Cybersecurity and Real Device Testing Products

Enclosures and accessories engineered for performance and customizable to your unique specifications.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cybersecurity</td>
<td>3</td>
</tr>
<tr>
<td>Real Device Testing</td>
<td>4</td>
</tr>
<tr>
<td>Commitment to Compliance</td>
<td>5</td>
</tr>
<tr>
<td>Why Enconnex?</td>
<td>6</td>
</tr>
<tr>
<td><strong>DefenseShield</strong></td>
<td></td>
</tr>
<tr>
<td>DefenseShield™ RF Shielded Cabinet</td>
<td>7</td>
</tr>
<tr>
<td>DefenseShield™ Light RF Shielded Cabinet</td>
<td>8</td>
</tr>
<tr>
<td>DefenseShield™ Wall Mount Enclosure</td>
<td>9</td>
</tr>
<tr>
<td><strong>DevShield</strong></td>
<td></td>
</tr>
<tr>
<td>DevShield RF Shielded Cabinet</td>
<td>10</td>
</tr>
<tr>
<td>DevShield Light RF Shielded Cabinet</td>
<td>11</td>
</tr>
<tr>
<td>DevShield Mini Enclosures</td>
<td>12</td>
</tr>
<tr>
<td><strong>DevRack</strong></td>
<td></td>
</tr>
<tr>
<td>DevRack Cabinet</td>
<td>13</td>
</tr>
<tr>
<td>2 Post Rack</td>
<td>14</td>
</tr>
<tr>
<td><strong>DevRack Components</strong></td>
<td></td>
</tr>
<tr>
<td>DevRack Fan Door</td>
<td>15</td>
</tr>
<tr>
<td><strong>DevRack Accessories</strong></td>
<td></td>
</tr>
<tr>
<td>Shelves</td>
<td>16-18</td>
</tr>
<tr>
<td><strong>Our Locations</strong></td>
<td>19</td>
</tr>
</tbody>
</table>
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.

Why Choose a RF Shielded Rack?

- Lower total cost than SCIFs or Faraday cages
- Less 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
Real device testing is the process of testing the functionality of apps, software, or programs on real devices like mobile phones and tablets. Testing is typically conducted across a variety of different operating systems and physical devices. Real device testing is essential because it helps to identify and mitigate any potential issues before they impact the end user. Enconnex real device testing enclosures employ shielding, cooling, and maximize available space for faster and more accurate test results.

Who Needs Real Device Testing?

Companies who are using 3rd party test labs (real device cloud):

- Enterprise
- Telecom
- Retail
- Financial

Our real device testing enclosures were engineered to enable real device cloud companies to enhance their offerings. Enconnex enclosures can scale to meet the needs of any real device cloud customer.

Companies who build their own test labs:

- Hyperscale
- Social Media
- Internet
- Technology
Why Enconnex?

**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, IT infrastructure companies, and military and defense companies.

**Your one-stop shop.**

We are the only one-stop shop in the real device testing and cybersecurity markets for enclosures, airflow solutions, and cable management accessories.

**Robust customization options.**

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.**

DevShield and DefenseShield are precision-built. They are tested in accordance with IEEE-299, MIL-STD-285, and NSA 94-106. The cabinets 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 allow for commercial use in high reliability environments.

*Enconnex is the exclusive sales partner of Kform, the industry leader in precision manufacturing of rugged, RF shielded enclosures.*
Commitment to compliance.

Customers choose our products because they are reliable, high-quality, cost-effective, and carry the regulatory certifications that companies need their data center products to have. Enconnex IT infrastructure products are used in the largest hyper-scale, enterprise, data center, and network customer locations worldwide. They must meet specific standards for safe operation in the data center environment. As an ISO 9001:2015 certified company, customer satisfaction is at the forefront of everything we do.
DefenseShield™
RF Shielded Cabinet

DefenseShield™ is an RF shielded, EMC hardened cabinet providing military-grade radio frequency (RF) shielding to mitigate signals emanating from or interfering with electronics within the enclosure. The cabinet features lightweight, rugged construction with a standard server rack form factor.

The DefenseShield™ cabinet acts as a Faraday cage by attenuating RF signals entering or exiting the enclosure. Applications include installations in an office, lab, or data center to keep sensitive information protected.

APPLICATIONS

Cybersecurity
- Isolation of sensitive data from emergent threats, including EMI and power analysis side channels

Innovation
- The only RF shielded cabinet engineered specifically for data center deployment at scale.
- UL listed, ample cooling, lightweight enough to be supported by standard data center flooring

Communications
- Emanations control mitigating interference with scientific equipment such as satellite radio antenna.

KEY FEATURES

Lightweight, Rugged Construction
- Rack weight does not limit installation locations.

Superior Shielding
- Effectively attenuates signals from 1MHz to 10GHz

Cooling
- 10x 235 CFM fans provide 10kW+ of cooling to support dense installations.

Customizable I/O
- Define your own I/O panels for copper and fiber connectivity.
DefenseShield™ Light
RF Shielded Cabinet

DefenseShield Light has the same features, benefits, and construction as the standard DefenseShield, just with a lower cooling capacity.

The DefenseShield Light is a full-size RF shielded, EMC hardened cabinet that provides military-grade radio frequency (RF) shielding mitigating signals emanating from or interfering with electronics within the enclosure. The cabinet features lightweight, rugged construction with a standard server rack form factor.

APPLICATIONS

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KEY FEATURES

Lightweight, Rugged Construction
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Superior Shielding
- Effectively attenuates signals from 1MHz to 10GHz

Cooling
- 2x 235 CFM fans provide 2kW+ of cooling to support dense installations.

Customizable I/O
- Define your own I/O panels for copper and fiber connectivity.
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.

**APPLICATIONS**

- Cybersecurity
- Device Testing
- Infrastructure

**KEY FEATURES**

- Lightweight, standard footprint for wall mounting in the lab, office, or datacenter
- Effectively attenuates signals from 1MHz to 10GHz
- Complete customization of size, power, data, and accessories to suit
- Trusted performance from countless deployments, individual testing, and third-party approval
DevShield

RF Shielded Cabinet

DevShield cabinets are RF shielded, EMC hardened enclosures with power and data line filtering engineered for real device testing at scale. Constructed from aerospace-grade aluminum with copper-nickel gaskets sealing every opening, DevShield cabinets ensure maximum signal integrity within the cabinet. For high-density wireless testing, the cabinets can be configured to prevent channel interference from within as well. Customizable to your exact specifications. The only full-size RF shielded cabinet engineered for data center deployment to conduct enterprise real device testing on one platform.

APPLICATIONS

Installations
- Real device testing in a data center, office, or lab environment.
- High density wired and wireless testing.

Innovation
- Effectively attenuates signals from 1MHz to 10GHz, blocking IEEE 802.11 (Wi-Fi), Zigbee, Bluetooth, and more.
- Segregation of wireless networks; in-rack wireless networks.

Communications
- Emanations control mitigating interference with scientific equipment such as satellite radio antenna.

KEY FEATURES

Lightweight, Rugged Construction
- Rack weight does not limit installation locations.

Standard Rack Footprint
- Seamless integration into data center layout.

Cooling
- 10x 235 CFM fans provide 10kW+ of cooling to support dense installations.

Customizable I/O
- Define your own I/O panels for copper and fiber connectivity.

Large Capacity
- Can hold 400 phones or 40 open laptops (200 closed).
DevShield Light
RF Shielded Cabinet

DevShield Light has the same features, benefits, and construction as the standard DevShield, just with a lower cooling capacity. DevShield Light is an RF shielded, EMC hardened enclosure with power and data line filtering engineered for real device testing at scale. Constructed from aerospace-grade aluminum with copper-nickel gaskets sealing every opening, DevShield Light ensures maximum signal integrity within the cabinet. For high-density wireless testing, it can be configured to prevent channel interference from within as well.

APPLICATIONS

Installations
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• High density wired and wireless testing.

Innovation
• Segregation of wireless networks; in-rack wireless networks.
• The only full-size RF shielded cabinet engineered for data center deployment to conduct enterprise real device testing on one platform.

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• Emanations control mitigating interference with scientific equipment such as satellite radio antenna.

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• Rack weight does not limit installation locations.

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• Seamless integration into data center layout.

Cooling
• 2x 235 CFM fans provide 2kW+ of cooling to support dense installations.

Customizable I/O
• Define your own I/O panels for copper and fiber connectivity.

Large Capacity
• Can hold 400 phones or 40 open laptops (200 closed).
DevShield Mini Enclosures

DevShield Mini enclosures feature lightweight construction and can be directly mounted onto a 19” 2-post rack, 4-post rack, server cabinet, or be held by an equipment shelf allowing installation in an office, lab, or data center environment. The compact footprint of this enclosure allows for a better fit and more flexibility in high-density test environments. Various sizes are available.

Applications

- Cybersecurity
- Real Device Testing
- Infrastructure

Key Features

- Lightweight, standard footprint for cabinet or rack mounting in the lab, office, or datacenter
- Complete customization of size, power, data, and accessories to suit
- Trusted performance from countless deployments, individual testing, and third-party approval
- Effectively attenuates signals from 1MHz to 10GHz
DevRack

DevRack
Real Device Testing Cabinet

The DevRack products are non-shielded alternatives to DevShield. Suitable for hard-wired mobile device testing at scale or low-density wireless testing. They are purpose-built for real device testing and, as such, much better solutions than the alternative of retrofitting a standard server rack.

APPLICATIONS

- High-density situations where weight is a concern (3300 static load rating)
- Can be bundled into a full hot aisle / cold aisle containment solution
- Excellent airflow design makes these ideal for situations where heat issues exist
- High quality and affordability make these perfect for high-volume sites
- Integrate seamlessly with pre-existing environments
- Full range of customization available upon request

KEY FEATURES

- Rigid, reinforced design
- Adjustable mounting rails
- Heavy-duty casters and leveling feet
- Locking, removable side panels
- Split rear perforated doors
- Available airflow and cable management accessories
- Perforated front and rear doors
- Configurable with Wi-Fi and USB connections
DevRack 2 Post Rack

The Enconnex DevRack 2 Post equipment rack is an excellent solution for lightweight and smaller format rack mounting needs. This rack is constructed of high-quality, rigid aluminum, and is ideal for a wide range of equipment, from networking devices to small equipment that requires a shelf.

APPLICATIONS

- Networking
- Telecommunications
- Real device testing

KEY FEATURES

- Strong, rigid aluminum design
- Standard #12-24 threaded hole mounting is compatible with any 2 post accessory
Dev Rack Components

DevRack Fan Door

The Enconnex DevRack Fan Door can be installed on a 600mm wide DevRack cabinet to speed up the air circulation inside and outside the cabinet, in order to achieve faster heat dissipation. The fan door is equipped with a modular fan unit group with a C14 inlet power plug which supplies large volumes of air, has a high safety factor, is reliable, and only requires simple maintenance. It is suitable for 45U, 48U and 52U sized cabinets, and has front door (intake) and back door (exhaust) versions. This product has UL, FCC, CE certification.

APPLICATIONS

- User access management
- Powerful fan layout offers high cooling efficiency
- DC current allows for the easy adoption of multiple voltage levels

KEY FEATURES

- Up to 27 long life fans
- 69dBA operating noise
- Providing airflow higher than 2,000 CFM
- LED indicator light for ON/OFF Power Control
- Individual fuse per fan module protects the circuit from current overload
- Cut-off switch to de-energize the fans when the door is open
DevRack Accessories

Open Laptop Testing Shelf

The Open Laptop Testing Shelf is a W shape shelf for laptop testing in the open position. This shelf fits 4 laptops per shelf, equipped with toolless sliding rails.

Closed Laptop Testing Shelf

The Closed Book Laptop Testing Shelf is for testing laptops in the closed position. This shelf fits 20 closed laptops per shelf, equipped with toolless sliding rails.
Mac Mini Shelf - 4x

The Mac Mini Shelf fits 4 Mac Mini devices in a 1U space, equipped with toolless sliding rails.

Mac Mini Shelf - 8x

The Mac Mini Shelf fits 8 Mac Mini devices in a 5U space, equipped with sliding rails.

Mac Mini Shelf - 16x

The Mac Mini Shelf fits 16 Mac Mini devices in a 5U space, equipped with toolless sliding rails.
Mobile Shelf

The Mobile Shelf fits 57 mobile devices per shelf, equipped with toolless sliding rails.

Mobile Shelf w/ Device Holder

The Mobile Shelf w/ Device Holder fits 36 mobile or tablet devices, equipped with toolless sliding rails.

Flat Sliding Shelf

ECX-G118R-R3-K

The Flat Sliding Shelf Provides a flat surface to place devices for real device testing application, equipped with toolless sliding rails.
High-quality solutions at the right price.

The best choice for your next project, build-out, order, or custom product.

Enconnex designs, manufactures, and supplies high-quality IT infrastructure products sold at a reasonable price. Our product lines cover the core components of data center infrastructure, including server racks and cabinets, network cabling, containment, PDUs, UPSs, power cords, and edge computing solutions. Our volume buying for global companies allows us to pass savings along to you.

Contact us today. We think you’ll be pleasantly surprised.