

PCS500HV/630HV

Bidirectional battery inverter from 500-630kW, can be used alone or with solar charge controllers and other accessories for different application scenarios.

Features



High yield

- Advanced three-level technology, max. efficiency 97%
- Effective forced air cooling, no derating up to 45°C
- Wide DC voltage operation window, full power operation at 1500V
- Max. 8 units in parallel in off-grid operation



Flexible application

- Bidirectional power conversion system with full four-quadrant operation
- Compatible with high voltage battery system, low system cost
- Battery charge & dis-charge management and black start function integrated

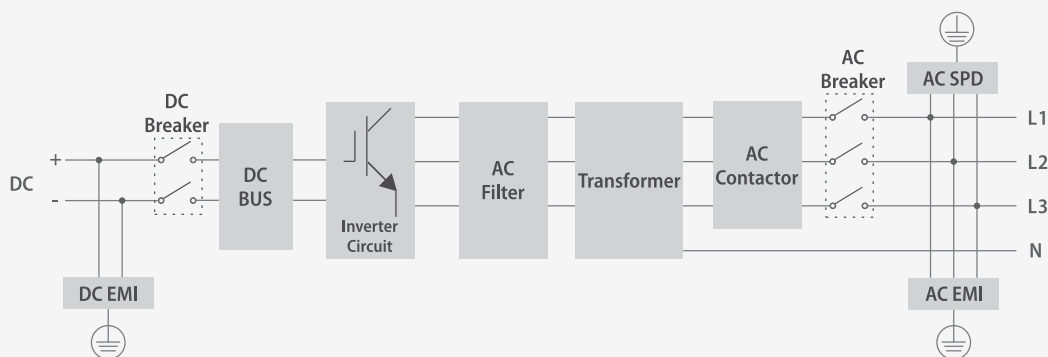


Grid support

- Fast active/reactive power response
- L/HVRT, FRT, soft start/stop, specified power factor control and reactive power support



Block Diagram



PCS500HV**PCS630HV****AC(on-grid)**

Apparent power	500kVA	630kVA
Rated power	500kW	630kW
Max. AC input	500kW	630kW
Rated voltage	550Vac	690Vac
Rated current	722A	910A
Voltage range	340V-440V	340V-440V
Rated frequency	50/60Hz	50/60Hz
Frequency range	46-54/56-64Hz	46-54/56-64Hz
THDI	<3%(@Pac,r)	<3%(@Pac,r)
PF	0.9 lagging~0.9 leading	0.9 lagging~0.9 leading
AC connection	3/PE	3/PE

AC(off-grid)

Apparent power	500kVA	630kVA
Rated power	500kW	630kW
Rated voltage	400/550Vac*	400/690Vac*
Rated current	722A	910A
THDU	≤2% linear	≤2% linear
Rated frequency	50/60Hz	50/60Hz
Overload capability	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min

DC (Battery and PV)

Voltage range	800-1500V	1000-1500V
Max. charge/discharge power	500kW	630kW
Max. charge/ discharge current	625A	630A
Voltage regulatoin	±1%	±1%
Current regulatoin	±1%	±1%
Voltage ripple	<3%	<3%
Current ripple	<2%	<2%

General Information

Max. efficiency	97%	97%
Protection degree	IP20	IP20
Noise emission	<75dB(A)@1m	<75dB(A)@1m
Operating temperature	-25°C~+55°C	-25°C~+55°C
Cooling method	Forced-air	Forced-air
Relative humidity	0-95% non-condensing	0-95% non-condensing
Max. altitude	6000m(derate over 3000m)	6000m(derate over 3000m)
Dimension(W/H/D)	1200/1900/800mm	1200/1900/800mm
Weight	905kg	905kg
Standby consumption	<100W	<100W
Build-in transformer	No	No
Lightning protection	Type II	Type II
Transfer between on/off grid	Manual(default) Automatic(optional) ≤10ms	Manual(default) Automatic(optional) ≤10ms

Communication

Display	Touch screen LCD	Touch screen LCD
Communication	RS485/CAN	RS485/CAN

*The direct output voltage of PCS500HV is 550V, and a transformer is required to output 400V or other voltages.

*The direct output voltage of PCS630HV is 690V, and a transformer is required to output 400V or other voltages.