NETSURE™ RETROFIT SOLUTIONS

-48 VDC Power Systems

NetSure™ systems for retrofit applications offer a cost efficient way to upgrade and expand a legacy DC power system while keeping the existing infrastructure intact.

KEY FEATURES

- Cost effective way to add new technology and increase reliability without replacing the entire system
- Increased system efficiency with >96% efficient 2 kW or 3.5 kW eSure rectifiers
- Can be installed on live systems
- Increased power in existing footprint
- Eliminates rectifier legacy support issues
- Enables remote connection via SNMP and web.

Critical telecom sites have to remain reliable for many years to come. On sites with old backup systems there is a challenge to maintain the availability without replacing equipment. Keeping old rectifiers and electronics with design life already passed will have an increasingly negative impact on system reliability. It will also consume too much energy with high OPEX as a result. However, changing complete DC power systems can sometimes be impossible. This is why Vertiv offers the NetSure™ Retrofit Solution!

The retrofit subrack includes eSure™ rectifiers and an advanced controller, substantially improving both system power efficiency and reliability as well as monitoring capabilities. With high-efficiency eSure rectifiers, the upgraded system can reach 96% system efficiency.

The advanced control unit (NCU or ACU+) enables supervision, comprehensive monitoring and maintenance with remote management connectivity. The NCU also offers a simplified user interface including an installation wizard, graphical color display and user friendly web pages.

The retrofit solution can be installed on live systems with no interruption of service. Compared to replacing the entire system, this type of upgrade significantly reduces risk and installation time.

NetSure retrofit systems currently exist for Ericsson, Nortel, Huawei and other legacy DC power systems. Additionally, we can easily adapt the solution to your power plant needs.



Before:
Legacy Ericsson DC Power System



After:
Legacy system retrofitted with NetSure 5100

Technical Specifications

SYSTEM CHARACTERISTICS	
Nominal System Voltage	-48 VDC
Adjustable Output Voltage Range	-42.0 to -58.5 VDC
Rated Output Capacity	Up to 31,5 kW per sub-rack assembly
Active Load Sharing	Yes
Approvals	CE, EN 60 950-1

EXAMPLES OF SOLUTIONS	
Robust, Fenix, Typhoon, etc.	10-31,5 kW / cabinet
Blue Power	10-31,5 kW / cabinet
ACTURA Optima 24350	16 kW @ -48 VDC and 3 kW @ +24 VDC
ACTURA Flex 48800	10-42 kW / cabinet

RECTIFIER AC INPUT	2000 W	3500 W
Input Voltage, Nominal	200 to 250 VAC	200 to 277 VAC
Input Voltage, Permitted Variation	85 to 300 VAC	85 to 305 VAC
Line Frequency	45 to 65 Hz	
Max Input Current	12 A	22.5 A
Power Factor	0.99	
THD, Total Harmonic Distortion	<5% from 50 to 100% of rated load	

DC OUTPUT		
Output Voltage, Adjustment Range	-42 to -58 VDC	
Output Power	2000 W @ Vout >48 VDC	3500 W @ Vout >48 VDC
Output Current	42 A	73 A
Efficiency	96.2%	96.5%

ENVIRONMENTAL		
Temperature Range, Operating	-40 to +80°C, -40 to +176°F	-40 to +75°C, -40 to +167°F
Temperature Range, Storage	-40 to +70°C, -40 to +158°F	-40 to +70°C, -40 to +158°F
Relative Humidity	0 to 95%	
Altitude	2000 m (6560 ft.) at full power	
EMC	ETSI EN 300386 class B	
Safety	EN 60950-1, CE, UL 60950	

MECHANICS		
Dimensions (H x W x D)	41 x 84.5 x 252.5 mm (1.61 x 3.33 x 9.94 inches)	132 x 85.3 x 287 mm (5.2 x 3.36 x 11.3 inches)
Weight	1.13 kg (2.49 lbs)	3,5 kg (7.7 lbs)

Controller	NCU (NetSure Control Unit)	ACU+

See separate datasheet for more information.



ACTURA Flex 48800 retrofitted with NetSure™ 701

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