

NETSURE™ 7100 SERIES

DC Power System with 400 VDC Input



KEY FEATURES

- High Efficiency Over 97% — reduces power consumption for lower operating cost
- 3500 W Converter — designed to operate from nominal 400 VDC source to provide -48 VDC load power
- Advanced Controller — offers battery management, site monitoring and configuration management
- Remote Access — options allow users to view, control and interact with the system using an Ethernet interface
- Plug'n'Play — add modular converters without changing the settings and making adjustments; no system interruption
- Front Accessible — allows for easy installation, additions and maintenance
- Wide Input Voltage Range — for operation during battery discharge down to 260 VDC
- Safety Compliance — NEBS Level 3 certification (pending); UL Listed to UL subject 1801

The NetSure™ 7100 DC Series with 400 VDC input reduces copper distribution cost and provides the flexibility to use existing -48 VDC equipment.

Description

The modular NetSure 7100 Series with 400 VDC Input provides up to 4000 amps of -48 VDC output current. The basic components of the power system include the ACU+ control unit, DC to DC converter shelf assemblies and a modular distribution cabinet.

The NetSure 7100 power system contains a powerful, micro-processor-based control system capable of monitoring and controlling up to 60 C400/48-3500e converters. The ACU+ controller provides a 4x16-character alphanumeric display, which can be activated at the touch of a keypad.

Each shelf can accommodate up to six plug'n'play C400/48-3500e converters, which are controlled by the ACU+. Additional shelves can be added as load requirements increase.

The NetSure 7100 with 400 VDC input can be expanded to up to three distribution bays for a total capacity of 4000 amps and up to twelve distribution panels. Each NetSure 7100 distribution cabinet is modular by row and position. Four distinct distribution cabinet sizes are available to accommodate from one to four distribution panels. This allows the system to be configured in relay racks of various heights for installation in low-profile sites or atop batteries or other equipment to make more effective use of floor space. Several distribution panels are available offering different combinations of distribution positions, low voltage disconnect and battery disconnect options.

Distribution device options include 1 amp to 250 amp bullet-style circuit breakers, 3 amp to 125 amp TPS-style fuses in plug-in bullet-style holders, 100 amp to 800 amp GJ/218-style circuit breakers, 70 amp to 250 amp TPL-B style fuses and 70 amp to 600 amp TPH-style fuses. These devices can be configured for both -48 V loads and battery disconnect. A GMT fuse module is also available.



High-Efficiency
eSure™
C400/48-3500e
Converter



NetSure 7100
DC Power
System with 400
VDC Input

Technical Specifications (System)

SYSTEM FEATURES

Input Voltage, Nominal	400 VDC (260 VDC to 400 VDC range)
Output Voltage	-48 VDC (-42.0 VDC to -58.0 VDC range)
Control	Microprocessor (ACU+)

RATED OUTPUT CAPACITY

Bay	2000 amps (48 VDC)
Converter	3500 W (C400/48-3500e)
Shelf	438 amps (3 RU shelf)
Distribution Panel	600 amps

PHYSICAL CHARACTERISTICS

Framework Type	Relay rack (can be mounted in enclosures)
Mounting Width	23 inches
Mounting Depth	20 inches
Access	Front access for installation, operation and maintenance

ENVIRONMENTAL

Operating Temperature	-40 °F to 104 °F (-40 °C to 40 °C) continuous operation
Storage	-40 °F to 185 °F (-40 °C to 85 °C)
Humidity	0% to 95% relative humidity, non-condensing
Ventilation	Converters are fan-cooled front to rear
EMI/RFI Suppression	Conforms to FCC rules Part 15, Subpart B, Class A and EN55022 Class A, radiated and conducted
Safety Compliance	UL Listed 1801, cUL, (NEBS Level 3 pending)

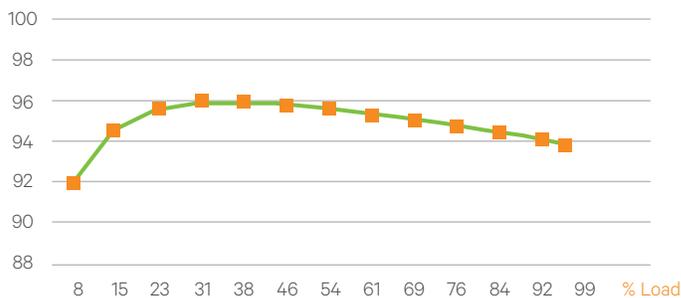
Ordering Information

PART NUMBER

DESCRIPTION

582127000	NetSure™ 7100 DC power system
1M820DNA	ACU+ controller
1C400483500E	3500 watt eSure™ C400/48-3500e converter
588705000	Power shelf for 3 RU (3500 watt) rectifiers and converters

% Efficiency



eSure Converter Efficiency Curve

SYSTEM ELEMENTS



NetSure 7100 with 400 VDC Input

1. 400 VDC Input Connection Panel (both sides)
2. DC Distribution Cabinet
3. ACU+ Controller
4. Converters
5. Relay Rack