



NetSure™ 5100 Ordering Guide

-48V DC Power System, Integrated
582137200 (40 A to 150 A)



NetSure™ 5100 Ordering Guide

Description

The NetSure 5100 Integrated DC Power System, a compact -48 volt, 150 A DC power solution, features an advanced control unit, up to (9) positions for 2000W high-efficiency eSure rectifiers and a distribution section. 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 section provides (4) distribution options. Up to (4) load breakers and (12) GMT fuses, or up to (2) load breakers and (2) battery disconnect breakers and (12) GMT fuses or up to (36)

GMT fuses. Options for low voltage battery disconnect are available.

Remote monitoring and control is supported through multiple web browsers including IE, Firefox, Chrome and Safari. Standard supported protocols include ModBus, SNMP V2 & V3. Encrypted security is also available as an option. Local access is provided through the controllers' keypad and TFT display.

NetSure DC Power systems from Vertiv offer extremely low failure rates, as well as low total cost of ownership. The 2000 W eSure rectifier delivers peak system

efficiency above 96%. Maximum value is achieved by an advanced energy optimization function known as ECO mode, enabling significant energy savings even at low loads.



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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.



eSure Rectifier, R48-2000e3



NCU Controller, M830B



NetSure 5100 with Integrated Distribution, 19" W

Step 1. Choose Power System Mounting

Step 1a. Optional — Choose Relay Rack, Shipping Rails

Select one, quantity of one.

List Number	Part Number	Description	Qty.	Rack Space	Notes
N/A	559817	Relay rack, 51.906"H x 24.376"W x 15"D		28RU	23" - Welded
N/A	559819	Relay rack, 84.000"H x 25.000"W x 15"D		45RU	23" - Seismic
N/A	559818	Relay rack, 72.000"H x 24.375"W x 15"D		37RU	23" - Welded
N/A	559820	Relay rack, 84.000"H x 24.375"W x 15"D		45RU	23" - Welded
N/A	559821	Relay rack, 90.000"H x 24.375"W x 15"D		48RU	23" - Welded
N/A	559822	Relay rack, 96.000"H x 24.375"W x 15"D		51RU	23" - Welded
N/A	559824	Relay rack, 84.000"H x 21.000"W x 15"D		45RU	19" - Welded
N/A	559823	Relay rack, 84.000"H x 20.375"W x 15"D		45RU	19" - Seismic
N/A	509638/509639	Shipping Brackets		22RU	

Step 1b. Optional — Choose Wall Mounting Bracket

List Number	Part Number	Description	Qty.	Notes	Pictorial
N/A	553203	Vertical Wall Mount Bracket Kit		N/A	
N/A	552537	19"W 6RU Wall Mount Bracket Kit		N/A	
N/A	552535	23"W 6RU Wall Mount Bracket Kit		N/A	

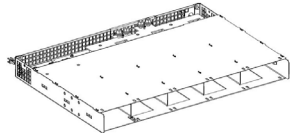
Step 1c. Choose Projection

List Number	Part Number	Description	Qty.	Rack Space	Notes
N/A	N/A	5" Projection Mount with Rear AC		N/A	Provides Molex Connectors on rear of shelf(562642)
N/A	N/A	5" Projection with Front AC		N/A	Provides Molex Connectors on front of shelf. Shelf mounts in 23" relay rack(562644)
N/A	N/A	Flush Mount with Rear AC		N/A	Provides Molex Connectors on rear of shelf(562642)

Step 2. Choose System Configuration

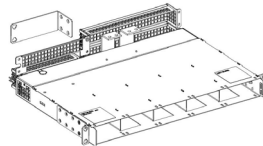
Step 2a. Choose 19"W Base Rectifier Shelf

Select one, quantity of one.

List Number	Part Number	Description	Qty.	Rack Space	Notes	Pictorial
List 01	58213720001	-48VDC Power Shelf		1RU	Accepts one distribution panel. Requires up to (2) AC cords	

Step 2b. Optional — Choose 19" Expansion Rectifier Shelf

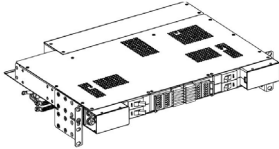
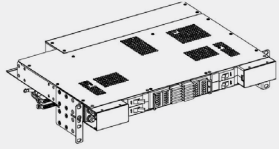
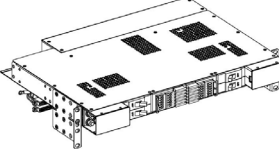
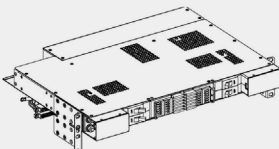
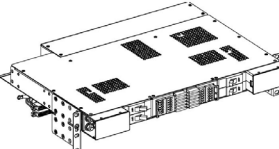
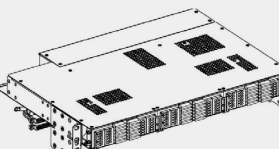
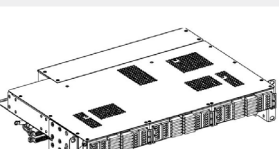
Select one, quantity of one.

List Number	Part Number	Description	Qty.	Rack Space	Notes	Pictorial
List 02	58213720002	-48VDC Expansion Power Shelf		1RU	Requires up to (3) AC cords	

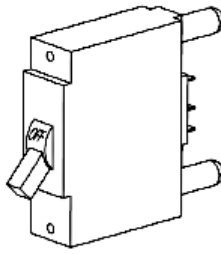
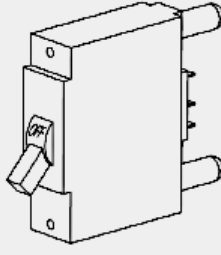
Step 3. Choose Distribution Items

Step 3a. Choose Distribution Panels

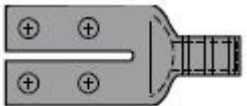
Select one per system.

List Number	Part Number	Description	Qty.	Notes	Pictorial
List BA	582137200BA	19" Distribution panel, (2) Load Breakers, (2) Battery Breakers, (12) GMT Fuses e/w BLVD			
List NA	582137200NA	19" Distribution panel, (2) Load Breakers, (2) Battery Breakers, (12) GMT Fuses			
List BC	582137200BC	19" Distribution panel, (4) Load Breakers, (12) GMT Fuses e/w BLVD			
List LC	582137200LC	19" Distribution panel, (4) Load Breakers, (12) GMT Fuses e/w LLVD			
List NC	582137200NC	19" Distribution panel, (4) Load Breakers, (12) GMT Fuses			
List BF	582137200BF	19" Distribution panel, (36) GMT Fuses e/w BLVD			
List NF	582137200NF	19" Distribution panel, (36) GMT Fuses			


Step 3b. Choose Bullet-Nose Type Circuit Breakers

List Number	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.	
N/A	101608	70	Black toggle handle		Occupies one position.	
N/A	101609	75	Black toggle handle		Occupies one position.	
N/A	121995	80	Black toggle handle		Occupies one position.	
N/A	138887	90	Black toggle handle		Occupies one position.	
N/A	101610	100	Black toggle handle		Occupies one position.	
N/A	516838	125	Black toggle handle		Occupies two positions.	
N/A	516839	150	Black toggle handle		Occupies two positions.	
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.	
N/A	102284	70	White toggle handle		Occupies one position.	
N/A	102285	75	White toggle handle		Occupies one position.	
N/A	121996	80	White toggle handle		Occupies one position.	
N/A	138887	90	White toggle handle		Occupies one position.	
N/A	102286	100	White toggle handle		Occupies one position.	
N/A	516991	125	White toggle handle		Occupies two positions.	
N/A	516993	150	White toggle handle		Occupies two positions.	

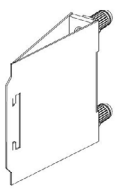
Step 3c. Optional - Choose Special Application Crimp Lugs

List Number	Part Number	Number of Poles	Description	Qty.	Notes	Pictorial
N/A	245393500	2 Pole	1/0 Lug		Required for 125A and 150A breaker.	
N/A	245393600	2 Pole	2/0 Lug		Required for 125A and 150A breaker.	
N/A	245393700	3 Pole	3/0 Lug		Required for 125A and 150A breaker.	
N/A	245393800	2 Pole	4/0 Lug		Required for 125A and 150A breaker.	

Step 3d. Choose GMT Fuses with GMT Fuse Module

List Number	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	







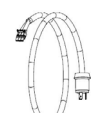

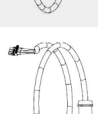
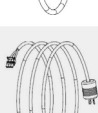

Step 3e. Choose Bullet Nose Bypass Bus Bar

List Number	Part Number	Description	Qty.	Notes	Pictorial
N/A	563020	Bullet Nose Bypass Busbar		Order one fuse holder per fuse.	

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Step 4. Choose AC Cords

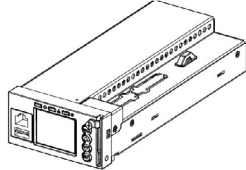
Select AC cords. List 01 Base shelf requires (2) AC cords. List 02 Expansion shelf requires (3) AC cords.

List Number	Part Number	Description	Qty.	Notes	Pictorial
N/A	535232	30" long, 8 AWG, input cable assembly			
N/A	547898	6' long, 8 AWG, input cable assembly			
N/A	553202	12' long, 8 AWG, AC input cable assembly			
N/A	540946	14' long, 8/3 AWG, AC input line cord, L6-30P			
N/A	559301	14' long, 8/3 AWG, AC input line cord, L6-30P e/w 90 degree bend			
N/A	545252	14' long, 8/3 AWG, AC input line cord, L5-30P			
N/A	545616	6' long, 8 AWG, AC input line cord, L6-30P			
N/A	559842	6' long, 8 AWG, AC input line cord, L6-30P e/w 180 degree bend			
N/A	559302	6' long, 8 AWG, AC input line cord, L6-30P e/w 90 degree bend			
N/A	547525	14' long, 12 AWG, AC input line cord, L5-30P			
N/A	548196	6' long, 12 AWG, AC input line cord, IEC320 C20			


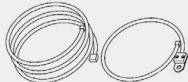
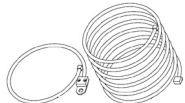
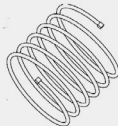
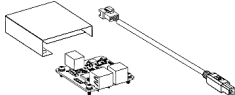
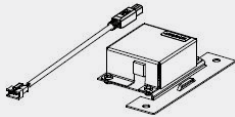
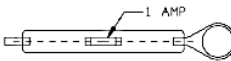

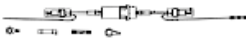
Step 5. Controller Items

Step 5a. Choose Controller

Select one, quantity of one.

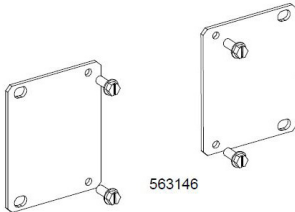
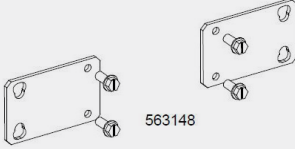
List Number	Part Number	Description	Qty.	Notes	Pictorial
N/A	1M830BNA	NCU Controller		Standard or special firmware configuration can be assigned. Distribution panel comes equipped with IB2 interface board which provides (8) programmable and mappable output relays, (8) programmable binary inputs and (2) temperature inputs.	

Step 5b. Optional — Choose Controller Interfaces

List Number	Part Number	Description	Qty.	Notes	Pictorial
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	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	562804	NCU controller second Ethernet port kit - internal		Provides dual Ethernet feature - one static and one dynamic. Cannot use the IB2 board when this board is used.	
N/A	561929	NCU controller second Ethernet port kit - external		Provides dual Ethernet feature - one static and one dynamic.	
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 on the IB2 Interface board.	
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 on the IB2 Interface board.	
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 on the IB2 Interface board.	

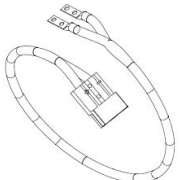
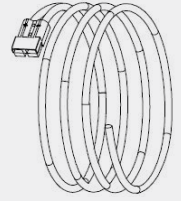
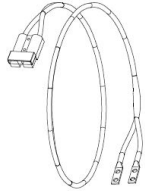
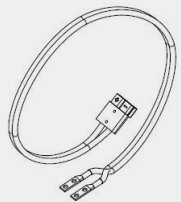
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Step 6. Optional - Choose Accessories

List Number	Part Number	Description	Qty.	Rack Space	Notes	Pictorial
N/A	563146	19"W to 23"W Mounting adapters for List 01 shelf		2RU		
N/A	563148	19"W to 23"W Mounting adapters for List 02 shelf		1RU		

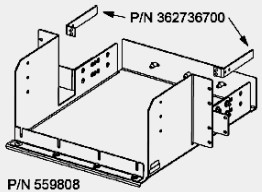
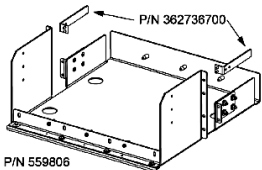
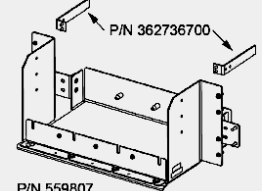
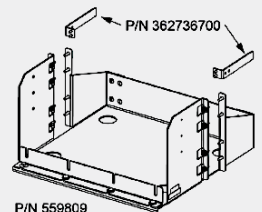
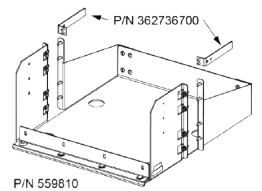
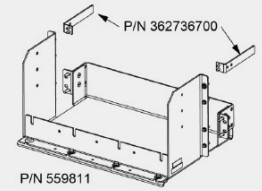
Step 7. Optional - Choose Battery Cables, Tray(s) and Battery Tray Accessories

Step 7a. Optional - Choose Battery Cables

List Number	Part Number	Description	Qty.	Notes	Pictorial
N/A	540814	(2) 3' long, 2 AWG, battery cables terminated in a 2-position Red SB120 Anderson connector on the shelf side.			
N/A	540954	(2) 12' long, 2 AWG, battery cables terminated in a 2-position Red SB120 Anderson connector on the battery side.			
N/A	545709	(2) 4' long, 8 AWG, battery cables terminated in a 2-position Red SB50 Anderson connector on the shelf side.			
N/A	557304	(2) 3' long, 6 AWG, battery cables terminated in a 2-position Red SB50 Anderson connector on the shelf side.			

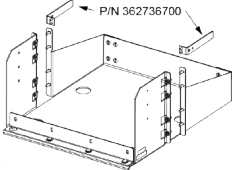
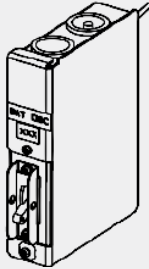
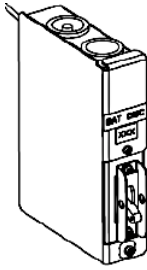
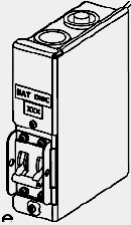
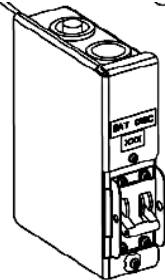
Step 7b. Optional — Choose Battery Tray(s) and Battery Tray Accessories

Select one List 93 or List 94 and up to (4) trays as space and restrictions apply.
 Select battery disconnect and lugs if required.

List Number	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 with the following maximum dimensions: 4.3"W x 21.7"L x 11.3"H		6RU, 7RU or 8RU		 <p>P/N 559808</p>
N/A	559806	—	Battery tray for front terminal batteries with the following maximum dimensions: 4.96"W x 22.51"L x 12.80"H		6RU, 7RU or 8RU		 <p>P/N 559806</p>
N/A	559807	—	Battery tray for front terminal batteries with the following maximum dimensions: 4.20"W x 11.3"L x 11.60"H		6RU, 7RU or 8RU		 <p>P/N 559807</p>
List 94	58213710094	—	Battery Tray Mounting Kit	—	—		
N/A	559809	—	Battery tray for front terminal batteries with the following maximum dimensions: 4.25"W x 15.59"L x 11.3"H		6RU, 7RU or 8RU		 <p>P/N 559809</p>
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		 <p>P/N 559810</p>
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		 <p>P/N 559811</p>

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Step 7b. Optional — Choose Battery Tray(s) and Battery Tray Accessories (continued)

List Number	Part Number	AMP Rating	Description	Qty.	Rack Space	Notes	Pictorial
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		 <p>P/N 559812</p>
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	559816	—	Two pole battery disconnect box — Left side of relay rack		—		
N/A	559815	—	Two 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	

Step 7b. Optional — Choose Battery Tray(s) and Battery Tray Accessories (continued)

List Number	Part Number	AMP Rating	Description	Qty.	Rack Space	Notes	Pictorial
N/A	256695900	100	Electrical/Mechanical trip breaker	—	—	Requires 559814 or 559813 battery disconnect box	
N/A	100765	125	Electrical/Mechanical trip breaker	—	—	Requires 559816 or 559815 battery disconnect box	
N/A	100763	150	Electrical/Mechanical trip breaker	—	—	Requires 559816 or 559815 battery disconnect box	
N/A	121810	200	Electrical/Mechanical trip breaker	—	—	Requires 559816 or 559815 battery disconnect box	
N/A	528234	—	2 AWG Battery Lug Kit (short tongue)	—	—		
N/A	528235	—	1/0 AWG Battery Lug Kit (short tongue)	—	—		
N/A	528236	—	2 AWG 90 Degree Battery Lug Kit (long tongue)	—	—		
N/A	528237	—	1/0 AWG 90 Degree Battery Lug Kit (long tongue)	—	—		

Step 8. Order Rectifier Modules

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

List Number	Part Number	Description	Qty.	Rack Space	Notes	Pictorial
N/A	1R482000E3	Rectifier, R48-2000e3, 48VDC, 2000 watts, high efficiency, 1 RU			Provides 41.7 amps at 48VDC	
N/A	SXA1100035/1	Blank cover, 1 RU rectifier			Optional cover for empty 1RU rectifier position	

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