

RF Shielding for Cybersecurity

DefenseShield™, DefenseShield™ Light, and DefenseShield™ Wall Mount Enclosure
Maximum Security Protection at the Server Rack Level

The DefenseShield Electromagnetic Compatibility (EMC) Hardened Enclosures are radio frequency (RF) shielded cabinets that provide military-grade performance to shield against technical surveillance and block electromagnetic fields. They provide shielding from RF interference, EMC, and power conditioning to provide a secure environment where data is protected. Our DefenseShield™ cabinets provide compelling solutions to the most common, high-requirement cybersecurity and defense applications.

Key Attributes



Maximum Security

DefenseShield products provide power and data line filtering, shielding from electromagnetic interference, RF interference, and overall EMC to create a secure environment where data is protected.



High Performance

Our RF shielded products are purpose-built to effectively attenuate signals from 1MHz to 10GHz. Government agencies, defense contractors, communications companies, internationally accredited labs, and tech giants have tested, approved, and implemented these products.



Cooling

All DefenseShield products provide significant airflow with built-in fan systems providing up to 10kW of cooling to keep all enclosed equipment running efficiently.



One of a Kind

The only RF shielded cabinet engineered for data center deployment at scale. UL-listed, provides ample cooling, and lightweight enough for traditional data center floors.

Cybersecurity

Historically, the primary purpose of RF shielded racks has been as a technical surveillance countermeasure (TSCM) for cybersecurity-mitigating risks from power analysis and electromagnetic interference (EMI) side-channel attacks. The proliferation of Wi-Fi, Bluetooth, and other wireless technologies pose new eavesdropping threats.

Who Needs Cybersecurity?

Defense/Military/Government/Engineering Labs

The DefenseShield enclosures are used for cybersecurity purposes. The DefenseShield 42U is a server cabinet option to shielded rooms to protect against EMI and side-channel attacks. The DefenseShield Wall Mount Enclosure is a smaller, wall-mountable, enclosure that provides the same protection. The DefenseShield Light is a lower cost alternative providing the same level of protection with a little less cooling capacity.

Why Choose a Shielded Rack?

- > Lower total cost than SCIFs or Faraday cages
- > Lower maintenance
- > Lower implementation cost
- > Allows use of off the shelf electronics as opposed to expensive TEMPEST equipment
- > Lasts for generations of IT systems
- > Provides granular, sectionalized signal and physical security

Why Choose Enconnex for Your RF Shielding Needs?

Product expertise.

We have extensive experience in RF shielding technology, providing solutions to and guidance for the world's largest companies, including data centers, hyperscalers, labs, and military and defense companies.

Your cybersecurity one-stop shop.

We are the only one-stop shop in the cybersecurity market for enclosures, airflow, and cable management accessories. DefenseShield cabinets effectively shield against the latest in wireless technology.

Enconnex provides solutions.

Our enclosures can be customized to your exact specs. Offering customizable I/O panels, a variety of shelves, cable management accessories, size options, airflow and cooling management features, and more.

Compliance and standards.

Our DefenseShield cabinets are tested in accordance with IEEE-299, MIL-STD-285, and NSA 94-106. They enable systems to meet standards for SIGINT and emanation security such as MIL-STD-461 and TEMPEST requirements. They are UL 2416 (NWIN) listed to

What Are the DefenseShield Products That We Offer?

DefenseShield™ Cabinets

The DefenseShield is a full-size RF shielded cabinet that provides industry-leading radio frequency (RF) shielding mitigating signals emanating from or interfering with electronics within the enclosure.



FEATURED PRODUCT

DefenseShield™ 42U

- > Lightweight, Rugged Construction
- > Standard Rack Footprint
- > 10kW+ of Cooling Support
- > Customizable I/O



What Are the DefenseShield Products That We Offer?

DefenseShield™ Light Cabinet

The DefenseShield Light is a full-size RF shielded cabinet that provides industry-leading radio frequency (RF) shielding mitigating signals emanating from or interfering with electronics within the enclosure. This cabinet provides the same level of shielding with a lower cooling capacity.



DefenseShield™ Light

FEATURED PRODUCT

DefenseShield™ Light

- > Lightweight, Rugged Construction
- > Standard Rack Footprint
- > 2kW+ of Cooling Support
- > Customizable I/O

What Are the DefenseShield Products That We Offer?

DefenseShield™ Wall Mount Enclosure

The DefenseShield™ Wall Mount Enclosure provides military-grade shielding in a small size for convenient wall mounting. Perfect for shielding sensitive network devices.

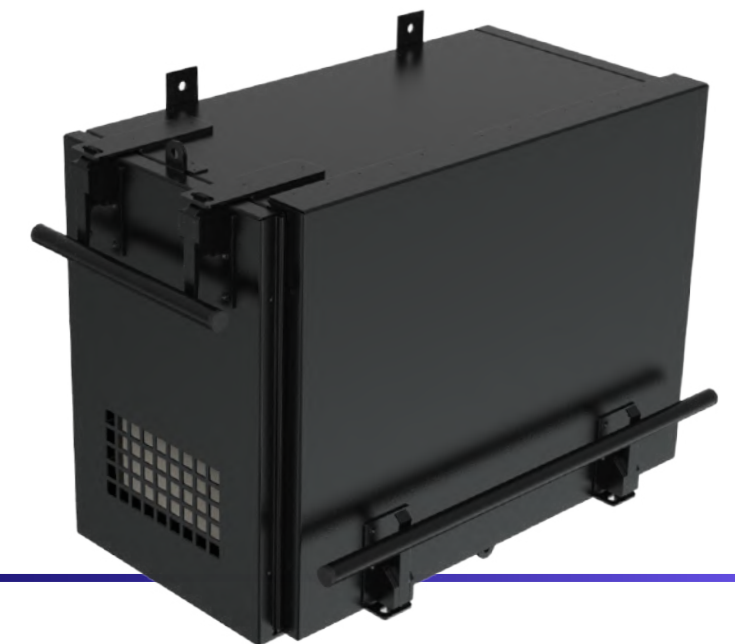


DefenseShield™ Wall Mount Enclosure - On Side

FEATURED PRODUCT

DefenseShield™ Wall Mount Enclosure

- > Lightweight, Standard Footprint
- > Wall-Mounted
- > Completely Customizable
- > Tested and Trusted Performance



DefenseShield™ Wall Mount Enclosure - Front