success. ETS-Lindgren's reputation for expertise and innovation has been integral to the understanding of EMP and its risk to business, government, and society. Our experts have been invited to share their knowledge with national and international government leaders in an effort to ensure HEMP and IEMI protection for all areas of defense and critical infrastructure.

Our in-house experts design integrated systems, chambers, RF shielded rooms and accessories, perform site surveys (including EMI, vibration, and acoustic), and oversee project management. ETS-Lindgren also provides an assortment of design and site-planning services as well as Building Information Modeling (BIM). Beyond surveys, planning, design, and BIM, ETS-Lindgren provides installation and testing services to ensure your facility is secure. ETS-Lindgren also provides maintenance and repair services maximizing the long-term performance and life of HEMP and IEMI solutions.

With more than 750 professionals at locations in the Americas, Europe, and Asia, plus a global network of independent representatives and distributors, *we are committed to smarter, more secure EMP protection.*





DEFY THE RISKS WITH ETS-LINDGREN EMP SOLUTIONS

Protecting the safety, security, and reliability of critical infrastructure and data assets is no longer an exercise in operational recovery during a once-a-year practice simulation. The threats are real, making continuous protection imperative.

For more than 30 years, we've continued to provide proven, comprehensive, and scientifically-engineered solutions for protecting systems and data from the destructive effects of EMP events. Moreover, we continue to actively contribute technically as a member of industry standards organizations, thus ensuring our products comply with current and future regulations. In virtually every industry and sector, ETS-Lindgren is recognized for our leading expertise and innovation – in our solutions and in the products and people that make them possible. Given this expertise and history of innovation, our capabilities extend beyond standard products to customized solutions to meet specific requirements.

We not only have the resources and experience to meet the 2018 National Defense Authorization Act, our people are frequently called upon to be expert advisors to the agencies, lawmakers, and others who are concerned about protecting critical assets and infrastructures in the face of this destructive and disruptive threat.

To learn more, contact ETS-Lindgren or visit us online at www.ets-lindgren.com.

Sales and Support Offices

UNITED STATES – TEXAS

Cedar Park, TX
+1.512.531.6400 Phone
+1.512.531.6500 Fax
info@ets-lindgren.com

UNITED STATES – ILLINOIS

Wood Dale, IL
+1.630.307.7200 Phone
+1.630.307.7571 Fax
info@ets-lindgren.com

UNITED STATES – WISCONSIN

Minocqua, WI
+1.715.356.2022 Phone
+1.715.356.2023 Fax
info@ets-lindgren.com

FINLAND

Eura
+358.2.8383.300 Phone
+358.2.8651.233 Fax
euinfo@ets-lindgren.com

CHINA

Beijing
+86(10)8273.0877 Phone
+86(10)8273.0880 Fax
china@ets-lindgren.com

JAPAN

Tokyo
+81.3.3813.7100 Phone
+81.3.3813.8068 Fax
japan@ets-lindgren.com

INDIA

Bangalore
+91.80.4341.8600 Phone
+91.80.4341.8611 Fax
indiainfo@ets-lindgren.com

SINGAPORE

Singapore
+65.6391.0026 Phone
+65.6291.7311 Fax
singapore@ets-lindgren.com

TAIWAN

Taipei
+886.2.27023389 Phone
+886.2.27023055 Fax
taiwan@ets-lindgren.com

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