

PCS1000/1200HV/1500HV

Bidirectional battery inverter from 1000-1500kW, can be used alone or with solar charge controllers and other accessories for different application scenarios.

Features



SMART O&M

- Modular design, easy for maintenance
- C5 anti-corrosion degree, adjust to applications close to the sea



HIGH YIELD

- Advanced three-level technology, max. efficiency 99%
- Effective forced air cooling, no derating up to 45°C
- Wide DC voltage operation window, full power operation at 1500V



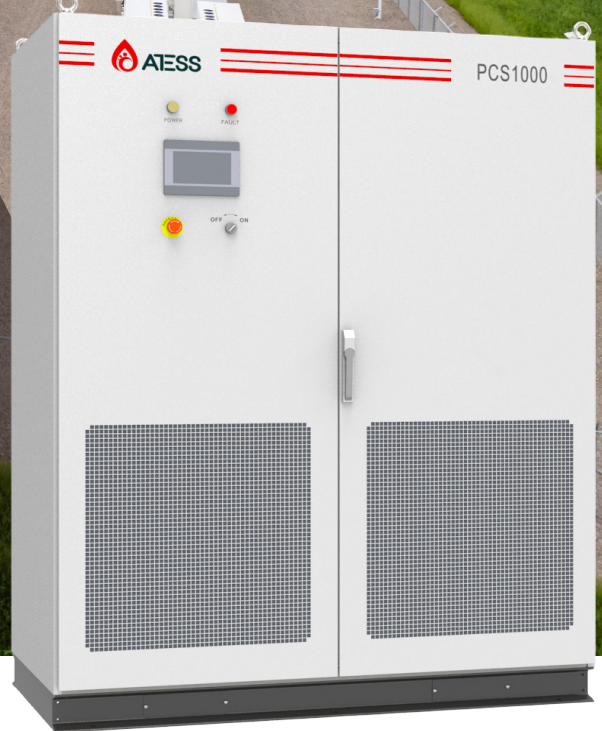
FLEXIBLE APPLICATION

- 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

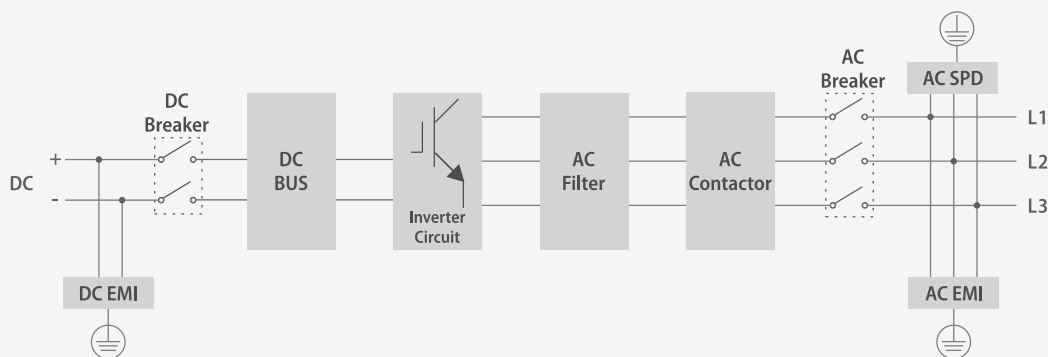


GRID SUPPORT

- Compliant with CE, IEC 62477, IEC 61000 and grid regulations
- Fast active/reactive power response
- L/HVRT, FRT, soft start/stop, specified power factor control and reactive power support



Block Diagram



	PCS1000	PCS1200HV	PCS1500HV
AC(on-grid)			
Apparent power	1100kVA	1320kVA	1650kVA
Rated power	1000kW	1200kW	1500kW
Rated voltage	400V	550V	690V
Rated current	1443A	1260A	1260A
Voltage range	360V-440V	495V-605V	621V-766V
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Frequency range	47-51.5/57-61.5Hz	47-51.5/57-61.5Hz	47-51.5/57-61.5Hz
THDI	<3%	<3%	<3%
PF	0.9 lagging~0.9 leading	0.9 lagging~0.9 leading	0.9 lagging~0.9 leading
AC connection	3/PE	3/PE	3/PE
Max. rectified power	750kW	1200kW	1500kW

AC(off-grid)			
Apparent power	1100kVA	1320kVA	1650kVA
Rated power	1000kW	1200kW	1500kW
Rated voltage	400V	550V	690V
Rated current	1443A	1260A	1260A
THDU	≤2% linear	≤2% linear	≤2% linear
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Overload capability	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min
Max. rectified power	750kW	1200kW	1500kW
Unbalance load Capacity	100%	100%	100%

DC (Battery and PV)			
Rated power	1000kW	1200kW	1500kW
Current regulation	±1%	±1%	±1%
Voltage regulation	±1%	±1%	±1%
Voltage ripple	<3%	<3%	<3%
Current ripple	<2%	<2%	<2%
Voltage range	650V-860V	900V-1500V	1000V-1500V
Max. charge/discharge current	1154A/1600A	1111A/1334A	1300A/1500A

General Information			
Max. efficiency	99.0%	99.0%	99.0%
Protection degree	IP20	IP20	IP20
Noise emission	<65dB(A)@1m	<65dB(A)@1m	<65dB(A)@1m
Operating temperature	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C
Cooling method	Forced-air	Forced-air	Forced-air
Relative humidity	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing
Max. altitude	6000m(derate over 3000m)	6000m(derate over 3000m)	6000m(derate over 3000m)
Dimension(W/H/D)	1510/1900/850mm	1510/1900/850mm	1510/1900/850mm
Weight	1600kg	1600kg	1600kg
Build-in transformer	No	No	No
Lightning protection	Type II	Type II	Type II
Transfer between on/off grid	Manual(default) Automatic(optional) ≤10ms	Manual(default) Automatic(optional) ≤10ms	Manual(default) Automatic(optional) ≤10ms
Grid support	L/HVRT, FRT, active & reactive power control and power ramp rate control. Volt-var, Volt-watt. Frequency-watt		

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

Certificate			
CE , MEA , PEA , EN 61000-6-2:2019 , EN 61000-6-4:2019 , EN61000-6-2:2005 , EN62109-1:2010 , EN62109-2:2011, RPPs in South Africa			