# **Enclosure and rack systems**



APC by Schneider Electric NetShelter enclosures, open frame racks, and related products provide a complete solution to meet the challenges facing server and networking applications in every environment.

- Best-in-class NetShelter enclosures offer the most standard features to facilitate installation and speed of deployment, integrating seamlessly with the full line of Schneider Electric InfraStruxure components.
- Rack PDUs, jointly designed with NetShelter enclosures, enable pinpoint control and monitoring of rack level power.
- Rack accessories provide superior cable management capabilities for high-density networking and blade applications.



### APC by Schneider Electric enclosure and rack systems

Today's high-density server and networking applications demand a rack infrastructure that can mount a mix of different equipment and support high-capacity cable management in an efficient, flexible design.

#### Racks and enclosures: the building blocks of every IT environment

Trends like virtualization, consolidation, convergence, and blade server adoption are forcing different types of equipment to share the same space. Today's high-density devices generate tremendous amounts of heat. Rapidly changing business conditions require the IT environment to adapt and adjust faster than ever, and the imperative of uninterrupted uptime now has the corollary demand of efficiency.

Whether it's a network closet, a server room, or a data center of any size, IT operations rely on racks and enclosures for support, organization, and management of the rack-mount equipment. Servers, storage, switches, routers, power distribution units, console port servers, KVM switches – today's racks and enclosures are expected to support a greater number and greater variety of applications and devices.



Check out White Paper #72: "Five Basic Steps for Efficient Space Organization within High Density Enclosures."

www.apc.com/wp?wp=72

## Table of contents

| NetShelter selection                          | Page 4  |
|---|---------|
| NetShelter cable management                   | Page 8  |
| Shelves and mounting hardware                 | Page 13 |
| Rack components                               | Page 14 |
| Open frame racks                              | Page 15 |
| NetShelter CX enclosure                       | Page 16 |
| Specialty enclosures                          | Page 17 |
| Rack cooling and airflow management           | Page 18 |
| Rack power distribution                       | Page 19 |
| Server access                                 | Page 20 |
| NetBotz security and environmental monitoring | Page 21 |
| Online resources and more                     | Page 28 |



### NetShelter SX applications and selection

### World's most versatile rack enclosure for demanding IT environments

Ready for high-density environments right out of the box, NetShelter<sup>™</sup> SX rack enclosures offer the most standard features on the market today. Influenced by 10 years of customer feedback, APC<sup>™</sup> by Schneider Electric<sup>™</sup> has specifically engineered the next-generation NetShelter SX enclosure to handle today's power-hungry high-density server and networking applications.

APC NetShelter SX is the base building block of the InfraStruxure<sup>™</sup> system. NetShelter SX has many inherent features that facilitate a faster installation and reduced handling after installation, lowering your installation and operating costs. In addition, the homogenous appearance of the NetShelter SX and its sister components in an InfraStruxure solution provides a clean, consistent look that every first rate data center requires.

### Features

### **Best-in-class design**

Offers most standard features to facilitate installation and speed of deployment

Guarantees compatibility with all EIA standard 19 in. rack-mount equipment — or your money back

Integrates seamlessly with full line of APC InfraStruxure components

#### Greatest flexibility

Available in 24U, 42U, and 48U heights; 600 mm (24 in.) and 750 mm (30 in.) widths; and 1,070 mm (42 in.) and 1,200 mm (47.5 in.) depths

Easily adjustable vertical mounting rails for equipment varying in depth

Rapid installation of vertical Rack PDUs in the rear vertical zero-U accessory channel of NetShelter enclosures

#### Superior cable management capabilities

Accommodate high-density networking and blade applications

Easy installation to enable faster and easier moves, adds, and changes

Promote proper airflow to improve cooling efficiency

## Rack enclosure solutions for networking applications: high-capacity cable management

Today's high-density networking applications demand a rack enclosure system that can meet the challenge of increasingly complex and dense cabling. With today's rack enclosures packed to capacity with a mix of servers, storage, and networking equipment, superior cable management is an absolute imperative.

Specific considerations facing network managers: Is there sufficient room to properly route cabling? How to keep hundreds of data cables protected and organized? Can a huge number of cable bundles be installed and changed quickly and easily? Is cable density obstructing airflow and diminishing efficiency?

APC networking rack enclosure systems provide exactly the kind of high-capacity cable management needed to keep cable density under control.

## Rack enclosure systems for server applications: high-efficiency high-density

Servers are the lifeblood of any organization's IT operations. But keeping today's high-density servers up and running — keeping that lifeblood pumping — has become more challenging than ever. Current trends such as virtualization, consolidation, and adoption of blade servers mean more devices, more power, and more heat packed into each individual enclosure. And that means more cable clutter blocking proper airflow, more hot air recirculation concerns, and more cold air leakage, leading to more inefficiency.

APC server enclosure systems have been preengineered as an optimized system to provide proper front-to-back airflow to prevent hot air recirculation and promote efficient cable management that permits quick and easy installation of new options as servers change.





### Applications for height

24U Enclosures - Remote offices and small spaces

42U Enclosures - Standard height used globally, designed to fit through standard doorways

48U Enclosures - More U-spaces for more equipment in the same footprint



### Applications for depth

1,070 mm (42 in.) is the standard depth and meets most low to medium density applications

The 1,200 mm (47.5 in.) NetShelter has double the toolless mounting locations for more Rack PDU and cable management options (excluding AR3x4x enclosures)

The 1,195 – 1,220 mm (47 – 48 in.) depth enclosures are becoming the new standard because of increasing server depth crowding cable and power space

### Applications for width

600 mm (24 in.) wide enclosures are the standard for most server applications. For higher densities a deeper enclosure may be required

750 mm (30 in.) wide enclosures offer more space for high-capacity cable management and power distribution. Typically wider enclosures are used for networking applications but the extra side space is often requested in blade sever applications





| NetShelter SKU | Height | Width  | Depth    | Application                          |
|----------------|--------|--------|----------|--------------------------------------|
| AR3100*        | 420    | 600 mm | 1,070 mm | Low-medium density servers           |
| AR3107*        | 48U    | 600 mm | 1,070 mm | Low-medium density servers           |
| AR3150*        | 42U    | 750 mm | 1,070 mm | Networking and blade applications    |
| AR3157*        | 48U    | 750 mm | 1,070 mm | Networking and blade applications    |
| AR3300*        | 42U    | 600 mm | 1,200 mm | Medium-high density servers          |
| AR3307*        | 48U    | 600 mm | 1,200 mm | Medium-high density servers          |
| AR3350*        | 42U    | 750 mm | 1,200 mm | HD networking and blade applications |
| AR3357*        | 48U    | 750 mm | 1,200 mm | Networking and blade applications    |
| AR3140         | 42U    | 750 mm | 1,070 mm | High-density networking              |
| AR3340         | 42U    | 750 mm | 1,200 mm | Very high-density networking         |
| AR3347         | 48U    | 750 mm | 1,200 mm | Very high-density networking         |
| AR3200         | 420    | 600 mm | 1,070 mm | 2 x 20U compartments for colocation  |
| AR3104         | 24U    | 600 mm | 1,070 mm | Remote server applications           |

\* Enclosures available in x-options without sides panels (X609), without doors (X610), or without side panels/doors (X617). Product information available on the Specialty Enclosures product family page on www.apc.com

### NetShelter SX enclosure features

### More standard features for faster installation

### 1 Cable access roof

- Eight cable entry slots
- Toolless mounting of overhead cable trough system



 Snap-in mounting to allow easy roof removal and installation with cables in place

### 2 Integrated baying brackets

- Pre-installed on frame front and back
- Spacing options at 600 mm (24 in.)
- Bays with other APC power and cooling products

### **3** Pre-installed leveling feet and castors

- Easily adjustable leveling from top down
- Castors standard on all enclosures

## 4 Toolless, zero-U accessory channel

 Toollessly mount Rack PDUs



 Toollessly mount vertical cable organizers

## Easily adjustable vertical mounting rails

- Simple screw and cam engagement
- Captive screws no loose hardware
- Easy visual alignment for quick adjustment
- Adjust in 6 mm (0.25 in.) increments through enclosure
- Hole cutouts for 0U installation (AR8469) of APC Data Distribution Cable (DDC) accessories

## 6 Half-height side panels

- Easy and safe handling
- Quick release latch
- Lockable same key as doors
- Enclosure width remains the same with or without sides attached





### Other standard features include:

- Integrated electrical bonding of sides, doors, roof, and rails to frame
- Ventilated front and rear doors
- Split-rear ventilated rear doors for better clearance in hot aisle
- Numbered U positions front and back
- Open bottom for unobstructed under floor access
- 1,365 kg (3,000 lb.) static (levelling feet) load, 1,025 kg (2,250 lb.) dynamic (castor) load
- UL Listed
- 482.6 mm (19 in.) rack-mount standard compliant

### NetShelter SX networking enclosure

Optimized NetShelter SX design for enhanced networking application support and a superior solution for side airflow Cisco Nexus<sup>®</sup> 7018, Catalyst<sup>®</sup>, and MDS networking switches

### Cable access roof

- Extra-large cable access slots for high-density cabling and brush strips for air containment
- Two spring-loaded pins allow for easy roof removal and installation with cables in place

### Networking-style mounting rails

- Easily align rails that adjust in 6 mm (0.25 in.) increments
- Left vertical mounting rail contains additional cable channel
- Rail position preset to accommodate Cisco switches and cable management

### Pre-installed vertical cable managers

- Front vertical mounting rails feature pre-installed single-sided vertical cable managers
- Smooth plastic fingers provide proper bend radius for cables

### Vertical mounting rails for side-to-side airflow

 Front right vertical mounting rail open for improved side airflow









AR3140 - 42U x 750 mm W x 1,070 mm D AR3340 - 42U x 750 mm W x 1,200 mm D AR3347 - 48U x 750 mm W x 1,200 mm D

### Side airflow cooling

Support cooling for small and large networking switches mounted within an enclosure

- Side airflow solution (AR7742/AR7747) for Cisco Nexus 7018
- Side airflow duct kit (AR7715) mounts inside 750 mm (30 in.) wide enclosures for Cisco 6500 and 9500 series switches

### **Both solutions:**

- Directs cool air at the front of the enclosure directly and predictably to the intake at the side of side airflow switches
- Consists of two duct assemblies that act as diverters, utilizing the existing fan power of the switch
- Systems of baffles are located throughout the enclosure to mitigate exhaust air from recirculating back into the air intake



AR3340 Networking enclosure and AR7742 side airflow solution for Nexus 7018



AR3140 Networking enclosure and AR7715 internal side airflow duct kit for Catalyst and MDS

### NetShelter SX cable management

### Server and networking applications

As the number of IT components within each rack enclosure continues to increase, so do the number of power and data cables. APC by Schneider Electric offers a large selection of vertical and horizontal cable managers to address today's cable routing demands. From toolless-install ring-style managers for server applications to high-density finger-type managers for supporting patching and switches, APC by Schneider Electric is a leader in innovative, application-driven solutions. Our unique overhead cable management system turns the top of the enclosure into a cable tray, eliminating the need to use space under a raised floor and permitting better organization in non-raised floor environments.

APC by Schneider Electric has a strong history supporting the server applications in data centers around the world. The innovative, toolless, snap-in accessories have become the benchmark for server cable management.



Check out Application Note #137 – "NetShelter SX Cable Management Guidelines." www.apc.com/wp?an=137





High-capacity cable managers can be used to support fiber and copper cable bundles.

AR7580 - High-capacity vertical cable manager for NetShelter SX 750 mm (30 in.) wide enclosures (AR3x5x), supports 190 to 250 CAT 6A/CAT 6 data cables per section. 190 CAT 6A (.25 in. – .30 in.) per channel section. Each kit covers one corner of the enclosure



Hinged covers for AR7580 vertical cable managers

Fiber slack spools for mounting to the vertical mounting rails of NetShelter SX 750 mm (30 in.) wide enclosures (AR3x5x)



AR3150 with wide vertical mounting rails shown



AR3 750 mm (30 in.) enclosure with closed vertical mounting rails for server applications

### **NetShelter VL Enclosures**



#### Available in Various Sizes

- AR2900 42U 600 mm Wide x 1,070 mm Deep with Side Panels
- AR2901 42U 600 mm Wide x 1,070 mm Deep without Side Panels

### NetShelter VL Enclosure Options and Replacement Components

| APC SKU Number  | Description  |
|-----------------|--|
| Options         |  |
| AR7501          | NetShelter VL Vertical OU Accessory Channel 42U, qty. 2  |
| AR7719          | NetShelter VL Swivel Castor Kit, qty. 4                  |
| Replacement Com | ponents  |
| AR7302          | NetShelter VL 42U 1,070 mm Deep Split Side Panel, qty. 2 |
| AR7002          | NetShelter VL 42U 600 mm Wide Perforated Flat Door       |
| AR7102          | NetShelter VL 42U 600 mm Wide Perforated Split Doors     |
| AR7222          | NetShelter VL 600 mm Wide x 1,070 mm Deep Standard Roof  |

\* Reference the NetShelter enclosure and rack accessory compatibility chart on page 22 for a complete list.

## Cost-effective IT enclosures with basic functionality and features

The APC NetShelter VL is the enclosure you have become familiar with from APC but now with basic functionality and features provided as a cost-effective solution. The optional features such as side panels, castors, and vertical zero-U accessory channel reduce the cost of the base enclosure.

### Cable access roof

Г

Γ

AR7501

- Three large u-shaped cable entry slots
- Two spring-loaded pins allow for easy roof removal and installation with cables in place

### 2 Front and rear doors

- Flat front door with 65% ventilation
- Swing-style lockable handle
- Split rear doors

### Half-height side panels

- Easy and safe handling
- Lockable
- The upper side panels rest on the lower side panels and are connected at the top with a slam latch
- Lower side panels hook to the frame without fasteners

### 4 Easily adjustable vertical mounting rails

- Easy alignment
- 12 mm (1/2 in.) increments

### 5 Optional vertical 0U accessory channel kit

- Toollessly mount Rack PDUs
- Toollessly mount vertical cable organizers

## 6 Easily adjustable leveling feet and optional swivel castor kit

• Castors packaged and sold separately

### **Toolless** accessories

### Vertical cable management

APC specializes in toolless install accessories by the use of the zero-U channels located in the rear of every NetShelter SX enclosure

### Vertical 0U accessory channels

- Allows toolless mounting of vertical Rack PDUs
- Toollessly mount vertical cable organizers
- Additional vertical OU accessory channels:
  - AR7501 Vertical OU accessory channel, 42U NetShelter VL, qty. 2
- AR7502 Vertical OU accessory channel, 42U, qty. 2
- AR7572 Vertical 0U accessory channel, 48U, qty. 2
- AR7511 Narrow vertical OU accessory channel, 42U
- AR7505 Vertical cable organizer, center rear mount

#### 2 AR8442 - Vertical cable organizer, eight cable rings, zero U

- Supports 35 to 55 CAT 6/CAT 6A data cables
- Mounts toollessly on the vertical OU accessory channel

#### AR8443A - Vertical fiber organizer 3

- Installs toollessly
- Takes up one bay of channel
- Fiber spool only kit available (AR8444)

#### AR8457 - Data distribution 0U SX panel 4

- Installs toollessly
- Takes up one bay of channel
- Toollessly mount up to four DDC cable heads, 24 ports for rack-to-rack connections

#### 5 AR7710 - Cable containment brackets with Rack PDU mounting

- Low profile vertical cable management
- Support 60 to 90 CAT 6/CAT 6A data cables
- Mount toollessly on the vertical OU accessory channel

### 6 AR7711 - Zero-U accessory bracket

- Mount Rack PDUs in rear-facing orientation
- Support third party accessories in numerous mounting configurations
- Mount 1U or 2U patch panels or other networking accessories

### AR8621 - Hook-and-loop cable managers, qty. 10

- Mount toollessly on the vertical OU accessory channel
- · Secure and bundle cables with hook-and-loop ties







### NetShelter SX cable management

### Horizontal cable managers

### Finger-type horizontal cable managers

Cable managers for patching and crossover applications featuring smooth radius plastic fingers that protect the cable from kinking and binding. Hinged, snap-on covers provide a clean look and retain large cable bundles. Cable managers with 152 mm (6 in.) fingers include hardware for double-sided configurations with two units.

- AR8602 1U horizontal cable manager with 100 mm (4 in.) fingers and snap-on cover
- AR8600 2U horizontal cable manager with 100 mm (4 in.) fingers and snap-on cover
- AR8601 2U double-sided horizontal cable manager with 100 mm (4 in.) fingers and snap-on covers
- AR8612 1U horizontal cable manager with 152 mm (6 in.) fingers and snap-on cover
- AR8606 2U horizontal cable manager with 152 mm (6 in.) fingers and snap-on cover
- AR8603A 2U horizontal cable manager with 152 mm (6 in.) fingers, snap-on cover, rear cable pass-through holes and slots for AR8008BLK/AR8016ABLK horizontal cable channel
- AR8605 3U horizontal cable manager with 6 in. fingers, snap-on cover, rear cable pass-through holes and cable channel slots

### Ring-type horizontal cable managers

Economical cable managers for patching applications featuring various configurations to meet specific needs

- AR8425A 1U horizontal cable manager with four rings
- AR8426A 2U horizontal cable manager with four rings
- AR8428 2U horizontal cable manager with four rings and pass-through holes
- AR8427A 2U horizontal cable manager with multiple rings and small cable retainers
- AR8113A Cable management rings (qty. 5 large, 5 small)
- AR7707 Cable management rings 200 mm (8 in.) deep for 750 mm (30 in.) wide enclosures (AR3x5x), qty. 8

### Horizontal cable management accessories

- AR8429 1U cable pass-through manager with brush strip
- AR8129 Cable management arm for use with sliding shelves
- AR8008BLK Horizontal cable side channel 450 mm (18 in.) to 750 mm (30 in.) adjustment for routing cable front-to-back between the standard wide rack mounting rails or AR8603 and AR8428 horizontal cable managers
- **AR8016ABLK** Horizontal cable side channel 250 mm (10 in.) to 450 mm (18 in.) adjustment for routing cable front-to-back between the standard wide rack mounting rails or AR8603 and AR8428 horizontal cable manager
- **AR7706** Mounting rail brush strips for 750 mm (30 in.) wide enclosures (AR3x5x), qty. 6





### NetShelter SX cable management

### Overhead cable troughs and partitions

- NetShelter enclosures feature the ability to integrate a system of troughs and partitions for routing power and data cable across the top of the enclosures
- Troughs and partitions reduce the need for expensive suspended cable tray systems
- Troughs and partitions install toollessly with snap-in tabs and have standard attachment points for cable ladder systems
- Enclosure troughs are only shown here, for information on power and cooling troughs and partitions see the APC website

### Power cable trough

- Supports power distribution cables
- Provides separation from data cables
- Data cables pass through underneath to front partitioned area
- AR8561 Cable trough, 600 mm (24 in.) enclosures
- AR8571 Cable trough, 750 mm (30 in.) enclosures

### 2 Pass-through data cable partition

- Partitions the top of the enclosure into cable routing areas
- Pass-through hole provides cable access into multiple cable areas
- AR8163ABLK Pass-through data partition, 600 mm (24 in.) enclosures
- AR8173BLK Pass-through data partition, 750 mm (30 in.) enclosures

### **3** Solid data cable partition

- Partitions the top of the enclosure into cable routing areas
- Solid face provides clean appearance at the front of the enclosure
- AR8162ABLK Solid data partition, 600 mm (24 in.) enclosures
- AR8172BLK Solid data partition, 750 mm (30 in.) enclosures









AR8163ABLK

AR8186



## Check out Application Note #133 – "Cable Trough, Ladder, and Partition Configuration Guide."

www.apc.com/wp?an=133

### 4 Cable ladders and accessories

Cable ladders and attachment kits for routing power and data cabling overhead from rack to rack



| Cable ladders and attachment kits  | SKU        | Ladder accessories      | SKU    |
|--|------------|-------------------------|--------|
| Cable Ladder 150 mm (6 in.)<br>(AR8164AKIT 150 mm (6 in.)<br>ladder with attach kit)   | AR8164ABLK |                         |        |
| Cable Ladder 300 mm (12 in.)<br>(AR8165AKIT 300 mm (12 in.)<br>ladder with attach kit) | AR8165ABLK |                         |        |
| Alternate mounting -<br>Ladder to Power Troughs  | AR8576     |                         |        |
| Alternate mounting -<br>Ladder to Data Partitions                                      | AR8177BLK  | Ladder Wall Termination | AR8465 |
|  |            | Ladder Clamp Kit        | AR8169 |
| Ladder Elevation Bracket   | AR8186     |                         |        |
|  |            |                         |        |

### Shelves and mounting hardware

Mounting accessories to aid in the installation of IT equipment and secure racks into position

### Shelving

Fixed and sliding shelves to enable the mounting of tower units, monitors, and other equipment into the rack environment

- AR8105BLK Fixed shelf 22.7 kg (50 lb.)
- AR8122BLK Fixed shelf 114 kg (250 lb.)
- AR8123BLK Sliding shelf 45.5 kg (100 lb.)
- AR8128BLK Sliding shelf 91 kg (200 lb.)
- AR8422 Double side fixed shelf for two-post rack
- AR8126ABLK 430 mm (17 in.) Sliding keyboard shelf
- AR8127BLK 480 mm (19 in.) Sliding rotating keyboard shelf
- AR8006A Misc. equipment support rails for 600 mm (24 in.) wide enclosure

#### Bolt-down and stabilization

Stabilization plates and hardware to prevent tip-over in standalone rack applications and meet specific anchoring requirements

- AR7701 NetShelter SX bolt-down kit meets IBC seismic requirements
- **AR7700** NetShelter SX stabilization plate to prevent tipping when sliding out equipment

#### Miscellaneous mounting brackets

Variety of mounting brackets for mounting IT equipment

- AR7711 Zero-U multi-purpose accessory mounting bracket for side mounting of 1U/2U products and Rack PDUs
- AR8150BLK 580 mm (23 in.) to 480 mm (19 in.) mounting adapter brackets for use with AR7510 580 mm (23 in.) EIA mounting rails

#### Hardware kits

Available for additional hardware needs or to accommodate equipment mounted in varying mounting options

- AR8100 M6 Cage nuts and screws, qty. 32
- AR8400 #12-24 screws, qty. 100
- AR8005 #10-32 cage nuts, qty. 36



### **Rack components**

#### Replacement doors, side panels, roofs

Standard doors, side panels, and roofs are available for all enclosure sizes. Check the enclosure product page options tab on www.apc.com for a list of these rack components.







### Specialty roofs, side panels and accessories

- AR7252 Networking roof for high-density cabling 750 mm wide x 1,070 mm deep
- **AR7716** Networking roof for high-density cabling 750 mm wide x 1,070 mm deep
- AR7209 Open roof support bridge for overhead troughs and partitions
- AR7305A NetShelter SX pass-through side panel 42U x 1,070 mm deep
- AR7313 NetShelter SX pass-through side panel 42U x 1,200 mm deep
- AR7375 NetShelter SX pass-through side panel 48U x 1,070 mm deep
- AR7314 NetShelter SX pass-through side panel 48U x 1,200 mm deep
- AR7714 Replacement snap-in brush strips for SX roofs
- ACF502 Roof fan for 600 mm x 1,070 mm deep enclosures, 208 230 VAC
- ACF504 Roof fan for 750 mm x 1,070 mm deep enclosures, 208 230 VAC



AR7714



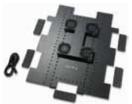
AR7209



AR8132A



AR7252/AR7716



ACF503



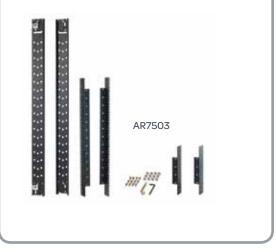
AR7305A



### **Recessed rail kits**

Intermediate mounting rails for supporting shallow depth equipment

- AR7503 42U x 600 mm (24 in.) wide
- AR7504 48U x 600 mm (24 in.) wide
- AR7508 42U x 750 mm (30 in.) wide
- AR7578 48U x 750 mm (30 in.) wide





AR7313

### Open frame racks

### Vertical cable management

## NetShelter two- and four-post open frame racks

The NetShelter two- and four-post open frame racks offer a quality solution for the economical installation of rack-mountable equipment, where security at the individual rack level is not required. Open frame racks provide unobstructed airflow and fast, easy access to installed equipment, and can be paired with high-density vertical cable managers for maximum cable volume. The two-post rack offers cost conscious customers a simple solution for supporting networking equipment and patching applications. The four-post offers more strength and features for supporting servers and networking equipment. Recent improvements to the four-post racks increase cable management options and flexibility.

## Channel-type vertical cable managers

- AR8440A 91 mm (3 in.) wide, black
- AR8441A 152 mm (6 in.) wide, black

AR8440A/AR8441A

### Accessories

### AR8652 – Rack PDU mounting bracket

- Mounts on sides as a spacer when using vertical cable managers between two racks
- Mounts on face of vertical rails, perpendicular, for single rack applications
- Designed to toollessly mount APC Rack PDUs





AR8652 mounted on right rear corner of four post rack with Rack PDU

### Two-post rack (AR201)

- Self-squaring design
- 45U mounting spaces 2,136 mm (84 in.) tall
- Black finish
- 6061-T6 Structural grade aluminum
- Weight capacity (static load) 340.19 kg (750.00 lb.)

### Four-post rack (AR203A)

- Square holes for cage nuts and server mounts
- New design for easier assembly
- Steel construction
- 44U mounting spaces 2,136 mm (84 in.) tall
- Black finish
- Multiple toolless mounting points for hook and loop fasteners
- Multi-position Rack PDU mounting bracket
- Reversible stabilization plates
- Grounding inserts
- Weight capacity (static load) 909 kg (2,000 lb.)





### AR8450A – Trough and partition adapter

• Provides mounting locations for APC overhead trough and partition cable management system



### NetShelter CX enclosure

### Soundproofed "Server room in a box" which allows for IT deployment wherever and whenever it is needed

Conveniently deploy servers and networking equipment in a guiet, ventilated, secure, and office-ready cabinet. The NetShelter CX is a cost-effective alternative for when there is no space, budget, or time for a traditional server room or wiring closet.



AR4038A AR4038IA

AR4024A AR4024IA

AR4018IA

AR4018A

**NetShelter CX features** 

### Cable management

Full-height vertical cable trays in the front and rear of all units

### Composite wood structure

Composite structure with acoustic foam lining keeps hardware quiet and secure

### Integrated fan modules

Each unit is outfitted with fan module providing up to 3.6 kW thermal capacity

### Zero-U Rack PDU

Each unit includes a Basic Rack PDU (100/120 V AP9567 NAM, 208/230 V AP9568 International) pre-installed

### Cable egress

Cable egress provides discrete and quiet exit of up to 400 CAT5/6 cables

### Castors

Each unit sits on four castors, two swivel and two fixed, for ease of deployment and mobility



AR4000MV



### Standard features

Floor space requirements: Enclosures are designed to be placed directly against a wall. Clearance of 200 mm (8 in.) on both sides of the cabinet is essential for normal operation

Cooling system: One ultra-low-noise exhaust fan module 1.2 kW maximum recommended total thermal load (or 4,100 BTU/hr.). one module with AR4018A(I), two with AR4024A(I), and three with AR4038A(I)

Noise reduction: 18.5 dB broadband noise reduction, measured 1.0 m (39 in.) in front of the enclosure (This is effectively a 95% reduction in perceived noise)

### Mobility:

- Four heavy duty castor-type wheels
- Front wheels have 360° rotation for maneuverability - rear wheels have fixed front-to-back motion for stability

### Rear and side access:

- Side panels are hingable and lockable for security and easy equipment installation and maintenance access
- Hingable and detachable rear fan modules gives completely open rear rack access

Cable management: 75 mm (3 in.) width full-height vertical OU accessory channels located on each side at the front and rear of the rack

Grounding: All equipment installed within a NetShelter CX should have conventional grounding via power cables, but unlike conventional metal-case cabinets, the NetShelter CX has no requirement for additional grounding in the form of ground strapping or pipe earthing, etc. The enclosure shell is constructed entirely from non-conductive materials and the rack is completely isolated from outside contact

Locking: The NetShelter CX is a fully lockable and secure enclosure. Key operated locks

### NetShelter CX Mini enclosure

The CX "Mini" is a purpose built tower-server enclosure aimed at small, non-IT spaces such as home office, school, AV, small office, and remote office environments.



### NetShelter CX Mini features

- Ventilation system The ultra-low-noise exhaust fan module has a 800 W maximum recommended total thermal load
- Cable management Two cable ports allow passage into and out of the enclosure for power and networking cables
- Mobility Four office-style castors
- Access A detachable and lockable door and rear panel ensures security and quick access to the equipment inside
- Integrated power strip Includes three IEC outlets and two sets of quantity of three regional specific equipment cords. The power strip is removeable to allow installation through the rear, without power-off of equipment

#### NetShelter CX accessories - 18, 24, 38U

- AR4601 Bolt-down kit two L-shaped brackets secure the enclosure to the floor.
- **AR4701** Dust Filter pack for 18 and 24U. Increases the Ingress Protection Rating (IP) from IP44 to IP54 and reduces the risk of dust related equipment issues.
- **AR4702** Dust filter pack for 38U. Includes filters for bottom and top of enclosure air intake holes.

### NetShelter CX accessories - Mini

- **AR4000MV12U** 12U Vertical Mounting Rail Kit for NetShelter CX Mini. Converts basic enclosure to a 12U rack enclosure.
- **AR4000MV-FR** Fixed rail kit for NetShelter CX Mini provides two horizontal mounting ledges for equipment placement. Must be used with AR4000MV12U vertical mounting rail kit.
- **AR4601** Bolt-down kit two L-shaped brackets secure the enclosure to the floor.

# Speciality enclosures

#### NetShelter WX wall-mount enclosure

Support remote patching and networking applications in a convenient wall-mount rack with an easy install rear hinged section, and reversible doors

- **AR100** 13U x 580 mm (23 in.) wide x 630 mm (25 in.) deep, wall-mount enclosure with vented sides and glass front door
- **AR100HD** 13U x 580 mm (23 in.) wide x 630 mm (25 in.) deep, wall-mount enclosure with vented sides and full vented front door
- AR8207BLK Roof fan tray 208/230 V
- AR8359 Castor kit for NetShelter WX
- AR8355 Ventilation plates for NetShelter WX





AR4702

AR4601

### Cooling and airflow management

### **Blanking panels**

Covers open rack space to prevent air recirculation and reduce bypass airflow to improve cooling efficiency

- AR8136BLK 1U toolless snap-in blanking panel, 10 pk
- AR8136BLK200 1U toolless snap-in blanking panel, 200 pk
- AR8108BLK 1U standard metal blanking panel, 2 pk
- AR8101BLK 1U, 2U, 4U, 8U, blanking panel kit
- AR7708 NetShelter SX Air Recirculation Prevention Kit for closing gaps and pass-through holes between side panels and equipment mounting rails







### KoldLok<sup>®</sup> raised floor grommets

Seal a variety of cutouts in a raised floor environment to reduce cold air leakage and improve cooling efficiency under the raised floor

- AR7720 Integral raised floor grommet (enclosed) for new installation, 10 pk
- AR7730 Surface-mount raised floor grommet (split) for existing cables, 10 pk
- AR7740 Extended raised floor grommet to cover length of floor tile, 10 pk





AR7740

### Side airflow cooling

Support cooling for small and large networking switches mounted within networking enclosures

- AR7742 (42U)/AR7747 (48U) Side airflow solution for Cisco Nexus 7018 attaches to sides of 1200 mm (47.5 in.) deep enclosures
- AR7715 Side airflow duct kit mounts inside 750 mm (30 in.) wide enclosures for Cisco 6509, 6513, 9509, 9513, and 9500 series switches
- Consists of two duct assemblies that act as diverters, utilizing the existing fan power of the switch
- Systems of baffles are located throughout the enclosure to mitigate exhaust air from recirculating back into the air intake

### **Ducting only**

Vertical Exhaust Duct (VED) for NetShelter SX is an easy to install, low-cost cooling option that can increase the efficiency of the attached cooling system

- AR7751 VED for 600 mm (24 in.) enclosures, short range
- AR7752 VED for 600 mm (24 in.) enclosures, tall range
- AR7753 VED for 750 mm (30 in.) enclosures, short range
- AR7754 VED for 750 mm (30 in.) enclosures, tall range
- AR7755 Overhead cable extension for VED 600 mm (24 in.)
- AR7756 Overhead cable extension for VED 600 mm (24 in.)

Roof fan trays available for 1,070 mm (42 in.) deep enclosures, see Rack Components on page 14.





AR7715



AR7751 and AR7755 installed on AR3300 with cable management

### **Rack power distribution**

Global power densities are increasing and becoming more unpredictable. Whether deploying rack power distribution in a wiring closet, server room, or data center, APC by Schneider Electric offers a consistent way to meet a variety of power density applications up to 22 kW per strip.

APC Rack PDUs have sufficient power and receptacle outputs to meet high kW loads in a minimal amount of space. Their ease of installation accelerates speed of deployment and reduces installation costs. With advanced rack power distribution, APC offers real-time remote load monitoring of connected equipment and individual outlet power control for remote power recycling.

### Manage power at the rack level with pinpoint control

- Basic Rack PDU Entry-level power distribution for rack-mount equipment
- Metered Rack PDU Advanced power distribution provides real-time remote monitoring of connected loads
- Switched Rack PDU Premium power distribution allows remote control of individual outlets and monitoring of aggregate current consumption
- Metered-by-Outlet with Switching Provide real-time remote monitoring of each individual outlet and on/off outlet control
- Back automatic transfer switch Provides redundant power to single-corded equipment

### Rack PDU local display



SNMP, and Telnet

### Intelligent Rack PDUs offer advanced networking features to meet today's data center demands

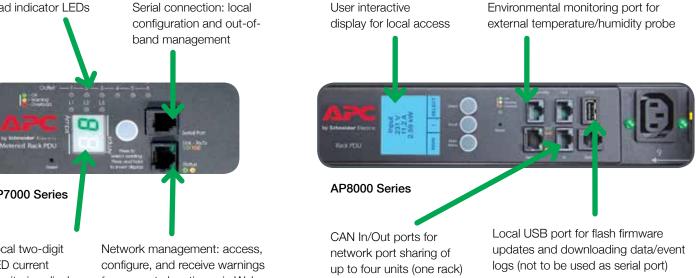
Current, power, and energy monitoring at the rack (depending on model series) combined with user-customizable warning/overload settings and automated alarm notifications enables enhanced capacity and change management.

- Web interface
- Telnet, SNMP
- Security
- Schneider Electric StruxureWare<sup>™</sup> for Data Centers software



For a comprehensive list of Rack PDUs download the latest pocket guide on www.apc.com

www.apc.com/wp?br=4



### LCD monitors and KVM switches

### Optimize rack space. Maximize system visibility.

APC Rack LCD Consoles are a keyboard, mouse, LCD console, and optional integrated 8/16 port analog KVM Switch (17 in. model only) all in a compact 1U design. This compact design allows a KVM switch to be mounted in the rear of the Rack LCD Console, or, eliminate the need for a separate KVM switch altogether by choosing a Rack LCD Console with Integrated 8/16 port analog KVM Switch. The console is easily installed and minimizes support and maintenance costs, ensuring lower cost of ownership. The ultra-thin LCD screen, touchpad technology, and easy-to-install single user rackmount kit combine to form a high-quality, streamlined solution built for server management. The Rack LCD Consoles can be used in a variety of IT environments, from computer rooms to large data centers.

- Ultra-thin 17 in. or 19 in. LCD monitor
- Integrated keyboard with number pad
- USB port for external media
- Space-saving 1U design
- Touchpad mouse
- · Easy to install
- Localized keyboard versions available, check www.apc.com for availability

## Access your servers across the room or across the world

APC Rack KVM switches empower IT administrators through both local and remote POST and BIOSlevel access and control of connected servers. APC Analog, CAT-5 Analog, and IP KVM switches help reduce total cost of ownership — minimizing space, hardware, electricity, and cabling by leveraging just one keyboard, monitor, and mouse for multiple servers. Improve return on investment and flexibility through enterprise-level scalability with centralized management. IT infrastructure management in data centers, computer rooms, and remote branch offices is now possible with greater control and peace of mind with APC Rack KVM switches.



AP5201

| KVM Switches with Coaxial Type Connection | SKU    |
|---|--------|
| 8-port Analog KVM                         | AP5201 |
| 16-port Analog KVM                        | AP5202 |

| LCD Console             | SKU     |
|-------------------------|---------|
| 17 in. Rack LCD Console | AP5717* |
| 19 in. Rack LCD Console | AP5719  |

\* Localized keyboard versions available, check www.apc.com for availability.

| LCD Console with Integrated KVM Switch                     | SKU    |
|--|--------|
| 17 in. Rack LCD Console with Integrated 8-port KVM Switch  | AP5808 |
| 17 in. Rack LCD Console with Integrated 16-port KVM Switch | AP5816 |
| KVM USB Cable, 1.8 m (6 ft.)                               | AP5821 |
| KVM USB Cable, 3 m (12 ft.)                                | AP5822 |
| KVM USB Cable, 5 m (25 ft.)                                | AP5823 |



#### Rear of AP5816

| KVM Switches with CAT-5 Type Connection                                | SKU          |
|--|--------------|
| 32-port Digital Enterprise IP KVM with Virtual Media, two remote users | KVM2132P     |
| 16-port Digital Enterprise IP KVM with Virtual Media, two remote users | KVM2116P     |
| 16-port Digital IP KVM with Virtual Media, one remote users            | KVM1116P     |
| 16-port Analog Enterprise KVM with Virtual Media, two local users      | KVM0216A     |
| 16-port Analog KVM, one local user                                     | KVM0116A     |
| 8-port Analog KVM, one local user                                      | KVM0108A     |
| KVM USB Server Module  | KVM-USB      |
| KVM PS/2 Server Module   | KVM-PS2      |
| KVM USB Server Module with Virtual Media                               | KVM-USBVM    |
| KVM PS/2 Server Module with Virtual Media                              | KVM-PS2VM    |
| KVM USB Server Module with Virtual Media and CAC Support               | KVM-USBVMCAC |
| KVM Serial Server Module   | KVM-SERIAL   |
| KVM to APC Rack PDU Power Management Cable                             | AP5641       |
| KVM 1U Bracket for rear mount behind Rack LCD Console                  | KVM-LCDMOUNT |
| KVM Access Software License Upgrade to Enterprise (1,024 Nodes)        | SEKVM1024N   |

| Cables                | 0.6 m  | 0.9 m  | 1.8 m  | 3.6 m  | 7.6 m  |
|-----------------------|--------|--------|--------|--------|--------|
| KVM USB cable         |        |        | AP5253 | AP5257 | AP5261 |
| KVM PS/2 cable        |        | AP5264 | AP5250 | AP5254 | AP5258 |
| KVM Daisy-chain cable | AP5262 |        | AP5263 |        |        |



### NetBotz security and environmental monitoring

Security and environmental monitoring for network closets to data centers

### NetBotz

### Surveillance:

• Leverage NetBotz<sup>™</sup>, Pelco<sup>™</sup> IP and CCTV camera technology to monitor IT assets remotely

#### Management capabilities:

- Alarming allows alerts, multiple notification methods, scheduling, graph and video attachments, and escalation
- StruxureWare Central available for centralized monitoring of multiple appliances

#### Environmental monitoring:

- Wide range of sensor support to monitor the health of your IT assets
- Temperature, humidity, leak, door, smoke, vibration, dew point, airflow, dry contact, 4 20 mA, and 0 5 V

### Access control:

• Control and manage access privileges for APC NetShelter SX enclosures over the network



NBPD0160



NBRK0201



NBRK0451

### High-level security option for NetShelter SX

### NetBotz rack access PX – HID system AP9361

- Configure individual HID proximity cards for access or schedule access to equipment for maintenance purposes
- Control and manage rack access privileges from a Web browser
- Perform audit trails on rack access
- Receive alarm notification when the rack is in a compromised security state

### NetBotz rack access pod 170 - NBPD0171

- Rack access pod connects via A-Link and mounts in the rack basement, minimizing space usage
- Rack access solution scales easily and can be used with any NetShelter SX brand enclosures



AP9361



AP9361



NBPD0171



## NetShelter enclosure and rack accessory compatibility chart

| SKU        | Description  | AR2900/<br>AR2901<br>NetSheiter VL<br>42U x 600 mm W<br>x 1,070 mm D | AR3100<br>NetShelter SX<br>42U x 600 mm W<br>x 1,070 mm D | AR3140<br>NetShelter SX<br>Networking 42U x<br>750 mm W x<br>1,070 mm D | AR3130<br>NetSheiter SX<br>42U x 700 mm W<br>x 1,070 mm D | AR3150<br>NetSheiter SX 42U<br>x 750 mm W x<br>1,070 mm D | AR3107<br>NetShelter SX 48U<br>x 600 mm W x<br>1,070 mm D |
|------------|--|--|---|---|---|---|---|
| NetShelter | Enclosure & Rack Accessory   |  |   |   |   |   |   |
| AR7305A    | NetShelter SX 42U x 1,070 mm D Split Feed Through Side Panels                | Upper panel only   | •   | •   | •   | •   |   |
| AR7313     | NetShelter SX 42U x 1,200 mm D Split Feed Through Side Panels black, qty. 2  |  |   |   |   |   |   |
| AR7314     | NetShelter SX 48U x 1,200 mm D Split Feed Through Side Panels black, qty. 2  |  |   |   |   |   |   |
| AR7502     | NetShelter SX 42U Vertical PDU Mount and Cable Organizer                     |  | •   | •   | •   | •   |   |
| AR7503     | NetShelter SX 42U x 600 mm W Recessed Rail Kit                               |  | •   |   |   |   |   |
| AR7504     | NetShelter SX 48U x 600 mm W Recessed Rail Kit                               |  |   |   |   |   | •   |
| AR7505     | Centermount Vertical Accessory Channel for NetShelter SX                     | •  | •   | •   | •   | •   | •   |
| AR7508     | NetShelter SX 42U x 750 mm W Recessed Rail Kit                               |  |   | •   |   | •   |   |
| AR7511     | Narrow Vertical Cable Organizer, NetShelter SX, 42U                          |  | •   | •   | •   | •   |   |
| AR7572     | NetShelter SX 48U Vertical PDU Mount and Cable Organizer                     |  |   |   |   |   | •   |
| AR7578     | NetShelter SX 48U x 750 mm W Recessed Rail Kit                               |  | -   |   |   |   | -   |
| AR7580     | Vertical Cable Manager for NetShelter SX 750 mm W                            |  |   |   |   | •   |   |
| AR7581     | Hinged Covers for NetShelter SX 750 mm W<br>Vertical Cable Manager           |  |   |   |   | ٠   |   |
| AR7582     | Cable Retainer for NetShelter SX 750 mm W<br>Vertical Cable Manager, qty. 6  |  |   |   |   | •   |   |
| AR7700     | NetShelter SX Stablilizer Plate  | •  | •   | •   | •   | •   | •   |
| AR7701     | NetShelter SX Bolt-down Kit  | •  | •   | •   | •   | •   | •   |
| AR7706     | NetShelter SX 750 mm W Mounting Rail Brush Strips                            |  |   |   |   | •   |   |
| AR7707     | NetShelter SX 750 mm W Cable Ring Set  |  |   |   | •   | •   |   |
| AR7708     | NetShelter SX Air Recirculation Prevention Kit                               |  | •   |   | •   | •   | •   |
| AR7710     | Cable Containment Brackets with PDU<br>Mounting Capability for NetShelter SX | With AR7501  | •   | •   | •   | •   | •   |
| AR7711     | NetShelter zero-U Accessory Mounting Bracket                                 | •  | •   | •   | •   | •   | •   |
| AR7714     | NetShelter SX Roof Brush Strip   |  | •   |   | •   | •   | •   |
| AR7717     | Vertical Cable Manager for NetShelter SX Networking Enclosure                |  |   | •   |   |   |   |
| AR8005     | #10-32 Hardware Kit, qty. 36   | •  | •   | •   | •   | •   | •   |
| AR8006A    | Equipment Support Rails for 600 mm W enclosure                               |  | •   |   |   |   | •   |
| AR8008BLK  | Side Channel Cable Trough  |  |   |   |   | •   |   |
| AR8016ABLK | NetShelter SX Side Channel Cable Trough                                      |  |   |   |   | •   |   |
| AR8100     | M6 Hardware Kit, qty. 32   | •  | •   | •   | •   | •   | •   |

| AR3157<br>NetShelter SX 48U x<br>750 mm W x<br>1,070 mm D | AR3200<br>NetShelter SX<br>Colocation 42U x<br>600 mm W x<br>1,070 mm D | AR3300<br>NetShelter SX 42U x<br>600 mm W x<br>1,200 mm D | AR3340<br>NetShelter SX<br>Networking 42U x<br>750 mm W x<br>1,200 mm D | AR3350<br>NetShelter SX 42U x<br>750 mm x<br>1,200 mm D | AR3307<br>NetSheiter SX 48U x<br>600 mm W x<br>1,200 mm D | AR3347<br>NetShelter SX<br>Networking 48U x<br>750 mm W x<br>1,200 mm D | AR3357<br>NetShelter SX 48U x<br>750 mm W x<br>1,200 mm D | AR3104<br>NetShelter SX 24U x<br>600 mm W x<br>1,070 mm D |
|---|---|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |   |   |
|   | •   |   |   |   |   |   |   |   |
|   |   | •   | •   | •   |   |   |   |   |
|   |   |   |   |   | •   | •   | •   |   |
|   |   | •   | ٠   | •   |   |   |   |   |
|   |   | •   |   |   |   |   |   |   |
|   |   |   |   |   | •   |   |   | •   |
| ٠   |   | •   | •   | •   | •   | •   | •   |   |
|   |   | •   | •   | •   |   |   |   |   |
| •   |   |   |   |   | •   | •   | •   |   |
| •   |   |   |   |   |   | •   | •   |   |
| ٠   |   |   |   | •   |   |   | •   |   |
| ٠   |   |   |   | •   |   |   | •   |   |
| ٠   |   |   |   | •   |   |   | •   |   |
| •   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٥   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   |   |   |   | •   |   |   | •   |   |
| ٠   |   |   |   | •   |   |   | •   |   |
| ٠   | •   | •   |   | •   | •   |   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   |   | •   | •   |   | •   |   |
|   |   |   | •   |   |   | •   |   |   |
| ٥   | •   | •   | •   | •   | •   | •   | •   | •   |
| •   | •   | •   |   | •   | •   |   | •   | •   |
| •   |   |   |   | •   |   |   | •   |   |
| •   | •   | •   | •   | •   | •   | •   | •   | •   |
| -   |   | •   | -   |   |   |   |   |   |

## NetShelter compatibility chart continued

| SKU          | Description   | AR2900/<br>AR2901<br>NetShelter VL<br>42U x 600 mm W<br>x 1,070 mm D | AR3100<br>NetShelter SX<br>42U x 600 mm W<br>x 1,070 mm D | AR3140<br>NetShelter SX<br>Networking 42U x<br>750 mm W x<br>1,070 mm D | AR3130<br>NetShelter SX<br>42U x 700 mm W<br>x 1,070 mm D | AR3150<br>NetShelter SX 42U<br>x 750 mm W x<br>1,070 mm D | AR3107<br>NetShelter SX 48U<br>x 600 mm W x<br>1,070 mm D |
|--------------|---|--|---|---|---|---|---|
| AR8101BLK    | Blanking Panel Kit 19 in. black (1U, 2U, 4U, 8U)                    | •  | •   | •   | •   | •   | •   |
| AR8105BLK    | Fixed Shelf 50 lb./23 kg black                                      | •  | •   | ٠   | •   | •   | •   |
| AR8108BLK    | 1U Blanking Panel Kit 19 in. black                                  | •  | ٠   | •   | •   | •   | •   |
| AR8113A      | Cable Management Rings  | •  | ٠   | •   | •   | •   | •   |
| AR8122BLK    | Fixed Shelf 250 lb./114 kg black                                    | •  | •   | •   | •   | •   | •   |
| AR8123BLK    | Sliding Shelf 100 lb./45 kg black                                   | ٠  | ٠   | ٠   | ٠   | •   | •   |
| AR8126ABLK   | 17 in. Keyboard drawer black  | •  | ٠   | •   | •   | •   | •   |
| AR8127BLK    | 19 in. Rotating keyboard drawer black                               | •  | ٠   | •   | •   | •   | •   |
| AR8128BLK    | Sliding Shelf 200 lb./91 kg black                                   | •  | •   | •   | •   | •   | •   |
| AR8129       | 1U Cable Management Arm   | •  | •   | •   | •   | •   | •   |
| AR8132A      | NetShelter SX-VX-VS Combination Door Lock Handle                    | ٠  | ٠   | ٠   | ٠   | •   | •   |
| AR8136BLK    | 1U Plastic Blanking Panel Kit 19 in. black, qty. 10                 | ٠  | ٠   | ٠   | ٠   | •   | •   |
| AR8136BLK200 | 1U Plastic Blanking Panel Kit 19 in. black, qty. 200                | ٠  | ٠   | ٠   | ٠   | •   | •   |
| AR8150BLK    | Adapter Kit 23 in to 19 in. black                                   |  |   |   |   | with AR7510   |   |
| AR8425A      | 1U Horizontal Cable Organizer                                       | •  | •   | •   | •   | •   | •   |
| AR8426A      | 2U Horizontal Cable Organizer                                       | ٠  | ٠   | ٠   | ٠   | •   | •   |
| AR8427A      | 2U Patch Cord Organizer   | •  | ٠   | •   | •   | •   | •   |
| AR8428       | 2U Patch Cord Organizer with Pass-through                           | •  | ٠   | •   | •   | •   | •   |
| AR8429       | 1U Cable Pass-through with Brush Strip                              | •  | •   | •   | •   | •   | •   |
| AR8442       | Vertical Cable Organizer for NetShelter OU Channel                  | with AR7501  | ٠   | ٠   | ٠   | •   | •   |
| AR8443A      | Vertical Fiber Organizer  | with AR7501  | ٠   | ٠   | ٠   | •   | •   |
| AR8444       | Fiber Spools  |  | ٠   | ٠   | ٠   | •   | •   |
| AR8457       | Data Distribution OU SX Bracket                                     | with AR7501  | ٠   | ٠   | ٠   | •   | •   |
| AR8469       | Data Distribution Cable, Plastic Snap-in Panel SX                   |  | •   |   | •   | •   | •   |
| AR8579       | Grommet, Edge Protection for NetShelters and Accessories            | •  | •   | •   | •   | •   | •   |
| AR8600       | Horizontal Cable Manager, 2U Single Side with cover                 | •  | •   | •   | •   | •   | •   |
| AR8601       | Horizontal Cable Manager, 2U Double Side with cover                 | •  | •   | •   | •   | •   | •   |
| AR8602       | Horizontal Cable Manager, 1U Single Side with cover                 | •  | •   | •   | •   | •   | •   |
| AR8603A      | Horizontal cable manager, 2U x 6 in. fingers single side with cover | •  | •   | •   | •   | •   | •   |
| AR8621       | Cable manager, toolless 1/4 turn and hook-and-loop straps, qty. 10  | •  | •   | •   | •   | •   | •   |
| AP9513       | Door Sensor Switch Kit  | •  | •   | •   | •   | •   | •   |

| AR3157<br>NetSheiter SX 48U x<br>750 mm W x<br>1,070 mm D | AR3200<br>NetShelter SX<br>Colocation 42U x<br>600 mm W x<br>1,070 mm D | AR3300<br>NetShelter SX 42U x<br>600 mm W x<br>1,200 mm D | AR3340<br>NetShelter SX<br>Networking 42U x<br>750 mm W x<br>1,200 mm D | AR3350<br>NetShelter SX 42U x<br>750 mm x<br>1,200 mm D | AR3307<br>NetSheiter SX 48U x<br>600 mm W x<br>1,200 mm D | AR3347<br>NetShelter SX<br>Networking 48U x<br>750 mm W x<br>1,200 mm D | AR3357<br>NetShetter SX 48U x<br>750 mm W x<br>1,200 mm D | AR3104<br>NetShelter SX 24U x<br>600 mm W x<br>1,070 mm D |
|---|---|---|---|---|---|---|---|---|
| ٠   | ٠   | ٠   | ٠   | •   | •   | •   | ٠   | •   |
| ٠   | •   | •   | •   | ٠   | •   | •   | ٠   | •   |
| ٠   | ٠   | ٠   | ٠   | ٠   | ٠   | ٠   | ٠   | ٠   |
| ۲   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ۲   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
|   |   |   |   | with AR7510   |   |   |   |   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| •   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| •   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   |   | •   | •   |   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | ٠   | •   | •   | •   | •   | •   | •   | •   |
| ٠   | •   | •   | •   | •   | •   | •   | •   | •   |

## NetShelter compatibility chart continued

| SKU         | Description  | AR2900/<br>AR2901<br>NetShelter VL<br>42U x 600 mm W<br>x 1,070 mm D | AR3100<br>NetShelter SX<br>42U x 600 mm W<br>x 1,070 mm D | AR3140<br>NetShelter SX<br>Networking 42U x<br>750 mm W x<br>1,070 mm D | AR3130<br>NetShelter SX<br>42U x 700 mm W<br>x 1,070 mm D | AR3150<br>NetShelter SX 42U<br>x 750 mm W x<br>1,070 mm D | AR3107<br>NetShelter SX 48U<br>x 600 mm W x<br>1070 mm D |
|-------------|--|--|---|---|---|---|--|
| Rack coolin | g  |  |   |   |   |   |  |
| ACF001      | Rack Air Distribution Unit 120 V   |  | ٠   | ٠   | ٠   | ٠   | •  |
| ACF002      | Rack Air Distribution Unit 208/230 V                                       |  | •   | •   | •   | •   | •  |
| ACF003      | Rack Air Distribution Unit 100 V   |  | •   | •   | •   | •   | •  |
| ACF400      | Rack Air Removal Unit 100 – 240 V 50/60 HZ for NetShelter SX 600 mm W Rack |  | ٠   |   |   |   | •  |
| ACF402      | Rack Air Removal Unit 100 – 240 V 50/60 HZ for NetShelter SX 750 mm W Rack |  |   | ٠   |   | ٠   |  |
| ACF126      | Rack air removal unit SX ducting kit for 600 mm W ceiling tiles            |  | ٠   | ٠   | ٠   | ٠   | •  |
| ACF127      | Rack air removal unit SX ducting kit for 600 mm W ceiling tiles            |  | •   | •   | •   | •   | •  |
| ACF501      | NetShelter SX Roof Fan Tray 115 VAC  |  | •   |   |   |   | •  |
| ACF502      | NetShelter SX Roof Fan Tray 208 – 230 VAC                                  |  | •   |   |   |   | •  |
| ACF503      | NetShelter SX Roof Fan Tray 115 VAC 750 mm                                 |  |   | ٠   |   | •   |  |
| ACF504      | NetShelter SX Roof Fan Tray 208 – 230 VAC 750 mm                           |  |   | ٠   |   | •   |  |
| ACF201BLK   | Rack Side Air Distribution 2U 115 V 60 HZ                                  |  | ٠   | ٠   | ٠   | ٠   | •  |
| ACF202BLK   | Rack Side Air Distribution 2U 208/230 50/60 HZ                             |  | ٠   | ٠   | ٠   | •   | ٠  |
| AR7715      | NetShelter SX Internal Side Air Flow Duct Kit                              |  |   | ٠   |   | ٠   |  |
| AR7742      | NetShelter SX 42U Cisco Nexus 7018 Duct Kit                                |  |   |   |   |   |  |
| AR7747      | NetShelter SX 48U Cisco Nexus 7018 Duct Kit                                |  |   |   |   |   |  |
| AR7751      | Vertical Exhaust Duct Kit, Short Range, for 600 mm W<br>NetShelter SX      |  | •   |   |   |   | •  |
| AR7752      | Vertical Exhaust Duct Kit, Tall Range, for 600 mm W<br>NetShelter SX       |  | •   |   |   |   | •  |
| AR7753      | Vertical Exhaust Duct Kit, Short Range, for 750 mm W<br>NetShelter SX      |  |   | •   |   | •   |  |
| AR7754      | Vertical Exhaust Duct Kit, Tall Range, for 750 mm W<br>NetShelter SX       |  |   | •   |   | •   |  |
| AR7755      | Overhead Cable Extension for 600 mm W<br>Vertical Exhaust Duct Kit         |  | •   |   |   |   | •  |
| AR7756      | Overhead Cable Extension for 750 mm W<br>Vertical Exhaust Duct Kit         |  |   | •   |   | •   |  |

| AR3157<br>NetShelter SX 48U x<br>750 mm W x<br>1,070 mm D | AR3200<br>NetShelter SX<br>Colocation 42U x<br>600 mm W x<br>1,070 mm D | AR3300<br>NetSheiter SX 42U x<br>600 mm W x<br>1200 mm D | AR3340<br>NetShetter SX<br>Networking 42U x<br>750 mm W x<br>1,200 mm D | AR3350<br>NetShelter SX 42U x<br>750 mm x<br>1,200 mm D | AR3307<br>NetSheiter SX 48U x<br>600 mm W x<br>1,200 mm D | AR3347<br>NetShelter SX<br>Networking 48U x<br>750 mm W x<br>1,200 mm D | AR3357<br>NetShelter SX 48U x<br>750 mm W x<br>1,200 mm D | AR3104<br>NetShelter SX 24U x<br>600 mm W x<br>1,070 mm D |
|---|---|--|---|---|---|---|---|---|
|   |   |  |   |   |   |   |   |   |
| •   | •   | •  | •   | •   | •   | •   | •   |   |
| •   | •   | •  | •   | •   | •   | •   | •   |   |
| ٠   | •   | •  | •   | •   | •   | •   | •   |   |
|   | •   | •  |   |   | •   |   |   |   |
| ٠   |   |  | •   | •   |   | •   | •   |   |
| ٠   | •   | •  | •   | •   | •   | •   | •   |   |
| ٠   | •   | •  | •   | •   | •   | •   | •   |   |
|   | •   |  |   |   |   |   |   | •   |
|   | •   |  |   |   |   |   |   | •   |
| ٠   |   |  |   |   |   |   |   |   |
| ٠   |   |  |   |   |   |   |   |   |
| ٠   | •   | •  | •   | •   | •   | •   | •   |   |
| ٠   | •   | •  | ٠   | ٠   | •   | ٠   | ٠   |   |
| ٠   |   |  | ٠   | ٠   |   | ٠   | ٠   |   |
|   |   |  | ٠   |   |   |   |   |   |
|   |   |  |   |   |   | •   |   |   |
|   | ٠   | •  |   |   | •   |   |   |   |
|   | •   | •  |   |   | •   |   |   |   |
| ٠   |   |  | •   | •   |   | •   | •   |   |
| ٠   |   |  | •   | •   |   | •   | •   |   |
|   | •   | •  |   |   | •   |   |   |   |
| ٠   |   |  | •   | •   |   | •   | •   |   |

For a comprehensive list of compatible accessories visit www.apc.com product pages and view the "Options" tab to search through the available options. Or download the latest compatibility chart from:

www.apcmedia.com/salestools/ASTE-5TFQN4\_R14\_EN.pdf



### Help me choose

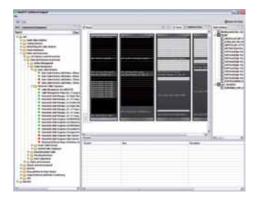
Rack PDU testdrive sites Visit testdrive.apcc.com/pdu.htm

### **Small IT Solution Designer**

Channel Partner's access this web-based designer tool through Schneider Electric Design Portal.

- Rack selector to find the right enclosure
- Drag and drop into the rack for fast configuration
- Instant validation with warnings and recommendations ensuring a proper solution

Visit www.apc.com to learn more about channel partner programs.



#### Additional resources

#### White Paper #72:

"Five Basic Steps for Efficient Space Organization in High Density Enclosures" Visit www.apc.com/wp?wp=72

#### White Paper #44:

"Improving Rack Cooling Performance Using Airflow Management Blanking Panels" Visit www.apc.com/wp?wp=44

#### Application Note #137:

"NetShelter SX Cable Management Guidelines" Visit www.apc.com/wp?an=137

### Application Note #133:

"Cable, Trough, and Partition Configuration Guide" Visit www.apc.com/wp?an=133

### APC Podcast Portal

Visit www.apc.com/podcast

### Data Center University online education

Data Center University<sup>™</sup> (DCU) courses offer industryleading education for IT professionals and deliver real-world expertise, where and when you need it. Visit www.myenergyuniversity.com

To learn more about Schneider Electric solutions, visit www.schneider-electric.com

Try our FREE, Web-based applications to experiment with virtualization, efficiency, and more at tools.apc.com

### Make the most of your energy<sup>™</sup>



www.apc.com