



NetSure™ 2100 Ordering Guide

-48V DC Power System
582138000 (Up to 48 A)



NetSure™ 2100 Ordering Guide

Description

The NetSure™ 2100 Series, a compact, -48 volt, 48 A DC power solution, features an advanced control unit, up to (3) positions for 1000 W high-efficiency eSure™ rectifiers and distribution space for breakers and/or fuses. The power system supports 19" W and 23" W rack mounting and is available in a number of configurations, designed to work with a wide range of applications.

The distribution portion of the system supports up to (12) GMT Fuses or (4) bullet circuit breakers 1 A to 60 A or (7) compact circuit breakers (5 A to 30 A) and (6) GMT Fuses or (4) compact circuit breakers, (6) GMT fuses and (1) bullet battery disconnect circuit breaker. Battery Low voltage disconnect capability as an option is supported. Remote monitoring and control is supported through multiple web browsers including IE, Firefox, Chrome and Safari. Standard supported protocols include ModBus and SNMP. Optional encrypted security is provided by IPv6 and SNMPV3. Local access is accomplished using the controllers, keypad while viewing the 2 line display or connecting to the Ethernet jack on the face of the unit.

NetSure DC Power systems from Vertiv offer extremely low failure rates, as well as low total cost of ownership. The 1000 W eSure™ rectifier delivers peak system efficiency above 95%. Maximum value is achieved by an advanced energy optimization function known as ECO mode, enabling significant energy savings even at low loads. High temperature system operation allows for flexibility of deployment.



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Requester Contact Information:

Name*

Company*

Address*

Zip Code*

Email*

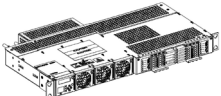
Phone*

Please **SAVE** this form to your desktop. Then press the submit button below

* These are required fields. Please complete.


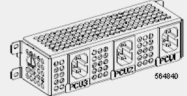
Step 1. Choose 19" Base Rectifier Shelf

Select one, quantity of one.

List Number	Vertiv Part Number	Description	Qty.	Rack Space	Notes	Pictorial
List 01	58213800001	-48VDC Power System Shelf		1RU	Accepts one distribuion option	

Step 2. Choose AC Input

Select one, quantity of one.

List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
n/a	564841	Single Shelf AC Input with Cord			
n/a	564840	Individual AC Input with IEC Receptacles			

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Step 3. Choose AC Cords

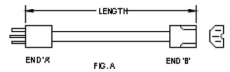
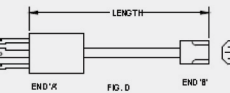
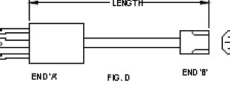
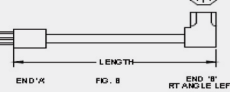
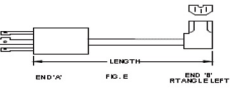
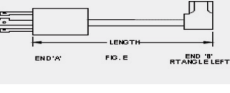

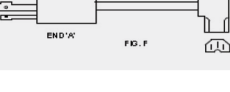
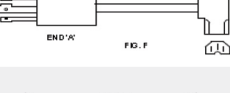

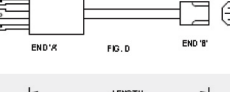
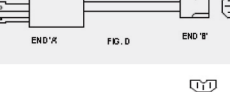
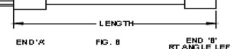
Select AC cords for molex AC input or IEC AC input.

Select appropriately angled IEC AC cords for orientation of IEC sockets on rear of shelf.



List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
Single AC Input Cords with Un-terminated ends or cords with plugs					
n/a	565487	30" 12AWG Un-terminated AC Cable Assembly		Select (1) AC cord	
n/a	565488	6' 12AWG Un-terminated AC Cable Assembly		Select (1) AC cord	
n/a	565489	12' 12AWG Un-terminated AC Cable Assembly		Select (1) AC cord	
n/a	565490	120V, 6', 5-20 AC Cord		Select (1) AC cord	
n/a	565491	120V, 14', 5-20 AC Cord		Select (1) AC cord	
n/a	565494	120V, 6', L5-20 TwstLk AC Cord		Select (1) AC cord	
n/a	565495	120V, 14', L5-20 TwstLk AC Cord		Select (1) AC cord	
n/a	565496	240V, 6', L6-20 TwstLk AC Cord		Select (1) AC cord	
n/a	565497	240V, 14', L6-20 TwstLk AC Cord		Select (1) AC cord	
n/a	565498	6' IEC320 AC Cord		Select (1) AC cord	

Step 3. (continued)

List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
IEC AC Input Cords with plugs					
n/a	151873	6', IEC320-C15/5-15 Straight AC Cord		Select up to (3) AC cords	
n/a	151874	6', IEC320-C15/L5-15 Straight AC Cord		Select up to (3) AC cords	
n/a	151875	6', IEC320-C15/L6-15 Straight AC Cord		Select up to (3) AC cords	
n/a	151876	6', IEC320-C15/5-15 Right Angle Left AC Cord		Select up to (3) AC cords	
n/a	151877	6', IEC320-C15/L5-15 Right Angle Left AC Cord		Select up to (3) AC cords	
n/a	151878	6', IEC320-C15/L6-15 Right Angle Left AC Cord		Select up to (3) AC cords	
n/a	151879	6', IEC320-C15/5-15 Right Angle Right AC Cord		Select up to (3) AC cords	
n/a	151880	6', IEC320-C15/L5-15 Right Angle Right AC Cord		Select up to (3) AC cords	
n/a	151881	6', IEC320-C15/L6-15 Right Angle Right AC Cord		Select up to (3) AC cords	
n/a	151882	14', IEC320-C15/5-15 Straight AC Cord		Select up to (3) AC cords	
n/a	151883	14', IEC320-C15/L5-15 Straight AC Cord		Select up to (3) AC cords	
n/a	151884	14', IEC320-C15/L6-15 Straight AC Cord		Select up to (3) AC cords	
n/a	151885	14', IEC320-C15/5-15 Right Angle Left AC Cord		Select up to (3) AC cords	

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Step 3. (continued)

List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
IEC AC Input Cords with plugs					
n/a	151886	14' , IEC320-C15/L5-15 Right Angle Left AC Cord		Select up to (3) AC cords	
n/a	151887	14' , IEC320-C15/L6-15 Right Angle Left AC Cord		Select up to (3) AC cords	
n/a	151888	14' , IEC320-C15/5-15 Right Angle Right AC Cord		Select up to (3) AC cords	
n/a	151889	14' , IEC320-C15/L5-15 Right Angle Right AC Cord		Select up to (3) AC cords	
n/a	151890	14' , IEC320-C15/L6-15 Right Angle Right AC Cord		Select up to (3) AC cords	


Step 4. Choose Distribution Option

Select one per system.

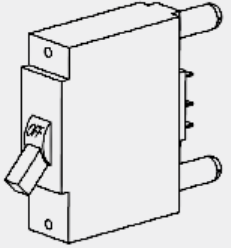
List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
List AA	582138000AA	(12)GMT fuse positions			
List BA	582138000BA	(7) Load breaker positions and (6) GMT fuse positions		Requires compact breakers	
List BB	582138000BB	(4) Load breaker positions, (6) GMT fuse positions and (1) Battery Disconnect		Requires (1) battery disconnet bullet breaker and (4) compact breakers	
List CA	582137100CA	(4) Load breaker positions and (6) GMT fuse positions		Requires (4) bullet breakers	

Step 5. Choose Distribution Devices

Step 5a. Choose Compact Type Circuit Breakers for List BA and BB

List Number	Vertiv Part Number	Ampere Rating	Description	Qty.	Notes	Pictorial
Electrical/Mechanical Trip Toggle Handle Bullet Breakers						
n/a	151313	5	5A E Trip		Occupies one position in List BA or BB	
n/a	151314	10	10A E Trip		Occupies one position in List BA or BB	
n/a	151315	15	15A E Trip		Occupies one position in List BA or BB	
n/a	151316	20	20A E Trip		Occupies one position in List BA or BB	
n/a	151317	25	25A E Trip		Occupies one position in List BA or BB	
n/a	151318	30	30A E Trip		Occupies one position in List BA or BB	

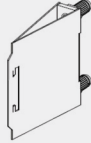
Step 5b. Choose Bullet-Nose Type Circuit Breakers for List CA

List Number	Vertiv Part Number	Ampere Rating	Description	Qty.	Notes	Pictorial
Electrical/Mechanical Trip Toggle Handle Bullet Breakers						
n/a	101596	1	Black toggle handle		Occupies one position	
n/a	101597	3	Black toggle handle		Occupies one position	
n/a	101598	5	Black toggle handle		Occupies one position	
n/a	101599	10	Black toggle handle		Occupies one position	
n/a	101600	15	Black toggle handle		Occupies one position	
n/a	101601	20	Black toggle handle		Occupies one position	
n/a	101602	25	Black toggle handle		Occupies one position	
n/a	101603	30	Black toggle handle		Occupies one position	
n/a	101604	35	Black toggle handle		Occupies one position	
n/a	101605	40	Black toggle handle		Occupies one position	
n/a	121997	45	Black toggle handle		Occupies one position	
n/a	101606	50	Black toggle handle		Occupies one position	
n/a	101607	60	Black toggle handle		Occupies one position	

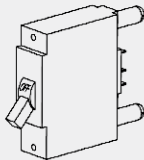
Step 5b. Choose Bullet-Nose Type Circuit Breakers for List CA (continued)

List Number	Vertiv Part Number	Ampere Rating	Description	Qty.	Notes	Pictorial
Electrical Trip Toggle Handle Bullet Breakers						
n/a	102272	1	White toggle handle		Occupies one position	
n/a	102273	3	White toggle handle		Occupies one position	
n/a	102274	5	White toggle handle		Occupies one position	
n/a	102275	10	White toggle handle		Occupies one position	
n/a	102276	15	White toggle handle		Occupies one position	
n/a	102277	20	White toggle handle		Occupies one position	
n/a	102278	25	White toggle handle		Occupies one position	
n/a	102279	30	White toggle handle		Occupies one position	
n/a	102280	35	White toggle handle		Occupies one position	
n/a	102281	40	White toggle handle		Occupies one position	
n/a	121998	45	White toggle handle		Occupies one position	
n/a	102282	50	White toggle handle		Occupies one position	
n/a	102283	60	White toggle handle		Occupies one position	


Step 5c. Choose Bullet-Nose Type Bypass Bus Bar

List Number	Vertiv Part Number	Ampere Rating	Description	Qty.	Notes	Pictorial
Electrical/Mechanical Trip Toggle Handle Bullet Breakers						
n/a	563020		Bullet Nose Bypass Busbar			

Step 5d. Choose Bullet-Nose Type Battery Disconnect Circuit Breaker for List BB

List Number	Vertiv Part Number	AMPERE RATING	Description	Qty.	Notes	Pictorial
Electrical/Mechanical Trip Toggle Handle Bullet Breakers						
n/a	101605	40	Black toggle handle		Occupies one position	
n/a	121997	45	Black toggle handle		Occupies one position	
n/a	101606	50	Black toggle handle		Occupies one position	
n/a	101607	60	Black toggle handle		Occupies one position	
n/a	101608	70	Black toggle handle		Occupies one position	

Step 5e. Choose GMT Fuses

List Number	Vertiv Part Number	Ampere Rating	Description	Qty.	Notes	Pictorial
n/a	248610301	18/100	GMT fuse		Occupies one position	
n/a	248610200	1/4	GMT fuse		Occupies one position	
n/a	248610300	1/2	GMT fuse		Occupies one position	
n/a	248610500	3/4	GMT fuse		Occupies one position	
n/a	248610700	1-1/3	GMT fuse		Occupies one position	
n/a	248610800	2	GMT fuse		Occupies one position	
n/a	248610900	3	GMT fuse		Occupies one position	
n/a	248611000	5	GMT fuse		Occupies one position	
n/a	248611300	7-1/2	GMT fuse		Occupies one position	
n/a	248611200	10	GMT fuse		Occupies one position	
n/a	248611500	15	GMT fuse		Occupies one position, space required	
n/a	102774	-	Replacement safety cover	-	-	
n/a	248872600	-	Replacement dummy fuse		Occupies one position	

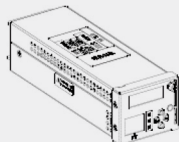
Step 6. Optional - Choose Low-Voltage Battery Disconnect Capability

Select one, quantity of one.

List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
List LB	582138000LB	Battery Low-Voltage Disconnect		Disconnects the battery when the voltage drops to a User-settable value. Reconnects when the voltage raises to a User-settable reconnect value. One disconnect per shelf	


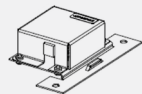

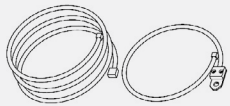







Step 7. Choose Controller

Select one, quantity of one.

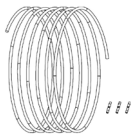
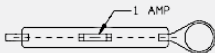

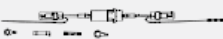
List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
n/a	1M831ANA	NCU Controller		Standard or special firmware configuration can be assigned Provides (4) programmable output relays, (2) programmable binary inputs and (2) temperature inputs	

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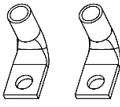
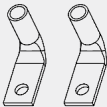
Step 8. Optional - Choose Controller Interfaces

List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
n/a	n/a	Disconnect Controller on LVD?		This is a choice to keep the controller powered or not when the BLVD is opened	
n/a	565286	12' Digital Input and Output Alarm cable			
n/a	559239	NCU controller second Ethernet port kit - external		Provides dual Ethernet feature - one static and one dynamic	
n/a	147605	Externally Mounted 2nd Ethernet Port Kit Cable Assembly		Order this cable with the 559239	
n/a	556155	Temperature probe, 3.3m, includes 0.3 m sensor		Provides temperature monitoring and alarming for battery or ambient. Battery-assigned probes provide temperature compensation and battery thermal runaway management	
n/a	552992	Temperature probe, 10.3m, includes 0.3m sensor		Provides temperature monitoring and alarming for battery or ambient. Battery-assigned probes provide temperature compensation and battery thermal runaway management	
n/a	04119122	10 m temperature probe extension		Provides 10 meter extension for temperature probe	
n/a	552823	10 m temperature probe extension controller side cable		10 m temperature probe extension controller side cable	
n/a	556154	3 m temperature probe extension controller side cable		3 m temperature probe extension controller side cable	
n/a	552822	0.3m temperature probe			
n/a	547490	SMTEMP, 8 input temperature module		Provides (8) temperature inputs. Maximum quantity of eight per system. Mounts external to power system	
n/a	565458	SM Temp to CAN			

Step 8. (continued)


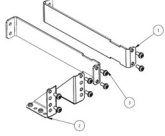
List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
n/a	552888	SM Module RS-485 Cable			
n/a	431300200	1 amp in-line fuse pigtail kit with 3/8" ring lug		Used for connecting to battery or bus potentials for use with digital inputs	
n/a	431300300	1 amp in-line fuse pigtail kit with 5/16" ring lug		Used for connecting to battery or bus potentials for use with digital inputs	
n/a	535135	In-line fuse pigtail kit with splice connector, 3/8" ring lug, and 1/4" ring lug		Used for connecting to battery or bus potentials for use with digital inputs	

Step 9. Optional - Battery Cables & Lug Kits

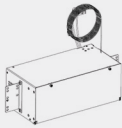
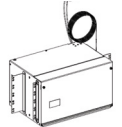
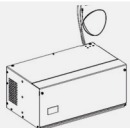
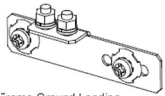
List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
n/a	565456	(2) 15', 2AWG Battery Cables			
n/a	565457	(2) 15', 8AWG Battery Cables			
n/a	545709	(2) 4', 8AWG, Shelf-side Battery Cables e/w Anderson Connector			
n/a	557304	(2) 3', 6AWG, Shelf-side Battery Cables e/w Anderson Connector			
n/a	545581	8 AWG Battery Lug Kit			
n/a	528234	2 AWG battery lug kit			
n/a	528236	2 AWG long tongue battery lug kit			

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Step 10. Optional - Mounting Accessories

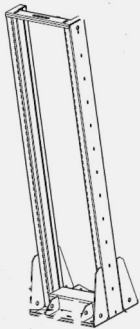
List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
n/a	540993	1Ru 19"W to 23" W Relay Rack Adapter Kit			
n/a	541285	Wall Mount Bracket Kit			

Step 11. Optional - Battery Cabinets

List Number	Vertiv Part Number	Description	Qty.	Rack Space	Notes	Pictorial
n/a	541434	Battery Cab, Small		4RU		
n/a	545534	Battery Cab, Medium (6U)		6RU	Includes slide out tray	
n/a	545506	Battery Cab, Large		6RU	Fits 23" relay rack or wall mount	
n/a	556872	Kit Adapter,GND,BatCab		n/a	Fits 23" relay rack or wall mount	 <small>*Frame Ground Landing Point Adapter P/N 556872</small>

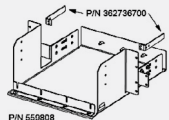
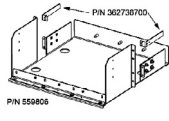
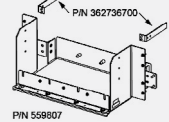
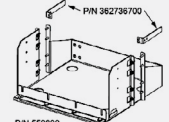
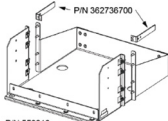
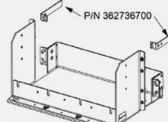
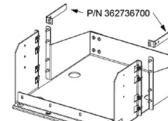
Step 12. Optional - Choose 19" or 23" Relay Rack

Select one, quantity of one.

List Number	Vertiv Part Number	Description	Qty.	Rack Space	Notes	Pictorial
n/a	559817	Relay rack, 51.906"H x 24.376"W x 15"D		28 RU	23" - Welded	
n/a	559819	Relay rack, 84.000"H x 25.000"W x 15"D		45 RU	23" - Seismic	
n/a	559818	Relay rack, 72.000"H x 24.375"W x 15"D		37 RU	23" - Welded	
n/a	559820	Relay rack, 84.000"H x 24.375"W x 15"D		45 RU	23" - Welded	
n/a	559821	Relay rack, 90.000"H x 24.375"W x 15"D		48 RU	23" - Welded	
n/a	559822	Relay rack, 96.000"H x 24.375"W x 15"D		51 RU	23" - Welded	
n/a	562353	Relay Rack, 84.000"H x 25.800"W x 18"D		45 RU	23" - Seismic e/w 6" rails	
n/a	559824	Relay rack, 84.000"H x 21.000"W x 15"D		45 RU	19" - Welded	
n/a	559823	Relay rack, 84.000"H x 20.375"W x 15"D		45 RU	19" - Seismic	
n/a	563922	Relay rack, 84.000"H x 21.800"W x 18"D		45 RU	19" - Seismic e/w 6" rails	


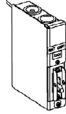
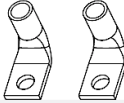
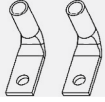

Step 13. Optional - Choose Battery Tray(s) & Battery Tray Accessories

Select one or two List 93 or List 94 and up to (2) trays as space and restrictions apply.
Select battery disconnect and lugs if required.


List Number	Vertiv Part Number	Amp Rating	Description	Qty.	Rack Space	Notes	Pictorial
List 93	58213710093	-	Battery tray mounting kit	-	-		
n/a	559808	-	Battery tray for front terminal batteries, max battery size 11.3" x 4.3" x 21.7" (H x W x L)		6 RU, 7 RU or 8 RU		
n/a	559806	-	Battery tray for front terminal batteries, max battery size 12.8" x 4.96" x 22.51" (H x W x L)		6 RU, 7 RU or 8 RU		
n/a	559807	-	Battery tray for front terminal batteries, max battery size 11.60" x 4.20" x 11.3" (H x W x L)		6 RU, 7 RU or 8 RU		
List 94	58213710094	-	Battery tray mounting kit	-	-		
n/a	559809	-	Battery tray for front terminal batteries, max battery size 11.3" x 4.25" x 15.59" (H x W x L)		6 RU, 7 RU or 8 RU		
n/a	559810	-	Battery tray for front terminal batteries with the following maximum dimensions: 4.33"W x 20.12"L x 9.4"H		6RU, 7RU or 8RU		
n/a	559811	-	Battery tray for front terminal batteries with the following maximum dimensions: 4.20"W x 11.3"L x 11.6 "H		6RU, 7RU or 8RU		
n/a	559812	-	Battery tray for front terminal batteries with the following maximum dimensions: 4.3"W x 22.1"L x 12.4"H		6RU, 7RU or 8RU		

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Step 13. (continued)

List Number	Vertiv Part Number	Amp Rating	Description	Qty.	Rack Space	Notes	Pictorial
n/a	559814	-	Single pole battery disconnect box - Left side of relay rack				
n/a	559813	-	Single pole battery disconnect box - Right side of relay rack				
n/a	256694300	50	Electrical/Mechanical trip breaker			Requires 559814 or 559813 battery disconnect box	
n/a	256694700	60	Electrical/Mechanical trip breaker			Requires 559814 or 559813 battery disconnect box	
n/a	256695100	70	Electrical/Mechanical trip breaker			Requires 559814 or 559813 battery disconnect box	
n/a	256695500	75	Electrical/Mechanical trip breaker			Requires 559814 or 559813 battery disconnect box	
n/a	256695900	100	Electrical/Mechanical trip breaker			Requires 559814 or 559813 battery disconnect box	
n/a	528234	-	2 AWG Battery Lug Kit				
n/a	528236	-	2 AWG 90 Degree Battery Lug Kit				
n/a	362736700		Relay Rack Cable Bracket				

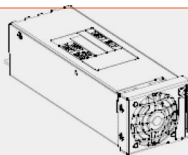
Step 14. Optional - Choose Accessories

List Number	Vertiv Part Number	Description	Qty.	Rack Space	Notes	Pictorial
n/a	562977	Earthquake Anchor Kit				

Step 15. Order Rectifiers

See instruction manuals for de-rating information due to temperature.

Slots for (3) rectifiers in each shelf.

List Number	Vertiv Part Number	Description	Qty.	Notes	Pictorial
n/a	1R481000E3	Rectifier, R48-1000e3, 48VDC, 1000 watts, high efficiency, 1 RU		Provides 20.8 amps at -48VDC	



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