

# 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.

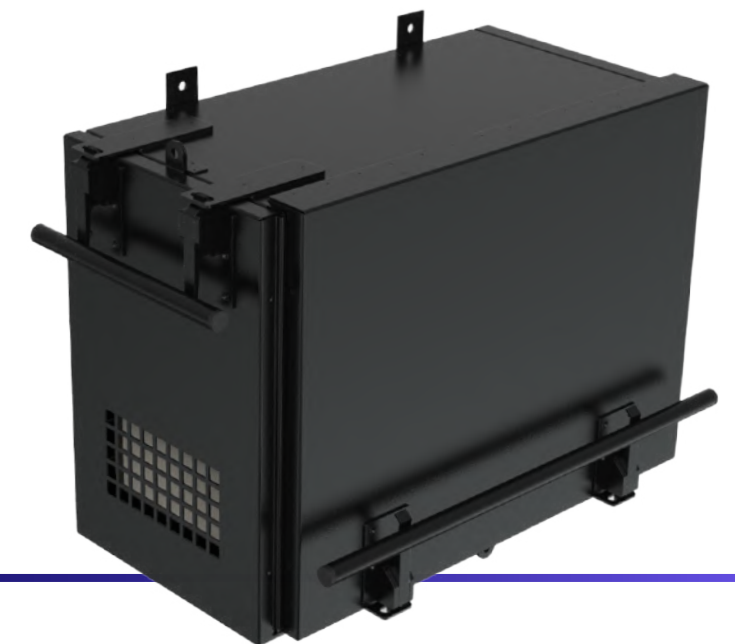


DefenseShield™ Wall Mount Enclosure - On Side

#### FEATURED PRODUCT

### DefenseShield™ Wall Mount Enclosure

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



DefenseShield™ Wall Mount Enclosure - Front

JEM Computers, Inc.



Phone: (586) 783-3400 | [gsa@jemtechgroup.com](mailto:gsa@jemtechgroup.com)  
[JEMtechgroup.com/capabilities-statement/](http://JEMtechgroup.com/capabilities-statement/)