

SR4850 2U/2.5U Rectifier

Output : 42~58Vdc/50A

SR4850, 2U/2.5Urectifier series, is an ideal design for applications requiring 53.5Vdc. It can provide up to 2900 watts of power and the efficiency is up to 96%.

The rectifier is designed to operate as an integral component in telecommunication power system as well as a stand-alone module. It is increasingly used in wireless communications, enterprise and broadband access equipment. The design with power conversion and output integration makes it easier to be installed.

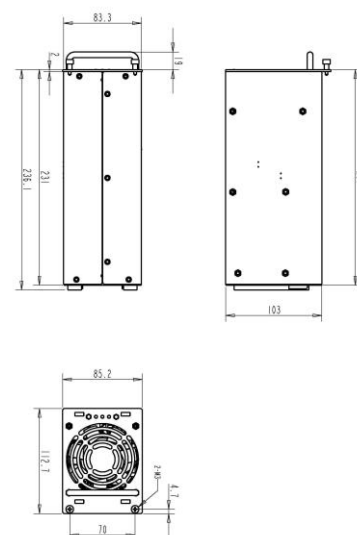


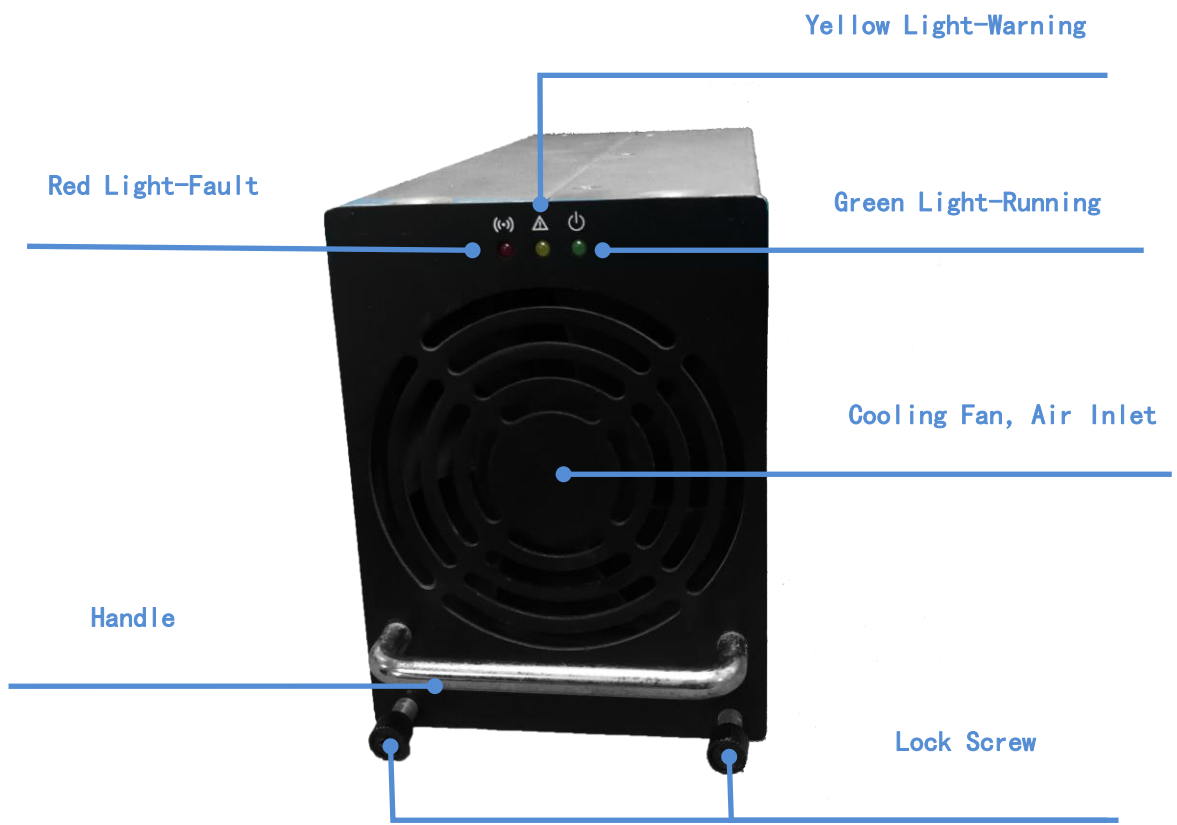
Features

- Universal AC input range (90VAC-300VAC)
- Operating temperature range from -40°C to +75°C
- Active load sharing
- Advanced internal monitoring

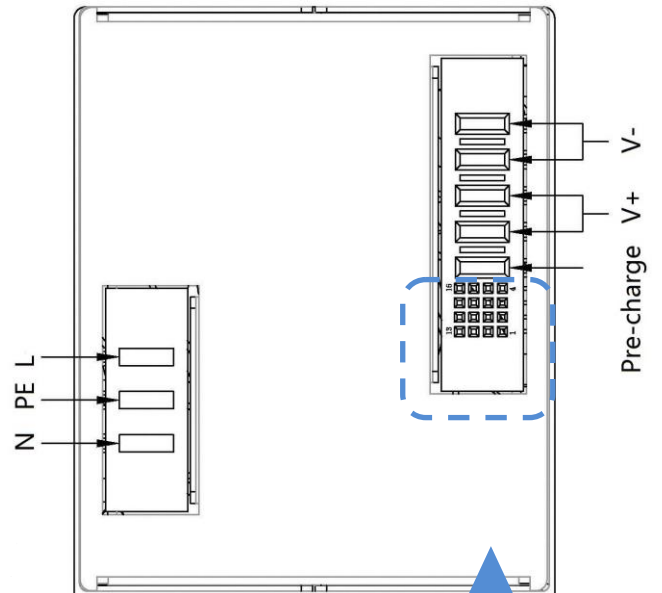
Input characteristics		Output characteristics			
Input voltage	176 ~ 300Vac full load	Vo set point(min/typ/max)	42/53.5/58(Vdc)		
	90 ~ 176Vac De-rating	Vo regulation(min/max)	-0.5/0.5(%)		
Rated input voltage	200 ~ 250Vac	Output noise(max)	<200mV(Bandwidth 20MHz)		
Input voltage(max)	300Vac.	Psophometric	<2mV		
Input frequency(min)	45Hz	Dynamic response	5%		
Input frequency(max)	65Hz	Turn-on delay	<10 s		
Inrush current	≤150% the rated input steady-state peak value (excludes X caps in the EMC input filter)	Hold-up time	>10ms		
		Output over voltage protection	59(Vdc)		
Power factor	≥0.99	Load sharing(min/max)	-5/+5(%)		
THD	<5%				
Environment characteristics					
Parameters	Min	Typ	Max	Unit	Note
Storage temperature	-40		85	°C	
Operating temperature(internal cooling)	-40		75	°C	-40°C to +50°C with full performance; de-rating from 50°C to 75°C
Humidity	5		90	%	Non-condensing
Altitude	-100		2000	m	De-rating from 2000m
MTBF	10 ⁵			hours	
Insulation resistance	20MΩ				AC-Enclosure
	20MΩ				AC-DC
	20MΩ				DC- Enclosure
Dielectric strength			2121	VDC	AC-Enclosure
			4242		AC-DC
			707		DC- Enclosure
Cooling	Horizontal direction, forced air cooling				
Audible noise	<55dBA				

Parameter	Typ.	Unit
Depth	231	mm
Width	83.3	mm
Height	112.7	mm
Weight	2.5	kg





Front Panel



Signal Definition	
1) ADDRESS0	9) LOADSHARE-
2) ADDRESS1	10) RS485 Source + +5V
3) LOADSHARE+	11) RS485 Source - +5V_GND
4) INHIBIT	12) RS485B
5) CANH	13) ADDRESS4
6) GND ADDR_GND	14) ALARM
7) ADDRESS2	15) RS485A
8) ADDRESS3	16) CANL

Signal Terminal

Connector and Signal Definition

1 Input

L/N/PE are connected with AC input through backplane board

2 Output

Positive output (Vout+) and Negative output (Vout-)

Vout is connected with output through backplane board.

CAN Communication between rectifier and controller. The rectifier can operate without controllers and communication ports can be using for something else.

Protection characteristics					
	Min	Typ	Max	Unit	Note
Over temperature protection			75	°C	
Input over voltage protection		300		Vac	Module stop working
Input under voltage protection		80			Module stop working
Output over voltage protection		59		Vdc	
Short circuit protection					No damage within long time

Order information

MPN	Input voltage (Vac)	Maximum input current (A)	Output voltage (Vdc)	Output current (@53.5Vdc)	Current limit(max) (A)	Power (W)	Efficiency
SR4850	90-300	19	42~58	54.2A	55	2900	92%
SR4850M	90-300	18	42~58	54.2A	55	2900	95%
SR4850H	90-300	18	42~58	54.2A	55	2900	96%

Note: All information contained in this datasheet is subject to change without notice, please visit our official website www.suplet.com for the latest information and refer to the user manual for more details.