

# Modular Enclosure Solutions

RACK IQ<sup>™</sup> - ENTERPRISE & HYPERSCALE DATA CENTER CABINETS





## SANMINA'S MODULAR ENCLOSURE SOLUTIONS

Sanmina is a global market leader in enclosures for electronic systems. We build enclosures for a variety of end markets, partnering with you from initial concept through integration and final system assembly. We offer unrivaled enclosure manufacturing capabilities and the capacity to deliver proven, tested enclosure solutions of any size anywhere in the world. Our operational excellence is unrivaled in each of our state of-the-art facilities worldwide.

## HOW DOES MODULARITY CREATE VALUE?

pre-engineered building blocks to simplify the development process. Our Mechanical Systems Division created by Sanmina. Sanmina gives customers "out of the box" engineering options for innovative product

## SOLUTIONS FOR YOUR NEEDS

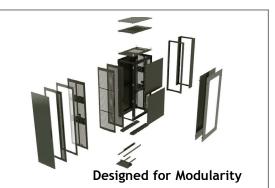
- Intelligent high-density power
- Scalable high-density cooling
- Pre-terminated fiber and copper trunks
- System monitoring and control
- Rack mounted digital storage arrays

Hot/cold air containment solutions		
Cabinet Size range	<ul> <li>Height: 20U to 48U</li> <li>Width: 24", 28" &amp; 32"</li> <li>Depth: 24" to 47"</li> </ul>	
Features	<ul> <li>Open frame design</li> <li>RoHS compliant</li> <li>Repeating 25mm hole pattern for flexibility</li> <li>Fully welded corner</li> <li>Lifting eyes attach to frame weldment for strength</li> <li>Leveling feet attach to frame weldment for strength</li> <li>Painted with rugged powder paint finish</li> <li>Material: 1.5mm pre-zinc plated cold roll steel</li> </ul>	
Door Options	<ul> <li>Solid</li> <li>Perforated</li> <li>Split</li> <li>Viewing</li> </ul>	
Door Handle and Lock Options	• Two-point handle • Four-point handle	
Sides	<ul> <li>Lock and screw-on options</li> <li>Single side</li> <li>Split side on deep cabinets</li> </ul>	
19" Mounting Rail Options	<ul><li>Depth adjustable 19" rails</li><li>Cage nut/square hole</li></ul>	



Back

Front



Power	<ul><li> Zero U mounting</li><li> Basic</li><li> Intelligent</li><li> Switched</li></ul>
Cooling	<ul><li>Fan solutions</li><li>In Row Liquid Cooling</li></ul>
Castors	<ul> <li>Standard casters are rated to a 2,600 lb weight load static</li> <li>Heavy Duty casters are rated to a 3,500 lb weight load dynamic</li> <li>Two Swivel and Two fixed is standard</li> </ul>
Options	<ul> <li>Cable management solutions</li> <li>Design to accept market available cable management</li> <li>Baying solution</li> </ul>
Roof	<ul> <li>Vented roof - available</li> <li>Cable access</li> <li>Bolt on standard</li> <li>Lockable roof - available</li> </ul>
Weight Loads	<ul> <li>Tested to 14,000 lbs static</li> <li>Certified to 3,500 lb static using UL times load</li> <li>Tested to 2,600 lbs dynamic</li> </ul>
Certifications	<ul><li>UL</li><li>WEEE and RoHs compliant</li></ul>

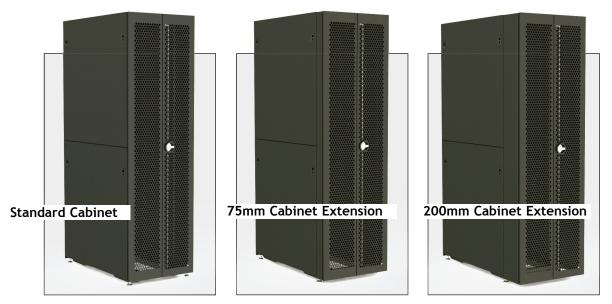
• Optional Punch and tapped rails

SUPPLY CHAIN & MANUFACTURING FULFILLMENT & REPAIR SERVICES



## SANMINA'S MODULAR ENCLOSURE SOLUTIONS CABINET OPTIONS

Sanmina's Modular Enclosure Solutions provides a standard door configuration with a perforated front doors and a split flat perforated rear door that allows for maximum air movement around equipment. The standard door configuration or split-door option offers threepoint, low-profile, locking swing doors. Its rugged locking handle provides custom keying configurations for maximum security.



## FREESTANDING FRAME DESIGN

#### Frame features:

- Static load rating: tested to 14,000 lbs
- Static UL load rated to 3,500 lbs
- Dynamic load tested on casters to 2,600 lbs
- RoHS compliant
- Repeating 25mm hole pattern for flexibility
- Fully welded corner weldments
- Lifting eyes attach to frame weldment for strength
- Leveling feet attaches to frame weldment for strength
- Zinc plated material painted with rugged powder paint finish
- Material: 2.5mm pre-zinc plated cold roll steel

## CABINET EXTENSION AND INSTALLING CABLES

#### Door features:

- Split rear door
- 83% open
- Rugged locking handle
- Two-point latch system
- Three-point hinge system
- M8 ground stud
- Door bumpers
- Grounding stud
- Material: 2.0mm CRS

#### **Extender features:**

- 75mm and 200mm depths
- Additional cable storage
- Removable cross mullion for lay in cable design
- Top and bottom cable access
- Bolt on design







## SANMINA'S MODULAR ENCLOSURE SOLUTIONS DOOR DESIGN AND CONFIGURATION

Sanmina's modular enclosures server environment offers flexibility, strength and stability in its design and configuration. The split side walls allow for ease of removal and easy access. The user has the option of either the standard perforated roof with internal mounting features or the optional roof with external lock mounting feature. The cabinet roof offers two 5-inch holes in the front and one adjustable rear cable access allowing for easy cable routing.

## STANDARD DOOR AND OPTIONAL CURVED DOOR

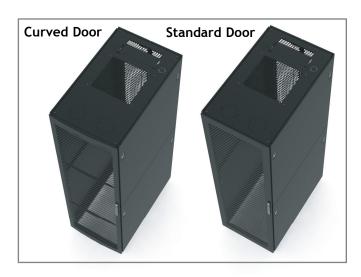
#### Door features:

- Perforated front door
- 83% open
- Rugged locking handle
- Two-point latch system
- Three-point hinge system
- Reversible door by removing hinge pin
- M8 ground stud
- Door bumpers
- Material : 1.5mm cold rolled steel

## **REAR DOOR MOUNTED FANS**

#### Fan features:

- Vertically adjustable on rear door
- Voltage: 120v and 230v
- CFM: 120 free flow per fan tray
- Tooless installation
- Fan noise level: 30db





## **DOOR HANDLES**

#### Front door handle features:

- Keyed lock
- Low profile
- Pop-out handle design
- Two or four point engagement
- Custom keying configuration



## SPLIT REAR DOOR

#### Door features:

- Split rear door
- 83% open
- Rugged locking handle
- Three point latch system
- Three point hinge system
- Ground stud
- Door bumpers
- M8 grounding stud
- Fan tray mounting features
- Material: 1.5mm CRS





## SANMINA'S MODULAR ENCLOSURE SOLUTIONS SPLIT SIDE WALLS, ROOF DESIGN AND CONFIGURATION

Sanmina's modular enclosures server environment offers flexibility, strength and stability in its design and configuration. The split side walls allow for ease of removal and easy access. The user has the option of either the standard perforated roof with internal mounting features or the optional roof with external lock mounting feature. The cabinet roof offers two 5-inch holes in the front and one adjustable rear cable access allowing for easy cable routing.



## **SIDE WALL**

Side wall features:

- Split side walls for ease of removal
- Lockable side wall catches
- 8mm ground studs
- Side wall bumpers
- Material:1.0mm CRS

## ROOF

#### Roof features:

- Two 5" cable access holes in the front
- Internal installation brackets for security
- Roof bumpers
- One adjustable rear cable access
- M8 ground studs
- Material: 1.0mm CRS





## SANMINA'S MODULAR ENCLOSURE SOLUTIONS CABINET FLOOR DESIGN AND CONFIGURATION

Sanmina's standard enclosure has an open floor configuration allowing for easy cable access. The cabinet has a full length caster bracket design for added strength with options of four, six or eight heavy duty casters providing more movement flexibility.

## **FLOOR FEATURES:**

Open floor for cable access. Caster options offer strength and flexibility.

## CASTERS

Caster features:

- Full-length caster bracket design for added strength
- 6 caster option for increased weight loads
- Heavy duty casters
- 4 caster solution standard
- Two fixed and two swivel
- Heavy duty caster bracket





Heavy Duty Caster Frame



Medium Duty Caster Frame



## SANMINA'S MODULAR ENCLOSURE SOLUTIONS EIA RAILS FOR SUPPORT AND FLEXIBILITY

Sanmina delivers support and flexibility with its modular enclosure EIA rails. The 19" EIA rails are designed for strength with 25mm hole spacing for flexibility and adjustability. The rails are easily added for simplified equipment installation providing a versatile cabinet enclosure.

## **19" EIA RAILS**

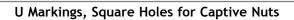
Rail features:

- Four 19" rails on standard configuration
- Square holes for captive nuts
- Captive nuts available in M6 thread
- U markings for simplified equipment installation
- Load tested to 14,000 lb on a set of four rails
- Zero U mounting features
- Material: 2.5mm CRS



Zero U Mounting Space







#### ABOUT SANMINA CORPORATION

Sanmina Corporation is a leading integrated manufacturing solutions provider serving the fastest-growing segments of the global Electronics Manufacturing Services (EMS) market. Recognized as a technology leader, Sanmina provides end-to-end manufacturing solutions, delivering superior quality and support to Original Equipment Manufacturers (OEMs) primarily in the medical, communications networks, defense and aerospace, industrial and semiconductor systems, multimedia, computing and storage, automotive and clean technology sectors. Sanmina has facilities strategically located in key regions throughout the world.

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