

SP120HCPV Converter Technical Specifications

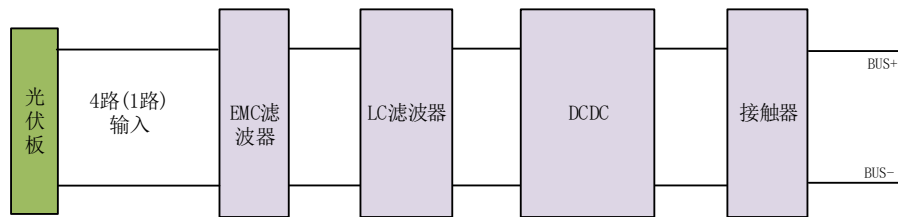
Version: V1. 2



1、 Product Introduction

Mainly adopts third-generation semiconductors, small size and high efficiency. Air duct isolation, good environmental adaptability, mainly photovoltaic power generation, MPPT function, 4-way (1-way) MPPT input.

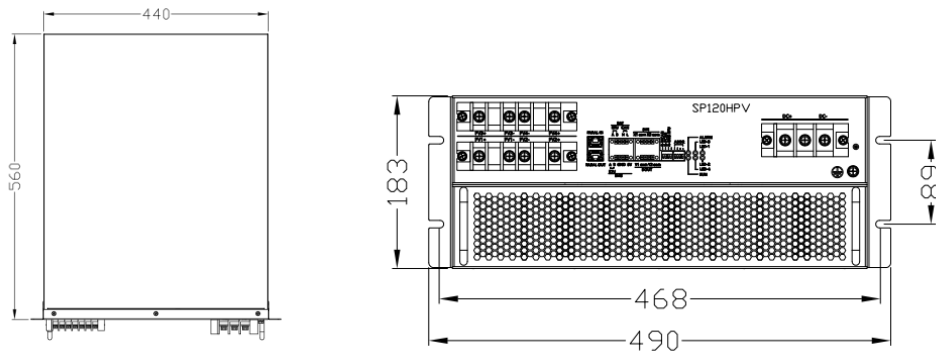
Main topology



Picture 1

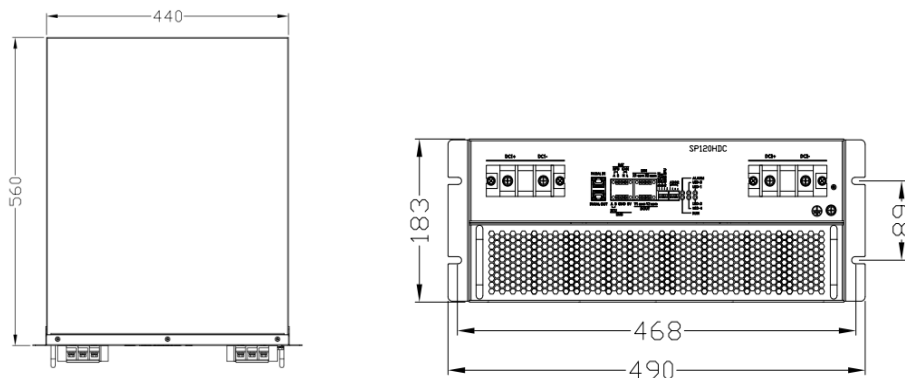
2、 Product model and size

The dimensions of SP120HCPV4 are shown in the figure below (unit: mm):



Picture 2

SP120HCPV1 are shown in the figure below (unit: mm):



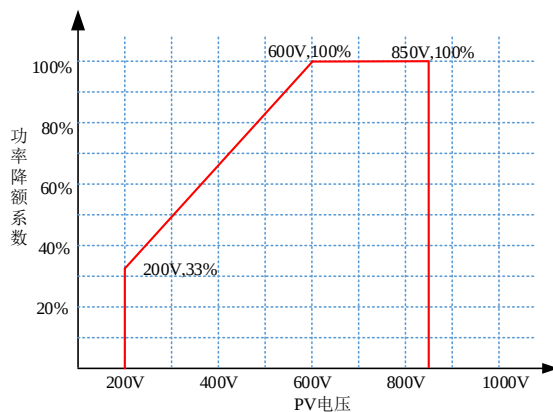
3、Specifications

1) parameter

parameter	SP120HCPV1	SP120HCPV4
PV parameters		
Rated Power	120kW	
PV open circuit voltage range	200V-900V	
MPPT voltage range	200V-850V	
Rated voltage	600V	
Starting voltage	250V	
PV input number	1	4
Maximum PV current	200A	50A+50A+50A+50A
Short circuit current	60A+60A+60A+60A	60A+60A+60A+60A
High voltage side parameters		
Voltage range	500V-900V	
Rated voltage	680V	
Maximum current	180A	
System Parameters		
Communication port	EMS : RS485 Battery: CAN or RS485	
DIDO	DI: 2 channels, DO: 2 channels	
Maximum efficiency	99.3%	
Installation	Insert frame	
loss	Standby <15W, no-load <100W	
weight	29KG	
size	W*H*D : 440*183*560mm	
Protection	IP5X (core control part)	
Temperature range	-30~60 ℃	
Humidity range	5%~95%	
Cooling method	Intelligent forced air cooling	
noise	50dB	
altitude	4000m (>2000m derating)	
Protect	Over temperature protection, over current protection, over voltage protection, short circuit protection to ground	
Certification	CE, IEC62477, IEC62019, IEC6100	
Soft-start circuitry	Yes	

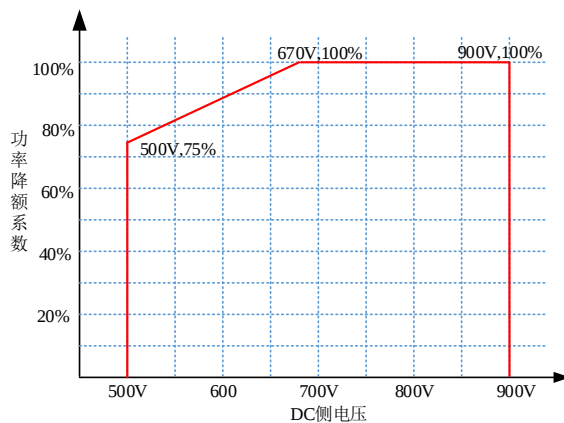
2) Power derating curve

SP120HCPV1/SP120HCPV4 power derating curve (PV voltage):



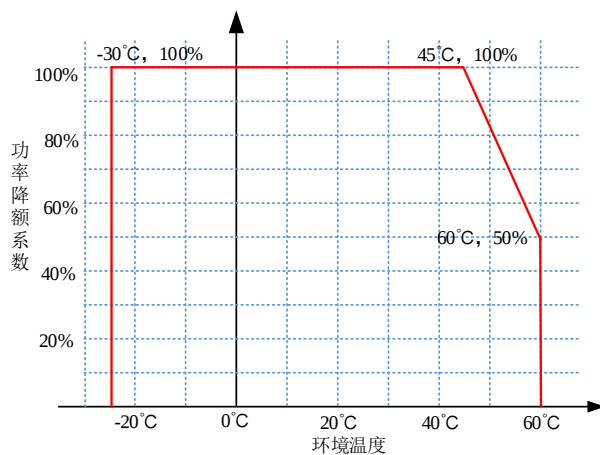
Picture 4

SP120HCPV1/SP120HCPV4/Power derating curve (DC side voltage):



Picture 5

3) Temperature derating curve



Picture 6