E48 Series

Rectifier system with 48vdc output

- For telecommunication with capacity from 30A to 1000A
- Integrated with communication power, AC and DC power distribution
- Modular rectifier with hot-swappable function
- Compatible with LiFePO4 batteries and lead-acid batteries

30A - 1000A

Capacity Range

30A-1000A

Application

Base stations, small and medium size switching centers, wave network communications, satellite communications, data communications, data centers etc.

Performance Characteristics

High reliability

- Ultra-wide mains input range: more suitable for harsh grid environment
- Perfect battery management: with functions of temperature compensation, automatic equalization, floating charge control, automatic voltage regulation, battery capacity calculation and online battery testing.
- Adopt advanced CPU and multiple microprocessor control technology to make the switching power supply more stable and more reliable

Excellent Design

- The rectifier module adopts non-destructive hot-swappable technology to realize less than 1miniute replacement time.
- Compatible with LiFePO4 batteries and lead-acid batteries for different application scenarios.
- Digital-controll active power factor correction technology with input power factor 0.99 to avoid pollution to the grid.

Perfect Protection

- With input over and under voltage protection, output over, under voltage protection, short circuit protection, over current protection, lightning protection, fan fault alarm protection, fault display, historical alarm record storage and other functions to ensure the reliable operation of load equipment。

Performance

1.Input				
Item		Parameter	Unit	Remark
Input Voltage Range		Start 140—290 Running 90-290	Vac	The input voltage range is the phase voltage of three-phase AC, and the system starting voltage shall be greater than or equal to 140vac
Rated Voltage		220	Vac	Phase voltage
Voltage Frequency		43—67(Typical value is 50/60)	Hz	
PF		≥0.99		Full load working condition

2.Output				
Item		Parameter	Unit	Remark
Rated Voltage		-53.5	Vdc	Input 220Vac
Voltage Range		-42 ~ -58	Vdc	Adjustable by monitoring (test condition: no load)
Single Module Capacity		30 or 50	A	Flexible configuration according to requirements
Output Current		30 ~ 1000	A	Under rated output conditions, 300A output is guaranteed at 90-176vac input
Output Ripple and Noise		≤200	mVp-p	The bandwidth of the oscilloscope shall be 20MHz, and the probe shall be connected in parallel with 10u + 104 capacitor
Power On Output Delay		3 ~ 8	S	Input 220VAC, AC input is calculated after the AC contactor is pulled in。
Voltage Stabilizing Accuracy		≤±1%		
Noise Index	Broadband Noise voltage	≤100	mV	3.4—150 KHz
		≤30	mV	150—30 MHz
	Telephone Weight Noise voltage	≤2	mV	
Dynamic Response	Overshoot Amplitude	△V：≤5	%Vo	25%—50%—25% or 50%—75%—50% Load change
	Recovery Time	△t：≤500	μS	
Current Sharing Imbalance		≤5%		Module parallel 50%—100% Rated output（Power modules can work in parallel）
Temperature coefficient		±0.02	%/℃	
Output Efficiency		≥92%		220Vac/ Rated load (typical)
		≥87%		110VAC/Rated load

3. Alarm and Protection Points			
Item	Parameter	Unit	Remark
System Input Over voltage Cut-off	298±5	VAC	Automatic recovery, recovery point 290V±5V
Module Input Overvoltage Protection	≥300	VAC	Output 0A（ ACSOURCE+ Voltage regulator test）
System Input Under voltage cut-off	68±5	VAC	Automatic recovery, recovery point 136V±5V

4. Physical Characteristics
Dimension and weight are subject to the power distribution module size and power module capacity.