

Rack Selection Guide for NetShelter SX



Choosing the right rack based on application and equipment type



Click here to download the new White Paper #201: "How to Choose an IT Rack"

Rack Selection Guide for NetShelter SX

1U servers

Typical Rack

- 42-84 power cords
- 42-168 data cables
 - 1900-2200lbs loaded (860 – 1000kg)
- 9-16kW per rack

Common Servers

- Cisco UCS® C200,
 - Dell® PowerEdge™ R310, R620
- HP® ProLiant DL320e, DL160
- IBM® System x™ 3550



Deeper for cabling
-More space for data and power cable management

Extra positions for additional Rack PDUs
-Install up to 4 vertical Rack PDUs



AR3300
Deep Rack

AR3300G
Now available in grey!

Cabling space for 1U servers

More servers means more outlets and more data cables that need to be managed.

Deep racks like the AR3300 allow space for additional rPDUs and plenty of Cat-5 or Cat-6 data cabling.

About this model

- Width: 23.6" (600mm)
- Depth: 47.25" (1200mm)
- Height: 42U - 78.4" (1991mm)
- Weight Cap.: 3000lbs (1360kg)
- Availability: Usually in stock

Rack

Cable Management Selection Guide for NetShelter SX

1U servers

Typical Rack

- 42-84 power cords
- 42-168 data cables
- Mixed copper and fiber data
- 9-16kW per rack

Common Servers

- Cisco UCS® C200,
- Dell® PowerEdge™ R310, R620
- HP® ProLiant DL320e, DL160
- IBM® System x™ 3550



Low profile

-Maximum clearance for equipment access

Cable management at every rack U space

-Provide secure routing exactly where needed



AR7721

Vertical Cable Manager

Cable capacity for 1U servers

More servers means more outlets and more data cables that need to be managed.

Low profile cable managers like the AR7721 offer cable guides at every rack U space without interfering with the 19" equipment mounting space.

About this model

- Rack U Span: 42U
- No Equipment Clearance Impact
- Compatible Racks: AR3100, AR3300
- Cable Capacity: 49 Cat6a, 251 fiber
- Availability: Usually in stock

Rack Selection Guide for NetShelter SX

2U – 4U Servers

Typical Rack

- 21-42 power cords
- 21-84 data cables
 - 750-1200 lbs loaded (340-544kg)
- 4-10kW per rack

Common Servers

- Cisco UCS® C23, C240
 - Dell® PowerEdge™ 2950, R720, R900
 - HP® ProLiant DL380, DL560, DL580
- IBM® System x™ 3755, 3650, 3550



Mount Rack PDUs Toollessly

- Dedicated vertical Rack PDUs mounting area

Pre-installed accessory channel

- Easy accessory integration



AR3100G
Now available
in grey!

AR3100
Standard Rack

Right sized for 2U-4U servers

Taller servers have fewer data and power cords, so less space is needed for cable management.

The AR3100 maximizes use of data center floor space and still accommodates a rack full of 2U-4U 19" servers, data and power cables.

About this model

- Width: 23.6" (600mm)
- Depth: 42.1" (1070mm)
- Height: 42U - 78.4" (1991mm)
- Weight Cap.: 3000lbs (1360kg)
- Availability: Usually in stock

Cable Management Selection Guide for NetShelter SX

2U – 4U Servers

Typical Rack

- 21-42 power cords
- 21-84 data cables
- Copper connections
 - 4-10kW per rack

Common Servers

- Cisco UCS® C23, C240
- Dell® PowerEdge™ 2950, R720, R900
- HP® ProLiant DL380, DL560, DL580
- IBM® System x™ 3755, 3650, 3550

Sturdy cable protection

- Steel rings provide stiffness to prevent accidents



Toolless mounting

- Fits in Zero U accessory channel for easy install

Organize power or data

- Rings allow any type of cable to be installed or removed quickly



AR8442

Ring Cable Organizer

Organizes and protects cables

Cable rings allow easy installation for both power and data cabling, and provide quick access and traceability during equipment refresh cycles. Its low profile helps ensure that equipment is visible and accessible.

Up to 55 Cat6a data cables can be managed and protected with the AR8442.

About this model

- Rack U Span: 21U
- Compatible Racks: All
- Cable Capacity: 30 Cat6a
- Availability: Usually in stock

Rack Selection Guide for NetShelter SX

Blade Servers

Typical Rack

- 16-32 power cords
- 24-48 data cables
 - 1500-2000 lbs loaded (680-900kg)
- 17-30kW per rack

Common Chassis

- Cisco UCS® 5100 series
 - Dell® PowerEdge™ M1000e
- HP® BLc3000, BLc7000
 - IBM® BladeCenter™ series



Dedicated cabling area

-Keep the cabling organized

Full equipment access

-Unobstructed hot-swap component access



AR3150
Wide Rack

AR3180G
Now available
in grey 800m W!

Clearance for blade servers

It is very difficult to route power and data cables and still have clearance to remove all the hot-swappable components from a blade chassis. Wide racks like the AR3150 provide space on either side of the chassis for full hot-swap component access.

About this model

- Width: 29.5" (750mm)
- Depth: 42.1" (1070mm)
- Height: 42U - 78.4" (1991mm)
- Weight Cap.: 3000lbs (1360kg)
- Availability: Usually in stock

Rack

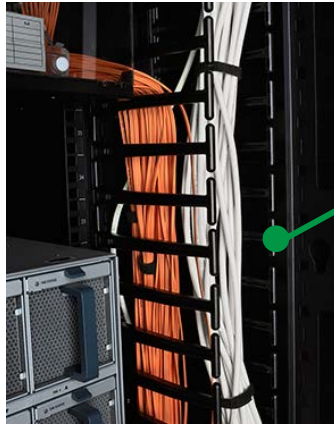
Cable Management Selection Guide for NetShelter SX Blade Servers

Typical Rack

- 16-32 power cords
- 24-48 data cables
 - Multiple fiber connection
 - Rear cable management

Common Chassis

- Cisco UCS® 5100 series
 - Dell® PowerEdge™ M1000e
- HP® BLc3000, BLc7000
 - IBM® BladeCenter™ series



6" cable guides

- Allow more cabling per U space
- Bend radius protects fiber

Hinged covers

- Conceal vertical cable routing



AR7580A & AR7581A

Vertical Cable Manager and Covers

Organizes and protects cables

Up to 1271 fiber or 190 Cat6a data cables can be managed with the AR7580A, and cables can be secured in 1U increments.

This low profile cable manager secures all cabling outside the 19" rack-mounting space and maximizes access for hot-swappable components in blade chassis.

About this cable manager

- Rack U Span: 42U
- No Equipment Clearance Impact
- Compatible Racks: AR3150, AR3350
- Cable Capacity: 1271 fiber, 190 Cat6a
- Availability: Usually in stock

Rack Selection Guide for NetShelter SX

Network Switches

Typical Rack

- 2-4 switches
- 4-12 power cords
 - 400-800 data cables
- 600-900 lbs loaded (270-400kg)
- 6-10kW per rack

Common Switches

- Cisco Catalyst® 6509*, MDS 9513*
- Juniper® EX6200, EX8200, EX9200

*These models require sAR7715 duct kit due to side-to-side air flow



Pre-configured for maximum cabling

-Dedicated channel & cable manager at every U-space

Accommodates side-to-side cooling

-Vented rails guide airflow where needed



AR3140
Networking Rack



AR3140G
Now available in grey!

Preconfigured for networking

Since switches typically mean lots of data cable, the AR3140 has space on either side and pre-installed cable managers specifically for routing cable.

Additionally, the rails are recessed to allow cable clearance at the front of the rack and designed for equipment with side-to-side airflow.

About this model

- Width: 29.5" (750mm)
- Depth: 42.1" (1070mm)
- Height: 42U - 78.4" (1991mm)
- Weight Cap.: 3000lbs (1360kg)
- Availability: Usually in stock

Cable Management Selection Guide for NetShelter SX

Network Switches

Typical Rack

- 2-4 switches
- 4-12 power cords
- 400-800 data cables
- Multiple fiber and copper connections
- Front vertical cable management pre-installed

Common Switches

- Cisco Catalyst® 6509, MDS 9513
- Juniper® EX6200, EX8200, EX9200



Rear pass-through

-Brush strips allow cable access to rear of rack while preventing air recirculation



Hinged cover

-Organize and protect cables while still providing access



AR8603A
High Density
Horizontal Cable
Manager

Manage high density cabling

Since switches typically mean lots of data cable, the AR8603A helps to distribute cable loads to both sides of the rack as well as from front to rear while keeping a clean and organized layout within the rack.

About this model

- Rack U Span: 2U
- No Equipment Clearance Impact
- Compatible Racks: All
- Cable Capacity: 916 fiber, 137 Cat6a
- Availability: Usually in stock

Rack Selection Guide for NetShelter SX

Deep Network Switches

Typical Rack

- 6-10 power cords
- 600-1200 data cables
- 800-1400 lbs loaded (360-635kg)
- 15-25kW per rack

Common Switches

- Cisco Nexus® 7010, 7018*
- Huawei® CloudEngine™ 12800

* This model requires AR7742 duct kit due to side to side air flow

Accommodates side-to-side cooling

-Vented rails guide airflow where needed

Deepest switch clearance

-Plenty of space for switch & cabling

Pre-configured for maximum cabling

-Dedicated channel & cable manager at every U-space



AR3340G
Now available in grey!

AR3340
Deep Networking Rack

Preconfigured for networking

Deeper racks are required to house the deepest switches and the accompanying cabling.

Since switches typically mean lots of data cable, the AR3340 has space on either side and pre-installed cable managers specifically for routing cable.

About this model

- Width: 29.5" (750mm)
- Depth: 47.25" (1200mm)
- Height: 42U - 78.4" (1991mm)
- Weight Cap.: 3000lbs (1360kg)
- Availability: Usually in stock

Rack

Cable Management Selection Guide for NetShelter SX

Deep Network Switches

Typical Rack

- 6-10 power cords
- 600-1200 data cables
- Multiple fiber connections
- 15-25kW per rack

Common Switches

- Cisco Nexus® 7010, 7018
- Huawei® CloudEngine™ 12800



Rear pass-through

- Brushes allow rear access and prevent air recirculation



Hinged cover

- Hide, organize and protect data cabling



AR8605

High Density
Horizontal Cable
Manager

Manage high density cabling

Since switches typically mean lots of data cable, the AR8605 helps to distribute cable loads to both sides of the rack as well as from front to rear while keeping a clean and organized layout within the rack.

About this model

- Rack U Span: 3U
- No Equipment Clearance Impact
- Compatible Racks: All
- Cable Capacity: 1259 fiber, 189 Cat6a
- Availability: Usually in stock

Rack Selection Guide for NetShelter SX

Network Storage

Typical Rack

- 21-42 power cords
- 21-84 fiber cables
 - 800-1400 lbs loaded (360-635kg)
- 4-8kW per rack

Common Storage

- EMC® VNX series
 - Oracle® Sun Storage 2500
- Seagate® STDN series



Mount rack PDUs toollessly

- Dedicated vertical rack PDUs mounting area

Conserve floor space

- Standard rack width & depth for smallest footprint



AR3100G
Now available in grey!

AR3100
Standard Rack

The right size for network storage

Typical storage devices don't require much space for cable density and can be supported by one set of Rack PDUs.

The AR3100 is the perfect rack to house this equipment comfortably without wasting space.

About this model

- Width: 23.6" (600mm)
- Depth: 42.1" (1070mm)
- Height: 42U - 78.4" (1991mm)
- Weight Cap.: 3000lbs (1360kg)
- Availability: Usually in stock

Rack

Cable Management Selection Guide for NetShelter SX

Network Storage

Typical Rack

- 21-42 power cords
- 21-84 fiber cables
 - Multiple fiber connections
- 4-8kW per rack

Common Storage

- EMC® VNX series
 - Oracle® Sun Storage 2500
- Seagate® STDN series



Promote proper bend radius for fiber

-Mitigate cable kinking



Eliminate fiber slack

-Move fiber spools to any position to dress fiber runs



AR8443A & **AR8654**
Fiber Organizer & Cable Fall

Protection for fiber cabling

Typical storage devices don't require much space for cable density but they usually need special consideration for the delicate fiber transferring data.

The AR8443A and AR8654 organize fiber and protect it from kinks and other damage.

About this model

- Rack U Span: 42U
- Compatible Racks: All
- Cable Capacity: 288 fiber
- Availability: Usually in stock

Rack Selection Guide for NetShelter SX

Converged IT Infrastructure

Typical Rack

- 21-42 power cords
- 21-84 data cables
 - 1000-1500 lbs loaded (450-680kg)
- 6-8kW per rack

Common Infrastructure

- 6U -10U switch
- Up to 20 servers
- 1-2 blade chassis
- Network storage



Multiple equipment types

-Flexible rack for multiple equipment types in one rack

Easy cable routing and full equipment access

-Dedicated side space for
1) front to back cable routing
2) unobstructed access to server hot swap components



Server



Network



Storage



AR3150
Wide Rack



AR3180G
Now available in grey 800m W!

Access for converged IT

Mixing servers, switches and storage demands a flexible rack space for front-to-rear cable routing and hot-swap component clearance.

The AR3150 provides generous space for data and power distribution while still providing full front and rear equipment access.

About this model

- Width: 29.5" (750mm)
- Depth: 42.1" (1070mm)
- Height: 42U - 78.4" (1991mm)
- Weight Cap.: 3000lbs (1360kg)
- Availability: Usually in stock

Rack

Cable Management Selection Guide for NetShelter SX

Converged IT Infrastructure

Typical Rack

- 21-42 power cords
- 21-84 data cables
- Mixed copper and fiber
- 6-8kW per rack

Common Infrastructure

- 6U -10U switch
- Up to 20 servers
- 1-2 blade chassis
- Network storage

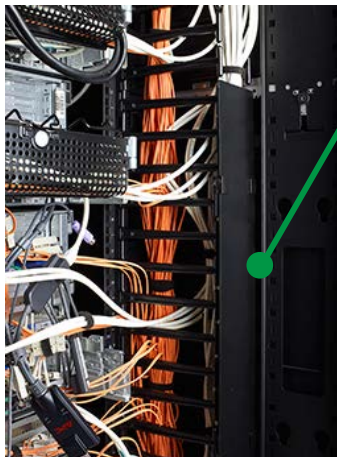


Front to back access

-Brush strips allow for convenient routing from switches to servers

Hinged covers

-Conceal vertical cable routing



AR8429
Horizontal
Organizer

AR7580A
& **AR7581A**
Vertical Cable
Manager & Covers

Converged IT cable management

Mixing servers and switches demands flexibility for front-to-rear cable routing. The AR8429 provides this access and is covered by brush strips to prevent air mixing.

The AR7580A secures cabling outside the 19" aisle full access for hot-swappable components in blade chassis.

About this model

- Rack U Span: 42U
- No Equipment Clearance Impact
- Compatible Racks: AR3150, AR3350
- Cable Capacity: 1271 fiber, 190 Cat6a
- Availability: Usually in stock

Rack Selection Guide for NetShelter SX

23" Telecommunications

Typical Rack

- 24-64 power cords
- 40-200 data cables
 - 700-1000 lbs loaded (310-450kg)
- 2-6kW per rack

Common Applications

- Power distribution
- Distributed antenna systems (DAS)
 - Network transmission



Right fit for telecom
-Rail kit provides 23" EIA equipment mounting

Dedicated cabling area
-Keep the cabling organized



AR3150 & **AR7510**
Wide Rack & 23" Rail Kit

Room for telecom mounting

The 23" mounting width common with equipment for telecommunications requires a wide rack.

The AR3150 provides generous space on both sides for data and power distribution while still providing full front and rear access to equipment.

About this model

- Width: 29.5" (750mm)
- Depth: 42.1" (1070mm)
- Height: 42U - 78.4" (1991mm)
- Weight Cap.: 3000lbs (1360kg)
- Availability: Usually in stock

Cable Management Selection Guide for NetShelter SX

23" Telecommunications

Typical Rack

- 24-64 power cords
- 40-200 data cables
- Mixed copper and fiber data
- 2-6kW per rack

Common Applications

- Power distribution
- Distributed antenna systems (DAS)
 - Network transmission

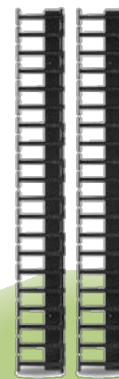


Low profile

- Maximum clearance for equipment access

Cable management at every rack U space

- Provide secure routing exactly where needed



AR7721

Vertical Cable Manager

Room for telecom mounting

Secure and protect both copper and fiber data cabling at every U space. The AR7721 promotes the proper bend radius for fiber and prevents cabling from obstructing access to equipment installed in the rack.

About this model

- Rack U Span: 42U
- No Equipment Clearance Impact
- Compatible Racks: AR3150, AR3350
- Cable Capacity: 38 Cat6a, 251 fiber
- Availability: Usually in stock