

# NetSure™ 7100 Compact Series

-48V DC Power System – Up to 500 Amps



## Benefits

- Optimize total cost of ownership with ultra high-efficiency eSure™ rectifiers that deliver efficiency up to 98% over a wide operating range
- Increase battery discharge time with priority or non-priority low voltage disconnect option
- Support colocation with (3) separate load branches
- Extend the life of your batteries with the available battery management tools
- Keep your network power source secure with optional encrypted controller communication
- Have peace of mind with this UL Listed and NEBS certified power system

*The NetSure™ 7100 Compact Series is designed for wireless access and fixed network applications offering unmatched temperature performance and high power density.*

## Description

The modular NetSure 7100 Compact Series DC power system with 3500 watt rectifiers provides up to 500 amps of current for -48 volt systems in 8 U of rack space, 19-in wide in indoor and outdoor applications. Basic components of the subrack include a 6 U distribution cabinet, a NetSure™ Control Unit (NCU), and slots for up to nine rectifiers where the top row contains space for the NCU plus four rectifiers and the bottom row holds five rectifiers. NetSure 7100 Compact systems are compatible with ultra-high efficiency R48-3500E4 rectifiers that operate at 98% efficiency over a wide load range. Low voltage disconnect options can be included to increase hold-up time and improve battery health. An optional door and top cover are available for indoor use.

The distribution section of the plant is split up into three branches of circuit breaker positions. The current in each branch is monitored by the controller. Two of the branches can include an optional load low-voltage disconnect. Distribution device options include 1 amp to 300 amp bullet-style circuit breakers.

## Application

NetSure™ 7100 Compact Series indoor and outdoor DC power systems are designed for deployment in telecom access network applications requiring a reliable and high power density supply up to 500 A at -48 VDC. The high operating temperature (350A system rating at +65°C) in conjunction with high operational efficiency has a positive impact on climate system dimensioning in outdoor enclosure applications. This DC power system is designed for insertion into EQ zone 4 compliant relay racks and cabinets.



Indoor System



Outdoor System

## Technical Specifications

AC Input	582137100101	582137100103	582137100105	582137100102	582137100104	582137100106
System Voltage	120/208/240 VAC, single phase (operational)					
Rectifier Voltage	200 to 240 VAC (nominal)					
Frequency	45 Hz to 65 Hz					
Input Connections	Terminal block (up to 6 AWG) for individual rectifier feed					
<b>DC Output</b>						
Voltage	-48 VDC to -58 VDC					
System Capacity	350 A @ +65 °C			500 A @ +40 °C		
Branch Rating	117 A for load 1, 2 and priority			167 A for load 1, 2 and priority		
Rectifier Output Power	3500 W					
Breakers	(21) (6 on Load 1 bus, 6 on Load 2 bus, 9 on Priority bus)					
Low Voltage Disconnect	LVBD, (2) LVLVD (Load 1 and Load 2)	No LVD	LVBD	LVBD, (2) LVLVD (Load 1 and Load 2)	No LVD	LVBD
<b>Physical Characteristics</b>						
Mounting	Standard 19" W rack mounting					
Dimensions (H x W x D)	6U (10.5") x 19" x 15.55"			8U (14") x 19" x 16.53" with top and front cover		
Weight	49	54	42	47	46	51
Framework Type	Rail-mount (can be mounted in an enclosure)			Rail-mount (can be mounted in a relay rack)		
Access	Front and rear for installation, Front for operation and maintenance					
<b>Environmental</b>						
Operating Temperature	-40°C to +65°C (-40°F to +149°F)			-40°C to +40°C (-40°F to +104°F)		
Storage	-40°C to +70°C (-40°F to +158°F)					
Humidity	0 to 95% non-condensing					
Ventilation	Rectifiers are fan-cooled front to rear					
Altitude	-200 feet to 10,000 feet. The maximum operating ambient temperature should be de-rated by 3°C per 1000 feet above 6562 feet.					
<b>Standards Compliance</b>						
Safety	UL 62368 Recognized					
EMI/RFI Suppression	Conforms to FCC rules Part 15, Subpart B, Class B and EN55022 Class B, radiated and conducted					
NEBS	NEBS Level 3, GR3108 Class 2					

## Ordering Information

Part Number	Description
582137100101	NetSure™ 7100 Compact, -48 VDC, 500 A outdoor power system e/w (2) LVLVDs and LVBD (no front door and top cover)
582137100102	NetSure 7100 Compact, -48 VDC, 500 A indoor power system e/w (2) LVLVDs and LVBD
582137100103	NetSure 7100 Compact, -48 VDC, 500 A outdoor power system (no LVDs, no front door and top cover)
582137100104	NetSure 7100 Compact, -48 VDC, 500 A indoor power system e/w front door and top cover (no LVDs)
582137100105	NetSure 7100 Compact, -48 VDC, 500 A outdoor power system e/w LVBD (no front door and top cover)
582137100106	NetSure 7100 Compact, -48 VDC, 500 A indoor power system e/w LVBD, front door and top cover
1R483500E4	Ultra high-efficiency eSure™ rectifier, -48 VDC, 3500 W
1R483500E3	High-efficiency eSure™ rectifier, -48 VDC, 3500 W
1M830BNA10009548	NCU controller for 582137100101 and 102 e/w (1) LVBD and (2) LVLVDs
1M830BNA10008994	NCU controller for 582137100103 and 104 (no LVDs)
1M830BNA10008996	NCU controller for 582137100105 and 106 e/w LVBD

Vertiv.com | Vertiv Headquarters, 1050 Dearborn Drive, Columbus, OH, 43085, USA

© 2022 Vertiv Group Corp. All rights reserved. Vertiv™ and the Vertiv logo are trademarks or registered trademarks of Vertiv Group Corp. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness here, Vertiv Group Corp. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications, rebates and other promotional offers are subject to change at Vertiv's sole discretion upon notice.