



# EMP SOLUTIONS FOR DATA CENTERS

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

 **ETS·LINDGREN<sup>®</sup>**  
An ESCO Technologies Company



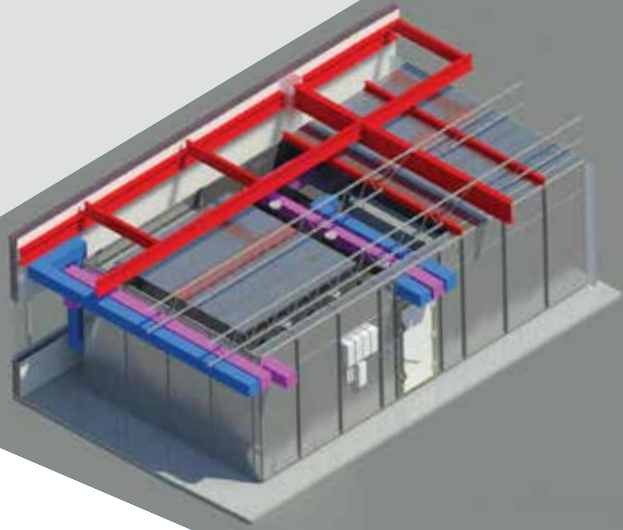
# BECAUSE PASSIVE RESISTANCE ISN'T ENOUGH.

## 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.

# PRODUCTS AND SOLUTIONS

## 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.



## 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 ROOMS

ETS-Lindgren designs, manufactures and installs an assortment of shielding systems from architectural shielding for applications requiring limited performance to the Series 81 and 101 that provide high levels of performance to meet security and HEMP/EMP protection standards, including NSA-94-106 and MIL-STD-188-125.







## SHIELDED EQUIPMENT ENCLOSURES

ETS-Lindgren manufactures an assortment of test enclosures capable of providing RF attenuation to meet any application. ETS-Lindgren's 5230 series provides NSA 94-106 and MIL-STD-188-125 levels of protections and can be configured in custom sizes from small tabletop enclosure to enclosures that can house a 42U rack or larger. ETS-Lindgren's 5240 and 5281 series provide MIL-STD-188-125 levels of protection in various sizes with the 5281 capable of integrating rack mount systems for easy housing of 19" rack equipment.

## SHIELDED RACK SYSTEMS

ETS-Lindgren's 5260-SRE (Shielded Rack Enclosure) provides a high level of RF performance with a 42U rack perfect for housing data center and other 19" rack equipment. The 5260's shielding helps address coexistence and crosstalk issues, provides protection from electronic surveillance, and protects against HEMP, EMP, and IEMI events.

## 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.



# 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, 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 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 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](http://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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