# Solutions Guide for HP® Data Center Architecture:

• HP BladeSystem c-Class Servers





With HP BladeSystem—the industry's only Converged Infrastructure architected for any workload from the desktop to the data center—you can drive business innovation and eliminate IT sprawl. Imagine a change-ready infrastructure that can support all your applications—from infrastructure to mission-critical—on a single platform, with both ProLiant and Integrity server blades and a range of storage and networking options.

Blade server applications present unique challenges in terms of rack level power distribution (Rack PDU), cable management and physical access space requirements for hot-swappable blade components.

This application guide provides recommendations for enclosures, Rack PDUs, and cable management to best address the specific physical infrastructure needs of the HP c7000 Blade Server Chassis.



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Enclosures and Rack Mount Power

**Distributions Units** 

#### **Advanced PDUs**

- Integrates power management capabilities with other products including Symmetra<sup>™</sup> PX UPS, row and room PDUs, InRow cooling, NetShelter<sup>™</sup> SX enclosures, and StruxureWare<sup>™</sup> for Data Centers management software suite.
- Features zero U, low profile design, optimized for high-density rack power solutions to minimize interference between the Rack PDU and hot-swap blade components.
- Comprehensive device, phase, and breaker bank level metering for overload protection, capacity planning purposes, and energy efficiency initiatives
- Right Angle C19/C20 connectors minimize bend radius at the connection point and reduce interference in the rear of an enclosure



#### **Full Featured Enclosures**

- NetShelter SX enclosures offer the most standard, outof-box features to ease installation and speed deployment.
- Single enclosure design is flexible enough to accommodate various networking and server applications.
- Sizes Available: 42U, 45U, & 48U heights, 600mm (24") & 750mm (30") widths, and 1070mm (42") & 1200mm (47.2") depths.





Schneider Electric is a global leader in data center infrastructure - cooling, UPS, power distribution, racks and management.

Schneider

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## Instructions

This guide is designed to facilitate a step by step selection of Rack PDUs, enclosures and accessories for HP c7000 blade servers.

**STEP 1: Determine estimated power load per blade chassis.** After consulting the manual, determine the total power load and redundancy configurations offered. c7000 power supplies include 2250W and 2400W for 200-240V. At full redundancy (3+3), the chassis is capable of maximum input power capacity of 8320W. Total max power consumption for a typical customer configuration of c7000 chassis is 5kW. The average power is about 3-4kW.

**STEP 2: Table 3A, 3B:** <u>Maximum Quantity Chassis per Rack PDU</u>. Table is organized by maximum capacity of standard 20A, 30A, 50A, and 60A Rack PDUs kW. Utilize power data calculated in step 1 and required number of connected servers to select the proper capacity Rack PDU.

**STEP 3: Table 3A, 3B:** <u>Select Rack PDU</u>. Take the Rack PDU capacity from within table 3A, or 3B and select the desired Rack PDU based on input connection to Rack PDU and compatibility of Rack PDU receptacles with power cords. Additional Rack PDUs are listed on page 7 and 8 if the listed Rack PDU in these tables do not match your equipment configuration. This step is critical as the Rack PDU must be able to connect to an input circuit on site and the servers and switches must have the correct type and quantity of receptacles to power up properly.

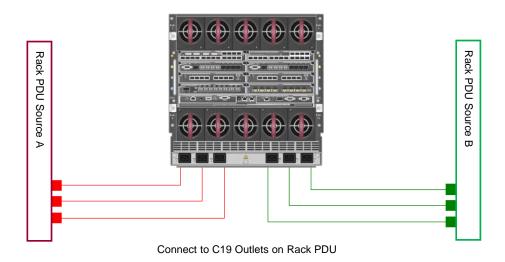
**STEP 4:** <u>Select Enclosures and Installation Diagrams</u>. Depending on special constraints onsite, select the appropriate combination of enclosure width and depth. It is recommended using "wide (750mm) and deep (1200mm)" enclosures if space permits, as this offers the most flexibility during operation and ease of installation.



### HP c7000 Power

### **Step 1: Determine Power Configuration**

The HP BladeSystem c7000 Server Chassis includes options for six, single phase, hotswappable redundant power supplies with IEC C20 Inlet connections. Follow the diagram below for a fully redundant 2N (3+3) power configuration.



### Step 2: Determine Anticipated Power Load

Max power consumption per chassis can range from 2.5 to 7.6 KW; while a typical peak power consumption is closer to 4-5kW. Schneider recommends using power supplies with C20 inlets for power distribution flexibility with Rack PDUs. If inputs of L15-30P (NAM) or IEC309-16A (5pin) plugs are used, direct connection from power distribution unit whips is recommended.

HP provides power sizing tools that can be used to calculate the infrastructure required as configured and allow some flexibility for growth. These calculators can be found on the HP website.

Dynamic Power Capping of the chassis can also be set in order to reduce the risk of overloading a circuit. The enclosure Dynamic Power Cap will be shared amongst all of the installed devices and individual server caps will be changed to match the server load. This will optimize the performance of the servers while ensuring that the enclosure stays below the Dynamic Power Cap value.



- •HP c7000 chassis has a maximum of (6) Power Supplies in a fully redundant system; (3) per power source.
- •Total power consumption for a typical configuration is 4-5kW or less per chassis enclosure.



### HP c7000 Power

### Step 3: Determine Chassis Quantity

- The following tables show the maximum amount of c7000 chassis which can be supported from a desired rack PDU.
- The data for Table 3A and 3B is organized based on the power capacity ratings for standard rack mount PDUs, showing both single phase and three phase options
- The tables show recommended Metered Rack PDUs with a zero U form factor and IEC outlets.

Please note that additional rack PDUs in different configurations are shown on page 7 and 8.

### Table 3A - North America Solutions

Number of Chassis per Recommended PDU

DI-DD11			208\	/ 3 Phase	415V 3 Phase				
Rack PDU	5.0 KW	5.7 KW	8.6 KW	10.0 KW	17.3 KW	11.5 KW	17.3 KW	23.0 KW	
powerrating	30A 1Ø	20A 3Ø	30A3Ø	50A 3Ø	60A 3Ø	20A 3Ø	30A 3Ø	40A 3Ø	
Recommended rPDU	AP8841	AP8861	AP8865	AP8868	AP8866	AP8881	AP8887	AP8888	
KW range per Chassis			Numl	ber of Chassis	that can be pow	ered from rPDU			
2500	2	2	2*	2*	4*	4	4*	4*	
3000	1	1	2	2*	4*	3	4*	4*	
3500	1	1	2	2*	4	3	4	4*	
4000	1	1	2	2	4	2	4	4*	
4500	1	1	1	2	3	2	3	4*	
5000	1	1	1	2	3	2	3	4	
5500		1	1	1	2**	2	3	4	
6000			1	1	2	1	2	2**	
6500			1	1	2	1	2	2**	
7000			1	1	2	1	2	2**	
7500			1	1	2	1	2	2**	

<sup>\*</sup> Limited by number of C19 outlets on PDU

### Table 3B-International Solutions

Number of Chassis per Rack Based on Calculated Power Load

Deel DDII	230V Sin	gle Phase	230V 3 Phase						
RackPDU	3.7 KW	7.4 KW	11.0 KW	22.0 KW					
powerrating	16A 1Ø	32A 1Ø	16A 3Ø	32A3Ø					
Recommended rPDU	AP8858EU3	AP8853	AP8881	AP8886					
KW range per Chassis	Number of Chassis that can be powered from rPDU								
2500	1	2	4	4*					
3000	1	2	3	4*					
3500	1	2	3	4*					
4000	-	1	2	4*					
4500		1	2	4					
5000	-	1	2	4					
5500	-	1	2	4					
6000	-	1	1	2**					
6500		1	1	2**					
7000		1	1	2**					
7500			1	2					

<sup>\*</sup> Limited by number of C19 outlets on PDU



<sup>\*\*</sup> Limited by internal circuit breaker capacity - UL mandates 80% derating (16A)for continuous loads.

<sup>\*\*</sup> Limited by internal circuit breaker capacity (16A).

### Rack PDU Charts - Metered

Metered Rack Power Distribution Units (PDUs) provide active metering to enable energy optimization and circuit protection. User-defined alarm thresholds mitigate risk with real-time local and remote alerts to warn of potential circuit overloads. Metered Rack PDUs provide power utilization data to allow Data Center managers to make informed decisions on load balancing and right sizing IT environments to lower total cost of ownership. AP8000 series Metered Rack PDUs include real power monitoring, a temperature/humidity sensor port, locking IEC receptacles, and ultra low profile circuit breakers. Users can access and configure Metered Rack PDUs through secure Web, SNMP, or Telnet Interfaces.

		Mounting U-Space	Nominal Voltage	Region	Input Circuit	Nominal Power	Inpu	t Plug Type	Outpu	it Receptacles	Cord Length	APC SKU	
			100-120	NAM	15A	1.4kW	⋒	NEMA 5-15P	<b>@</b>	(16)5-15	3.0 m	AP7831	
			120	NAM	20A	1.9kW	3	NEMA L5-20P	•	(24)5-20	3.0 m	AP7830	
	ă	Vertical, 0U	100	Japan	20A	2.0kW	(3)	NEMA L5-20P	0	(24) 5-15	3.0 m	AP7830J	
	100-120V Input	[	100	Japan	30A	2.4kW	3	NEMA L5-30P	8	(24) 5-15	3.0 m	AP7832J	]
	á		120	NAM	30A	2.9kW	3	NEMA L5-30P	•	(24)5-20	3.0 m	AP7832	
	# #	Horizontal, 1U	120	NAM	15A	1.4kW	- 60	NEMA 5-15P	<b>®</b>	(8)5-15	3.6 m	AP7800	
	₽	T TOTAL CONTROL TO	120	NAM	20A	1.9kW	ூ	NEMA L5-20P	•	(8)5-20	3.6 m	AP7801	1
		Horizontal, 2U	120	NAM	30A	2.9kW	•	NEMA L5-30P	•	(16)5-20	3.6 m	AP7802	
			100	Japan	30A	3.0kW	3	NEMA L5-30P	(A)	(16) 5-15	3.6 m	AP7802J	
			230	Worldwide	10/15A	2.3kW	8	IEC-320 C14	9	(16)C13	3.0 m	AP7850	1
			100-240	NAM	20A	3.3kW	•	NEMA L6-20P		(18)C13, (2)C19	3.0 m	AP8858NA3	1
	ă	Vertical, 0U	100-240	Worldwide	16A	3.3kW	<b>=</b>	IEC-320 C20	₩ 🖫	(18)C13, (2)C19	Inlet	AP8858	1
	200-240V Input		100-240	EMEA, APJ,	16A	3.7kW	0	IEC309 16A		(18)C13, (2)C19	3.0 m	AP8858EU3	R
	è		200-240	NAM, Japan	30A	5.0kW	3	NEMA L6-30P		(36)C13, (6)C19	3.0 m	AP8841	R
	2		220-240	EMEA, APJ,	32A	7.4kW	<u> </u>	IEC309 32A		(36)C13, (6)C19	3 m	AP8853	R
	8	Horizontal, 1U	100-240	Worldwide	10/15A	2.5kW	•	IEC-320 C14	•	(8)C13	Inlet	AP7820	4
	.,,		100-240	Worldwide	16A	3.3kW	- 2	IEC-320 C20	9	(8)C13	Inlet	AP7821	1
Ū.		Horizontal, 2U	200-240	NAM	30A	5.0kW	3	NEMA L6-30P		(12)C13, (4)C19	3.6 m	AP7811	4
5		·	230	EMEA, APJ,	32A	7.4kW	Ø	IEC309 32A	₩ 🖫	(12)C13, (4)C19	3.6 m	AP7822	
2			208	NAM	20A, 3Φ	5.7kW	⊛	NEMA L21-20P	•	(42)5-20	1.0 m	AP7862	1
9						******	•		•	(,-	3.0 m	AP7892	
à			208	NAM	20A, 3Φ	5.7kW	⊛	NEMA L21-20P	⊕ ③	(21)5-20, (6)L6-20	1.0 m	AP7863	
9							_				3.0 m	AP7893	-
METERED RACK PDUs	Ę		208	NAM	20A, 3Φ	5.7kW	•	NEMA L21-20P	<b>₽</b>	(36)C13, (6)C19, (2)5-20	1.8 m	AP8861	R
<u> </u>	<u> </u>	1	208	Japan	20A, 3Φ	6.0kW	⊛	NEMA L21-20P	<b>⊕</b>	(42) 5-15	1.0 m	AP7862J	
Σ	208V 3-phase Input	Vertical, 0U	208	NAM	30A, 3Φ	8.6kW	9	NEMA L21-30P	<b>8</b> ⊕	(36)C13, (6)C19, (2)5-20	1.8 m	AP8865	R
	6		208	NAM	50A, 3Φ	10.0kW	⊛	CS8365C		(36)C13, (6)C19	1.8 m	AP8868	R
	⊗		200-240	NAM	50A, 3Φ	14.4kW	( <del>2</del> )	CS8365C		(24)C13, (4)C19,	1.0 m	AP7869	
	×	[	200-240	NAM	·	IT.TKW		C30303C	ூ	(2)L6-30	3.0 m	AP7899	]
			200-240	NAM	50A, 3Φ	14.4kW	⊛	CS8365C		(6)C19	1.8 m	AP7867A	
			208	NAM	60A, 3Φ	17.3kW	•	IEC309-60A 3P+PE	₩ 🖫	(12)C19, (6)C13	1.8 m	AP8866	R
			208	NAM	000,04	11.5KW	•	IEC309-60A 3P+PE	•	(30)C13	1.8 m	AP8867	R
			400-415	Worldwide	16A, 3Φ	11kW	0	IEC309-16A 3P+N+PE	₩ 🖫	(36)C13, (6)C19	1.8 m	AP8881	R
	400-415V 3-phase Input	Vertical, 0U	415	NAM	30A, 3Φ	17.3kW	@	IEC309-30A 3P+N+PE	₩ 🖫	(12)C19, (30)C13	1.8 m	AP8887	R
			400	EMEA, APJ, LAM, GCN	32A, 3Φ	22kW	⊕	IEC309-32A 3P+N+PE	₩ 🖫	(12)C19, (30)C13	1.8 m	AP8886	R
	4년		400	EMEA, APJ, LAM, GCN	32A, 3Φ	22kW	0	IEC309-32A 3P+N+PE	7	(6)C19	1.8 m	AP7855A	
			415	NAM	40A, 3Φ	23kW	0	IEC309-60A 3P+N+PE	59 €	(12)C19, (30)C13	1.8 m	AP8888	R

R – Rack PDUs recommended on page 6 and 7.





### Rack PDU Charts - Switched

Switched Rack Power Distribution Units (PDUs) enable advanced, user-customizable power control and active monitoring. Remote outlet level controls allow power on/off functionality for power recycling to remotely reboot equipment and restrict unauthorized use of individual outlets. Power sequencing time delays allow users to define the order in which to power up or down attached equipment. Avoid circuit overload during power recovery and extend uptime of critical equipment by prioritizing the load shedding. Input Current metering provides real-time remote monitoring of connected loads. AP8000 series Switched Rack PDUs include real power monitoring, a temperature/humidity sensor port, and locking IEC receptacles. User-defined alarms warn of potential circuit overloads before critical IT failures occur. Users can access, configure, and control Switched Rack PDUs through secure Web, SNMP, or Telnet Interfaces.

		Mounting U-Space	Nominal Voltage	Region	Input Circuit	Nominal Power	Inpu	t Plug Type	Outpu	it Receptacles	Cord Length	APC SKU
			100-120	NAM	15A	1.4kW	<b>6</b>	NEMA 5-15P	<b>@</b>	(16)5-15	3.0 m	AP7931
	00-120V Input		120	NAM	20A	1.9kW	3	NEMA L5-20P	•	(24)5-20	3.0 m	AP7930
		Vertical, 0U	100	Japan	20A	1.9kW	•	NEMA L5-20P	<b>a</b>	(24) 5-15	3.0 m	AP7930J
			120	NAM	30A	2.9kW	(3)	NEMA L5-30P	•	(24)5-20	3.0 m	AP7932
	á		100	Japan	30A	3.0kW	3	NEMA L5-30P	0	(24) 5-15	3.0 m	AP7932J
	7	Horizontal, 1U	100-120	NAM	15A	1.4kW	<b>®</b>	NEMA 5-15P	8	(8)5-15	3.6 m	AP7900
	유	Tionzonkai, io	100-120	NAM	20A	1.9kW	➂	NEMA L5-20P	•	(8)5-20	3.6 m	AP7901
		Horizontal, 2U	120	NAM	30A	2.9kW	3	NEMA L5-30P	•	(16)5-20	3.6 m	AP7902
		r ionzontal, zo	100	Japan	32A	3.0kW	•	NEMA L5-30P	8	(16) 5-15	3.6 m	AP7902J
			230	EMEA, APJ,	10A	2.3kW	<u> </u>	IEC C14	- 50	(16)C13	3.0 m	AP7950
			100-240	NAM	20A	3.3kW	(3)	NEMA L6-20P	₩ 🖫	(7)C13, (1)C19	3.0 m	AP8958NA3
u			100-240	Worldwide	16A	3.3kW	<b>E</b>	IEC-320 C20		(7)C13, (1)C19	Inlet	AP8958
PDU			230	EMEA, APJ, LAM, GCN	16A	3.7kW	0	IEC309 16A	₩ 🕾	(7)C13, (1)C19	3.0 m	AP8958EU3
×		Vertical, 0U	100-240	NAM	20A	3.3kW	(3)	NEMA L6-20P		(21)C13, (3)C19	3.0 m	AP8959NA3
Ş	ă		100-240	Worldwide	16A	3.3kW	<b>E</b>	IEC-320 C20		(21)C13, (3)C19	Inlet	AP8959
SVITCHED RACK PDUS	200-240V Input		230	EMEA, APJ, LAM, GCN	16A	3.7kW	0	IEC30916A	₩ 🕾	(21)C13, (3)C19	3.0 m	AP8959EU3
王	강		200-240	NAM, Japan	30A	5.0kW	ூ	NEMA L6-30P	8	(21)(013, (3)(019	3.0 m	AP8941
Ž	8		220-240	EMEA, APJ, LAM, GCN	32A	7.4kW	0	IEC309 32A	₩ 🖫	(21)C13, (3)C19	3.0 m	AP8953
S		Horizontal, 1U	208-230	Worldwide	10/15A	2.5kW	•	IEC-320 C14	•	(8)C13	2.0 m	AP7920
			208-230	Worldwide	16A	3.3kW	==	IEC-320 C20	9	(8)C13	2.4 m	AP7921
			200-240	NAM	30A	5.0kW	➂	NEMA L6-30P	•	(16)C13	3.6 m	AP7911A
		Horizontal, 2U	230	EMEA, APJ, LAM, GCN	32A	7.4kW	0	IEC309 32A	•	(16)C13	3.6 m	AP7922
	a		208	NAM	20A, 3Φ	5.7kW	<b>⊕</b>	NEMA L21-20P	<b>®</b>	(24)5-20	1.0 m	AP7960
	208V 3-phase Input		200	IVAIN	204,34	9.7KW	(9)	NEINA CZI-ZOF	•	(24)0-20	3.0 m	AP7990
		Vertical, 0U	208	NAM	20A, 3Φ	5.7kW	⊛	NEMA L21-20P		(21)C13, (3)C19	1.8 m	AP8961
			208	NAM	30A, 3Φ	8.6kW	⊛	NEMA L21-30P		(21)C13, (3)C19	1.8 m	AP8965
	8		200-240	NAM	50A, 3Φ	12.5kW	(₽)	CS8365C		(21)C13, (3)C19	1.0 m	AP7968
			200-240	19/3/19/	30/4,34	12.5KW	- 69	C00000C	₩ 🖫	(21)010, (0)010	3.0 m	AP7998
	400- 415V 3-phase	Vertical, 0U	400-415	Worldwide	16A, 3Φ	11kW	•	IEC309-16A 3P+N+PE	₩ 🕾	(21)C13, (3)C19	1.8 m	AP8981

Metered by Outlet with Switching Rack Power Distribution Units (PDUs) enable advanced, user-customizable power control and individual outlet power metering.

BY IING		Mounting U-Space	Nominal Yoltage	Region	Input Circuit	Nominal Power	Input	Plug Type	Outpu	t Receptacles	Cord Length	APC SKU
	-240V iput		200-240	NAM, Japan	30A	5.0kW	3	NEMA L6-30P	₩ 🖫	(21)C13, (3)C19	3.0 m	AP8641
ETER OUT SV	200- In	Vertical, 0U	220-240	EMEA, APJ, LAM, GCN	32A	7.4kW	0	IEC309 32A	₩ 🐨	(21)C13, (3)C19	3.0 m	AP8653
₹ ÷	208V 3- phase		208	NAM	20A, 3Φ	5.7kW	<b>③</b>	NEMA L21-20P	₩ 🖫	(21)C13, (3)C19	1.8 m	AP8661





### Applications for height

24U Enclosures - Remote offices and small spaces

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

45U Enclosures - Enclosures with additional U-spaces for environments that standardize on a 45U 7 ft enclosure height

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



#### Applications for width

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

30 in (750 mm) 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



### Applications for depth

32.5 in (825 mm) is the preferred depth for AV equipment

42 in (1070 mm) is the standard depth and meets most low to medium density applications

The 47.5 in (1200 mm) NetShelter has double the toolless mounting locations for more Rack PDU and cable management options (excluding AR3x4x enclosures)

The 47 - 48 in (1195 - 1220 mm) depth enclosures are becoming the new standard because of increasing server depth crowding cable and power space



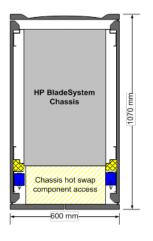
NetShelter SKU	Height	Width	Depth	Application
AR3100	42U	600 mm (24 in)	1070 mm (42 in)	Low-medium density servers
AR3105	45U	600 mm (24 in)	1070 mm (42 in)	Low-medium density servers
AR3107	48U	600 mm (24 in)	1070 mm (42 in)	Low-medium density servers
AR3150	42U	750 mm (30 in)	1070 mm (42 in)	Networking and blade applications
AR3155	45U	750 mm (30 in)	1070 mm (42 in)	Networking and blade applications
AR3157	48U	750 mm (30 in)	1070 mm (42 in)	Networking and blade applications
AR3300	42U	600 mm (24 in)	1200 mm (47.5 in)	Medium-high density servers
AR3305	45U	600 mm (24 in)	1200 mm (47.5 in)	Medium-high density servers
AR3307	48U	600 mm (24 in)	1200 mm (47.5 in)	Medium-high density servers
AR3350	42U	750 mm (30 in)	1200 mm (47.5 in)	HD networking and blade applications
AR3355	45U	750 mm (30 in)	1200 mm (47.5 in)	HD networking and blade applications
AR3357	48U	750 mm (30 in)	1200 mm (47.5 in)	Networking and blade applications
AR3140	42U	750 mm (30 in)	1070 mm (42 in)	High-density networking
AR3340	42U	750 mm (30 in)	1200 mm (47.5 in)	Very high-density networking
AR3347	48U	750 mm (30 in)	1200 mm (47.5 in)	Very high-density networking
AR3200	42U	600 mm (24 in)	1070 mm (42 in)	2 x 20U compartments for colocation
AR3104	24U	600 mm (24 in)	1070 mm (42 in)	Remote server applications
AR3810	42U	600 mm (24 in)	825 mm (325 in)	Audio visual applications
AR3812	42U	600 mm (24 in)	825 mm (32.5 in)	Audio visual applications
AR3814	24U	600 mm (24 in)	825 mm (325 in)	Audio visual applications

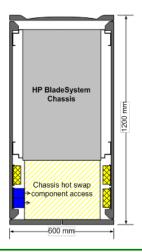


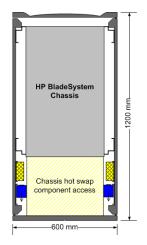
# Enclosure Recommendations - 600mm/24" Wide

The following diagrams are intended to show how the HP c7000 chassis fits within the different widths and depths of the NetShelter SX. Blade chassis' in general offer unique challenges of space and access. The rear area needs to be completely clear of cable managers and PDUs in order to access the rear hot-swappable components.

#### **TOP VIEW**







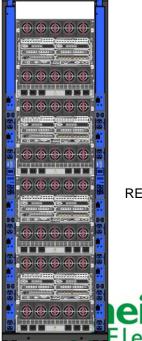
Yellow areas show data cabling area. Recommended cable managers: AR7710

- The 1070mm (42") deep enclosure is not recommended due to lack of the space for cable management.
- If 1070mm deep must be used, maximize space by rotating PDUs 90 degrees so that the outlets are facing the rear. Use AR7711 kit to rotate PDUs
- Add right angle power cord kits to improve clearance with enclosure frame.
- For cable management, use AR7540 Toolless Cable Ring kit in any available space.
- The 1200mm (47") deep enclosure offers more mounting options for PDUs and cable managers. The above two diagrams show suggested options.
- PDUs should be mounted in rear-most toolless channels to avoid interference with blade chassis components.
- If it is preferred to mount PDUs on opposite sides, maximize space by rotating PDUs 90 degrees so that the outlets are facing the rear.
- Recommended cable manager AR7710 mounted in toolless rear channels.

AP8866 rack PDU shown in illustration; however, configuration would be common for any PDU selection.







**REAR VIEW** 



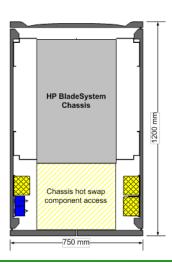
# Enclosure Recommendations - 750mm/30" Wide

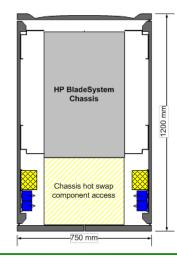
The below diagrams show the available rear space for 750mm (30") wide NetShelter's and the recommended Rack PDU and cable management options.

#### **TOP VIEW**

Rack PDUs can be placed on either side of rack enclosure

Chassis hot swap component access

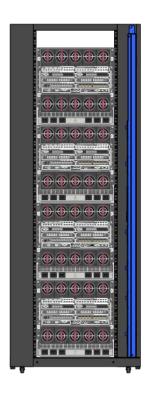


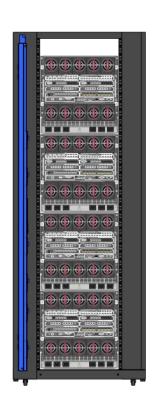


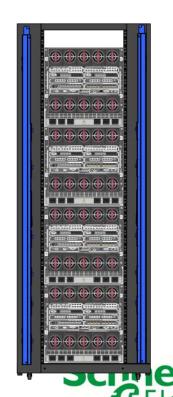
Yellow areas show data cabling area. Recommended cable managers: AR7710, AR7721, or AR7580A

1200mm enclosure has additional space for access and cable management (can use additional AR7721 kits or AR7710 kits)

- The wider 750mm (30") enclosures are the recommended enclosures for blade applications. They offer the best clearance with absolutely no interference with the Rack PDUs/cable managers and the removable modules of the blade chassis.
- Recommended cable manager AR7710 mounted in toolless rear channels.







**REAR VIEW**