

Key Features

- The rectifier uses the active Power Factor Correction (PFC) technology and the power factor increases up to 0.99.
- The power system has a wide AC input voltage: 85Vac~300Vac.
- The rectifier uses soft switching technology, raising the efficiency above 95.5%.
- The rectifier has ultra-low radiation. With advanced EMC design, the rectifier meets international standards such as CE NEBS and YD/T983.
- Effective battery management. includes the management functions such as BLVD, temperature compensation, auto voltage regulation, stepless current limiting, battery capacity calculation and on-line battery test among others.
- Provides multiple, integrated communication ports (such as RS232, Ethernet and dry contacts), that enable flexible networking and remote monitoring.
- Integrated lighting protection at both AC side as well as DC side.

Description

The NetSure™ 731 series, an embedded, high-efficiency sub-rack power system comprises three models: NetSure™ 731 A61-S1, NetSure™ 731 AA1-S1 and NetSure™ 731 AA1-S2, which are designed by Vertiv to meet the demands of shared BTS sites for multiple tenants. The system supports separate power supply and distribution management, along with independent power consumption calculation for a maximum of four users. The embedded 19-inch system is configured with Vertiv's new generation rectifier with an ultra-high power density of 50A. The maximum system capacity is 600A, and the system efficiency is above 96%, which meet the construction need of energy conservation and emission reduction for modern mobile communication.

Application

- Newly-constructed base station for multiple operators
- Outdoor cabinet for multiple operators
- Supply power to large stations for multiple operators, network coverage and broadband access



NetSure™ 731 A61-S1



NetSure™ 731 AA1-S1



NetSure™ 731 AA1-S2

System Configuration					
Configuration		NetSure™ 731 A61-S1	NetSure™ 731 AA1-S1	NetSure™ 731 AA1-S2	
System Capacity		300A	500A	600A	
Controller		M530S	M530S	M530S	
Rectifier		R48-3000e3x6	R48-3000e3x10	R48-3000e3x12	
AC Power Distribution	Input	63A / 3Px1, 3-phase 5-wire	125A / 3Px1, 3-phase 5-wire	125A / 3Px1, 3-phase 5-wire	
	Output	16A / 1Px1 + 10A/1Px1	16A / 1Px1 + 10A/1Px1	16A / 1Px1 + 10A/1Px1	
Battery MCB		125A/1Px4	125A/1Px4	125A/1Px4	
DC Distribution	LLVD	User 1-3	User 1-3	User 1-3	
		125A/1Px1 +16A/1Px1 +6A/1Px1	125A/1Px1 +16A/1Px1 +6A/1Px1	125A/1Px1 +16A/1Px1 +6A/1Px1	
		User 4: 63A/1Px1*	User 4: 63A/1Px1*	User 4: 63A/1Px1*	
	BLVD	User1-3: 25A/1Px1	User1-3: 25A/1Px1	User1-3: 25A/1Px1	
		User 4: 10A/1Px2	User 4: 10A/1Px2	User 4: 10A/1Px2	
Lightning Protection		AC SPD: C Class	AC SPD: C Class	AC SPD: C Class	
		DC SPD: 10kA	DC SPD: 10kA	DC SPD: 10kA	
Optional		Temperature Compensation Cable, Top Cover, Dummy Panel			

System Parameters	
Parameter	Description
Operating Temperature	-5°C~+40°C (derating is necessary above 40°C)
Relative Humidity	5%RH ~ 95%RH (no condensation)
Altitude	≤2000m (derating is necessary above 2,000m)
Input Voltage Range	85Vac~300Vac (output derating below 176Vac)
Input Frequency Range	45Hz~65Hz
System Efficiency	Normal Efficiency: 95%, Maximum Efficiency: 96%
Nominal Output Voltage	48Vdc
Rated Output Voltage	53.5Vdc
Output DC Voltage	42.3Vdc~57.6Vdc

Mechanical Parameters	NetSure™ 731 A61-S1	NetSure™ 731 AA1-S1	NetSure™ 731 AA1-S2
Dimensions (W x D x H) in mm	483 x 400 x 354	483 x 400 x 400	483 x 400 x 445
Weight (with rectifiers & controller), kg	36	47	52