

NetSure™ 7100 Retrofit

48V DC Power Universal Subrack



Benefits

- Cost effective way to add new technology and enhance reliability without replacing the entire system
- Adopts ultra-high efficiency eSure™ rectifier modules, which increase system efficiency by 98% and reduce current harmonics, saving both capital and operating expenditure
- High efficiency rectifiers with low power loss reduce site cooling needs
- Live plug-and-play installation eliminates the need of standby power supply for replacement
- Increased power density
- Enables connection to remote monitoring (SNMP & Web)
- Advanced control unit facilitates use of energy logic function and hybrid energy sources
- Eliminates legacy equipment support issues

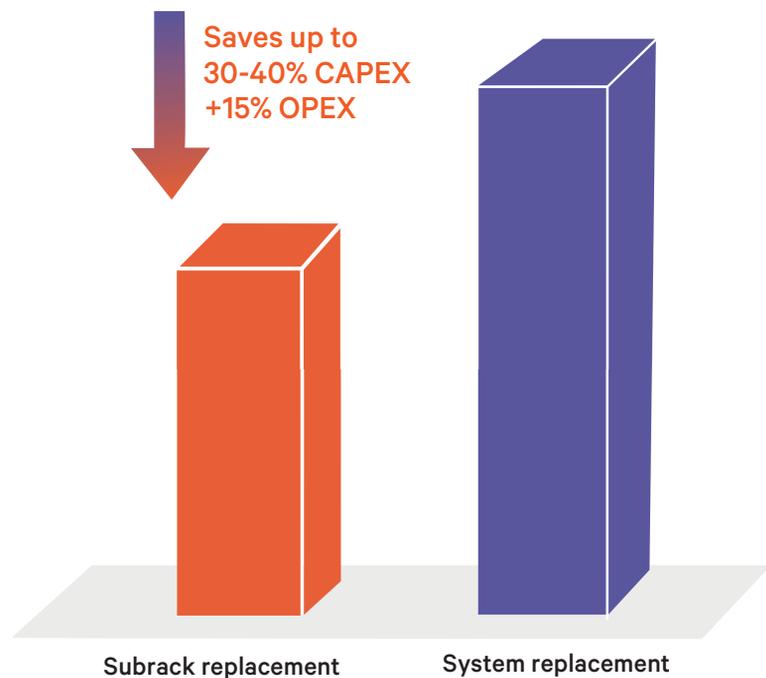
Description

DC power systems have been widely used to power telecom communication networks for many decades. Over the time, even the most reliable power supply reaches the end of its service life. Aging power systems deliver reduced technical performance in terms of efficiency, consequently increasing operational expenses. Unanticipated equipment failure can lead to severe downtime, recovery maybe further exemplified due to the unavailability of old spare parts and maintenance difficulties, resulting in greater operational risk.

The NetSure™ 7100 Universal Subrack is designed to be the most economical and efficient DC power retrofit solution available in the market. It fits directly into an existing power cabinet for an easy expansion, eliminating the need to modify the physical cabinet and distribution. This helps reduce the construction and deployment time frame, as well as improves power system efficiency and reliability.

Applications

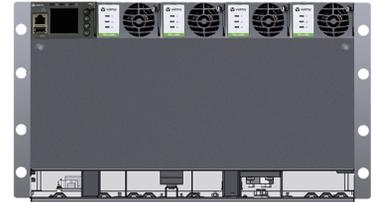
The NetSure™ 7100 Universal Subrack is engineered for aging 48V DC power plants that need to be replaced and/or sites where capacity needs are increasing. This innovative solution is also compatible with 3rd party legacy DC power systems.



**Savings may vary depending on the capacity and actual site conditions.*

Universal Subrack (Outdoor Retrofit)

731 A41 - S50	
Rectifier	R48-3000e3 / R48-3500e3 / R48-3500E4; Max 4 numbers
Controller	M530B
Output Current	300 A
Input Voltage	85 VAC to 300 VAC (output derating below 176 VAC)
Power Factor	≥0.99
Rectifier Efficiency, Peak	R48-3500E4: 98%; R48-3500e3: 96.3%; R48-3000e3: 95.5%
Output DC Voltage	-42 VDC to 58 VDC
AC Input & AC Output	1x125 A/2P & 2x10 A/1P
LLVD MCBs	3x63 A/1P, 4x32 A/1P, 2x16 A/1P
BLVD MCBs	2x32 A/1P, 2x16 A/1P
Battery MCB	2x125 A/1P
Dry Contact Ports	4 Direct Inputs, 2 Direct Outputs
Dimensions (W x D x H) in mm	482.6 × 400 × 266.6
Weight (excluding rectifiers)	≤21 kg



Model 731 A41 - S50

Universal Subrack (Indoor Retrofit)

	PSS4850-8A/19C	PSS4850-8B/19C	PSS4850-8C/19C
Rectifier	R48-3000e3 / R48-3500e3 / R48-3500E4		
	Max 5	Max 10	Max 6
Controller	M530S		
Output Current	300 A	600 A	300 A
System Input	3W+N+PE /380 VAC		L+N+PE /220 VAC
Input Voltage	85 VAC to 300 VAC (output derating below 176 VAC)		
Power Factor	≥0.99		
Rectifier Efficiency, Peak	R48-3500E4: 98%; R48-3500e3: 96.3%; R48-3000e3: 95.5%		
Output DC Voltage	-42 VDC to 58 VDC		
AC Input Terminals	OT terminal of M6 type/5 pieces	OT terminal of M8 type/5 pieces	Terminal Blocks/12PIN
DC Output Terminals	GTNR of M8 type/2 pieces	GTNR of M8 type/3 pieces	GTNR of M8 type/3 pieces
Dry Contact Ports	1 SPD alarm, 1 BLVD, 1 LLVD, 2 battery fuse alarm, 2 shunt detection, 6 load fuse alarm, 1 RS232		1 SPD alarm, 2 battery fuse alarm, 2 shunt detection, 6 load fuse alarm, 1 RS232
BLVD & LLVD	Only control signals are provided to connect with legacy system		Built-in BLVD & LLVD contactors
Dimensions (W x D x H) in mm	483 × 390 × 176	483 × 390 × 220	483 × 440 × 130
Weight (excluding rectifiers)	≤14 kg	≤18 kg	≤15 kg



Model PSS4850-8A/19C



Model PSS4850-8B/19C



Model PSS4850-8C/19C

Rectifier

R48-3500E4

Input Voltage	85 to 264 VAC
Input Frequency	45 Hz to 65 Hz
Power Factor	>0.99 for 50% to 100% load
Efficiency, Peak	98%
Maximum Input Current	21 A
Output Voltage	-42 VDC to 58 VDC
Maximum Output Current	73 A @-48 VDC
Operating Temperature	-40 to +75 °C (-40 to +167 °F)



Model R48-3500E4