



Product Brochure

American Standard
2026.10

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*Los datos del catálogo están sujetos a actualizaciones, le rogamos que los reconfirme con el personal de ATESS antes de realizar el pedido.



About us

We are committed to energizing the future with clean energy

Shenzhen ATESS Power Technology Co., Ltd. is headquartered at ATESS Industrial Park, Shuitian 4th Industrial Zone, Bao'an District, Shenzhen. The park covers an area of 31,600 m² and the manufacturing center covers an area of 25,000 m². It is a comprehensive smart industrial park integrating R&D, manufacturing, and sales of new energy products.



ESS & EV charging solutions supplier



31,600 m² industrial park



Thousands of tonnes of CO₂ emission reduced



Clean power delivered to 100,000+ users



12 years experience in ESS



200,000+ EV chargers installed



Milestone

2015
Started EV charger business

2013
Started ESS business

2016
Started EV
part business

2018
Top 3 supplier in the Thailand
ESS market

2019
Top 3 EV charger supplier
in the UK market

2020
Approved as a specialized and
sophisticated enterprise producing new
and unique products

2022
No.1 in the C&I ESS
sector in South Africa

Our History

Our R&D team

ATESS boasts an R&D team of over 100 highly experienced engineers. Our laboratory is fully equipped with advanced testing instruments to ensure top-notch product performance and quality, as well as customers' needs. We dedicate around 15% of our annual revenue to research and development each year to keep our products competitive.

100+
100+ R&D engineers

12
12 years experience

50%+
50%+ engineers with master's degree

15%
15% of annual revenue as R&D investment



Branches



Our vision

Over the past years, ATESS has helped thousands of users and companies produce and consume green energy independently according to their individual needs, saving millions of tonnes of CO₂ emission. This motivates us to continually strive to create and innovate, on the universal carbon neutralization goal, and also a greener future energized by renewable energy technology.

- 📍 Headquarter
- Office/warehouse

90+
Countries

Delivered clean power to 90+ Countries

15
Branches

15 Offices and warehouses Worldwide

10
Years

Systems operating 10+ years

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ATS50/100/150-US-220
ATS100/150-US-480



HPS50/100/150-US-220Y(D) Ⓢ
HPS100/150-US-480
HPS100/150HV-US

HPS20000TLSPA-US
HPS36000TLSPA-US
HPS30000TL-US-208A
HPS50000TL-US-208A
HPS60000TL-US-480A



HPS20000TLSP-US
HPS30000TL-US-208

Battery Inverter Solar Charge Controller

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PCS250/350S-US-480
PCS100/250/500-US-480 Ⓢ
PCS630/1000-US-480



Bypass100/250/500/630/1000-US-480



SMC200
SMC200HV



RTF600/600A
RTF1200AHV



PCS500HV/630HV
PCS1000HV/1200HV/1500HV

Accessories Page 45

PV-CB8M
PV-CB16M-P



Battery Solutions Page 47

MatrixOne
IC418-US-480



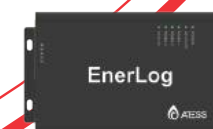
MatrixOne
IC261-US-208S



EnerStack100
EnerStack314

Monitoring Page 55

EnerLog



EnerClo



Enerview Pro

EV Charging Solutions Page 61



NOVO EVA-07/09/12S-PU

EVD-40SU
EVD-40DU



Card writer



Mounting pole



EneRace

HPS50/100/150-US-220Y(D)

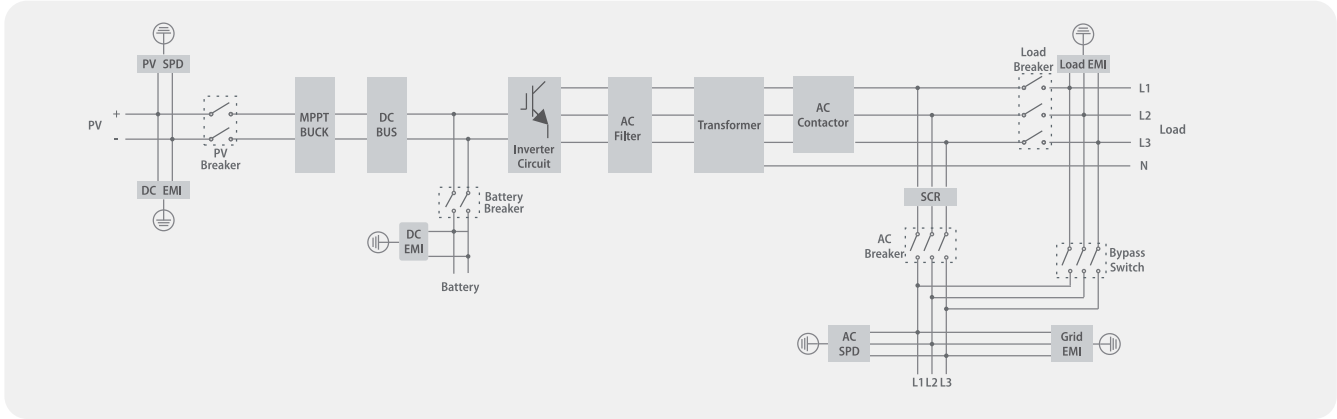
Large capacity all-in-one hybrid inverter for commercial application, supporting up to 1200kW system capacity, complied with American standard.



Features

- All-in-one hybrid inverter
- Seamless on/off grid transfer within 10 ms
- Programmable working mode
- Support remote control of DG
- Touchscreen LCD
- Max. 8 units in parallel for on&off grid operation

Block Diagram



	HPS50-US	HPS100-US	HPS150-US
AC(on-grid)			
Apparent power	50kVA	100kVA	150kVA
Rated power	50kW	100kW	150kW
Rated voltage	220V Wye	220V Wye	220V Wye
Rated current	131.3A	262.7A	394.1A
Voltage range	190-240V	190-240V	190-240V
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Frequency range	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz
THDI	<3%	<3%	<3%
PF	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading
AC input connection	3/N/PE Wye / 3/N/PE Delta(Opt)	3/N/PE Wye / 3/N/PE Delta(Opt)	3/N/PE Wye / 3/N/PE Delta(Opt)
AC input	75kVA	150kVA	195kVA

AC(off-grid)			
Apparent power	50kVA	100kVA	150kVA
Rated power	50kW	100kW	150kW
Rated voltage	220V Wye	220V Wye	220V Wye
Rated current	131.3A	262.7A	394.1A
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

DC (Battery and PV)			
Max. PV open-circuit voltage	1000V DC	1000V DC	1000V DC
Max. PV power	75kWp	150kWp	225kWp
PV MPPT voltage range	480V-800V DC	480V-800V DC	480V-800V DC
PV max. input current	104.2A	208.3A	312.5A
PV Isc	130.2A	260.4A	390.6A
Battery voltage range	400V-600V	400V-600V	400V-600V
Full load battery voltage range	400V-600V	400V-600V	470V-600V
Max. charge power	50kW	100kW	150kW
Max. discharge power	50kW	100kW	150kW
Max. charge current	125A	250A	319A
Max. discharge current	125A	250A	319A

General Information			
Protection degree	Type 1	Type 1	Type 1
Noise emission	<75dB(A)@1m	<75dB(A)@1m	<75dB(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)	950/1860/750mm	1200/1900/800mm	1200/1900/800mm
Weight	590kg	923kg	1200kg
Build-in transformer	Yes	Yes	Yes
Lightning protection	Type II	Type II	Type II
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms
Standby consumption	<30W	<30W	<30W

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

Certificate			
UL1741 , CSA-C22.2			
* The MPPT voltage of PV strings should be 50~200V higher than the Max battery voltage.			
* Support voltage types: 190-240V Wye & 190-240V High-leg Delta with split phase(Opt) There will be derating at different voltage levels and standards, as shown below:			
HPS50/100/150-US-220Y	Rated power of AC IN&OUT	HPS50/100/150-US-220D	Rated power of AC IN&OUT
190V Wye	86.50%	190V High-leg Delta	86.50%
208V Wye	94.50%	208V High-leg Delta	94.50%
220V Wye	100%	220V High-leg Delta	100%
240V Wye	100%	240V High-leg Delta	100%

HPS100/150HV-US

Large capacity all-in-one hybrid inverter for commercial application, supporting up to 1200kW system capacity.

Features

- Multiple MPPTs
2 MPPTs to increase the possibility of PV access, improve the power generation efficiency of solar.
- High Battery Voltage Range
600-900V Battery voltage to expand battery configuration flexibility, improve system efficiency.
- High PV Voltage range
1500V Level PV voltage to reduce the number of PV cables, lower system investment costs.
- Touchscreen LCD

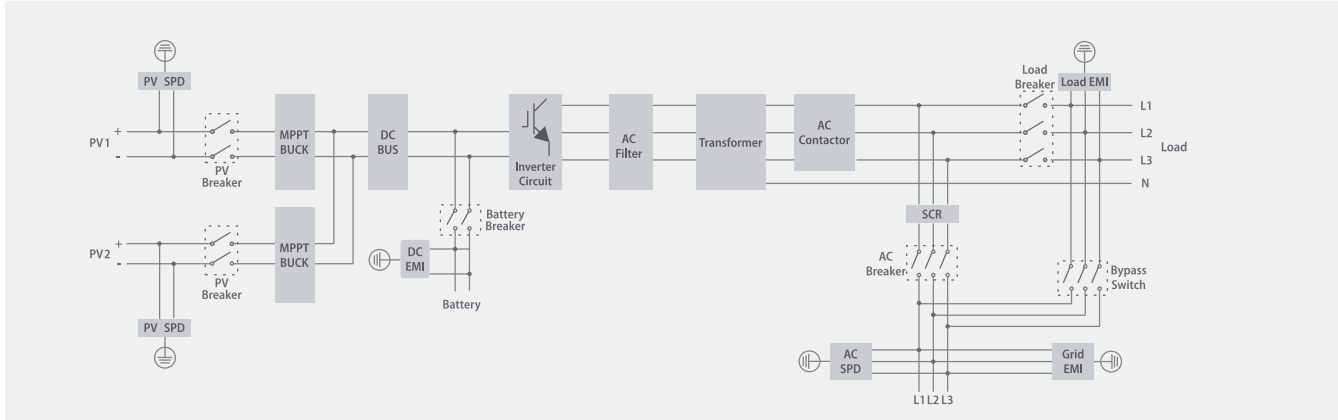
Programmable working mode
- Seamless on/off grid transfer within 10 ms

Support remote control of DG
- All-in-one hybrid inverter

Max. 8 units in parallel for on&off grid operation



Block Diagram



HPS100HV-US

HPS150HV-US

AC(on-grid)		
Apparent power	110kVA	165kVA
Rated power	100kW	150kW
Rated voltage	220V	220V
Rated current	262A	393A
Voltage range	190V-240V	190V-240V
Rated frequency	50/60Hz	50/60Hz
Frequency range	45~55/55~65Hz	45~55/55~65Hz
THDI	<3%	<3%
PF	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading
AC connection	3/N/PE	3/N/PE
AC input	150kVA	195kVA

AC(off-grid)		
Apparent power	110kVA	165kVA
Rated power	100kW	150kW
Rated voltage	220V	220V
Rated current	262A	393A
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)		
Max. PV open-circuit voltage	1500V DC	1500V DC
Max. PV power	150kWp	225kWp
PV MPPT voltage range	900V-1300V DC	900V-1300V DC
MPPT number	2	2
Max. PV current	2*80A	2*100A
Battery voltage range	600-900V	600-900V
Battery voltage range at max. charge power	804V-900V	804V-900V
Max. charge power	150kW	225kW
Max. discharge power	110kW	165kW
Max. charge current	187A	280A
Max. discharge current	183A	275A

General Information		
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	948kg	1230kg
Build-in transformer	Yes	Yes
Lightning protection	Type II	Type II
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms
Standby consumption	<30W	<30W

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

* The MPPT voltage of PV strings should be 50~200V higher than the Max battery voltage.

ATS50/100/150-US-220

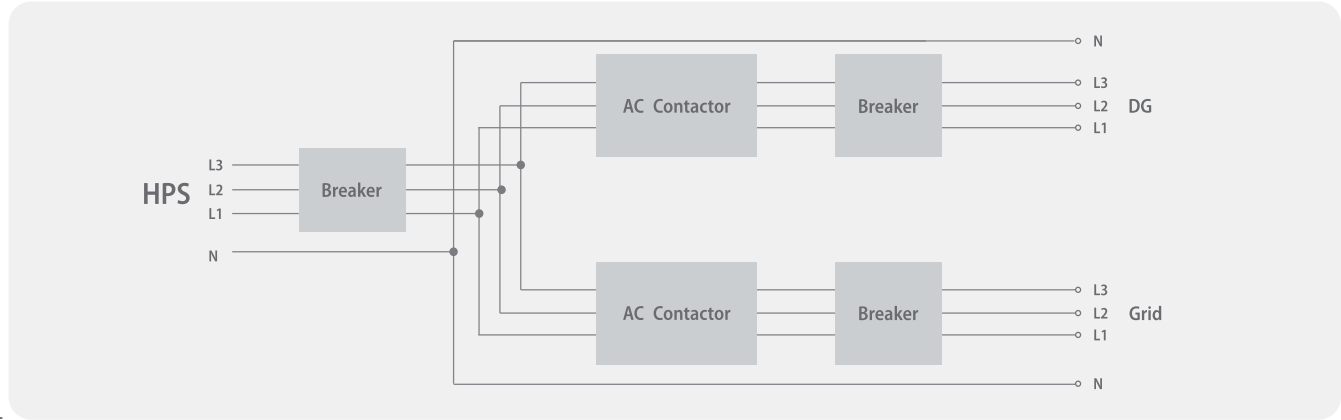
The ATS is an accessory of the American standard HPS. When both the grid and DG need to access the HPS, the ATS will be used to switch between the grid and DG automatically.

Features

-  HPS compatible
-  Flexible management
-  Transfer automatically between grid and DG
-  Support remote control of DG



Block Diagram



	ATS50-US-220	ATS100-US-220	ATS150-US-220
Rated voltage	220V	220V	220V
Rated current	131.3A	262.7A	394.1A
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Max. power	75kVA	150kVA	225kVA
Output breaker	250A	400A	630A
Grid breaker	250A	400A	630A
DG breaker	250A	400A	630A
Lightning protection	Type II	Type II	Type II
Protection degree	Type 1	Type 1	Type 1
Relative humidity	0~95% non-condensing	0~95% non-condensing	0~95% non-condensing
Operating temperature	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C
Dimension (W/H/D)	600/1500/430mm	700/1650/500mm	850/1650/550mm
Weight	82kg	135kg	173kg
Communication	RS485/CAN	RS485/CAN	RS485/CAN

HPS100/150-US-480

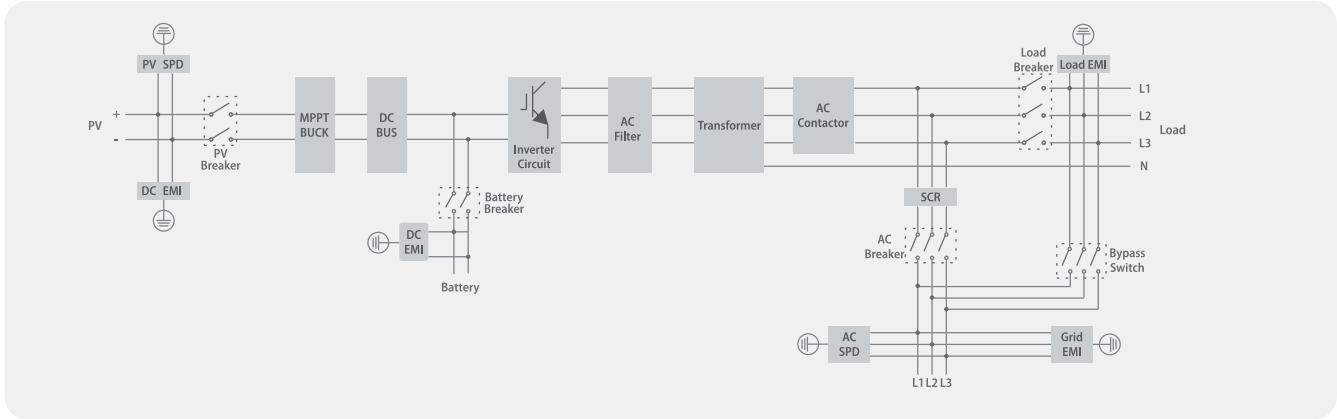
Large capacity all-in-one hybrid inverter for commercial application, supporting up to 1200kW system capacity, complied with American standard 480V 3P Dyn11.

Features

-  All-in-one hybrid inverter
-  Seamless on/off grid transfer within 10 ms
-  Programmable working mode
-  Support remote control of DG
-  Touchscreen LCD
-  Max. 8 units in parallel for on&off grid operation



Block Diagram



	HPS100-US-480	HPS150-US-480
AC(on-grid)		
Apparent power	100kVA	150kVA
Rated power	100kW	150kW
Rated voltage	480V Wye	480V Wye
Rated current	120A	180A
Voltage range	432-528V	432-528V
Rated frequency	50/60Hz	50/60Hz
Frequency range	45~55/55~65Hz	45~55/55~65Hz
THDI	<3%	<3%
PF	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading
AC connection	3/N/PE Wye	3/N/PE Wye
AC input	200kVA	240kVA

AC(off-grid)		
Apparent power	100kVA	150kVA
Rated power	100kW	150kW
Rated voltage	480V Wye	480V Wye
Rated current	120A	180A
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)		
Max. PV open-circuit voltage	1000V DC	1000V DC
Max. PV power	150kWp	225kWp
PV MPPT voltage range	480V-800V DC	480V-800V DC
Battery voltage range	352V-600V	352V-600V
Max. charge power	150kW	225kW
Max. discharge power	110kW	165kW
Max. charge current	300A	450A
Max. discharge current	275A	413A

General Information		
Protection degree	Type 1	Type 1
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	923kg	1200kg
Build-in transformer	Yes	Yes
Lightning protection	Type II	Type II
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms
Standby consumption	<30W	<30W

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

* The MPPT voltage of PV strings should be 50~200V higher than the Max battery voltage.

ATS100/150-US-480

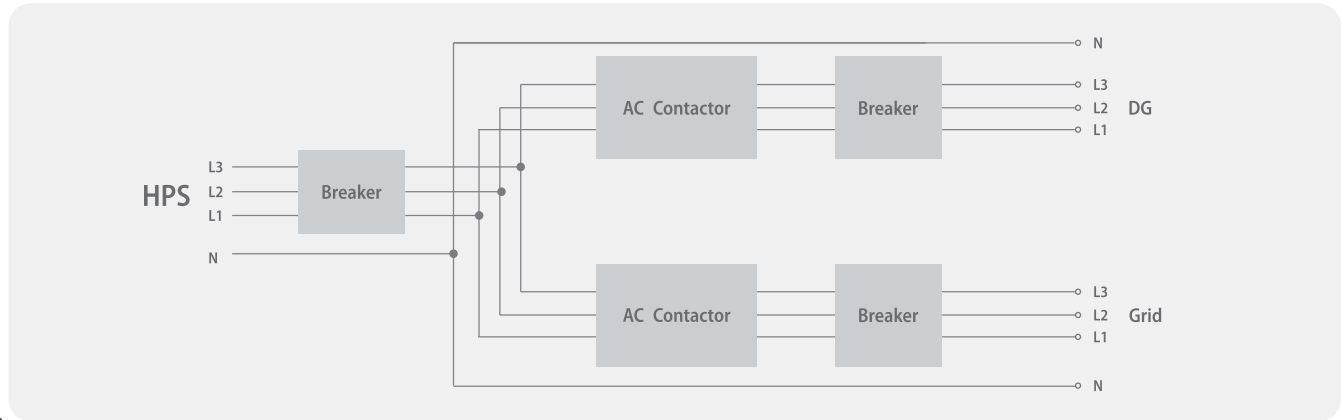
The ATS is an accessory of the HPS. When both the grid and DG need to access the HPS, the ATS will be used to switch between the grid and DG automatically.

Features

- HPS compatible
- Flexible management
- Transfer automatically between grid and DG
- Support remote control of DG



Block Diagram



	ATS100-US-480	ATS150-US-480
Rated voltage	480V	480V
Rated current	240A	288A
Rated frequency	50/60Hz	50/60Hz
Rated power	200kVA	240kVA
Output breaker	400A	630A
Grid breaker	400A	630A
DG breaker	400A	630A
Lightning protection	Type II	Type II
Protection degree	Type 1	Type 1
Relative humidity	0~95% non-condensing	0~95% non-condensing
Operating temperature	-25°C~+55°C	-25°C~+55°C
Dimension (W/H/D)	700/1650/500mm	700/1650/500mm
Weight	125kg	125kg
Communication	RS485/CAN	RS485/CAN

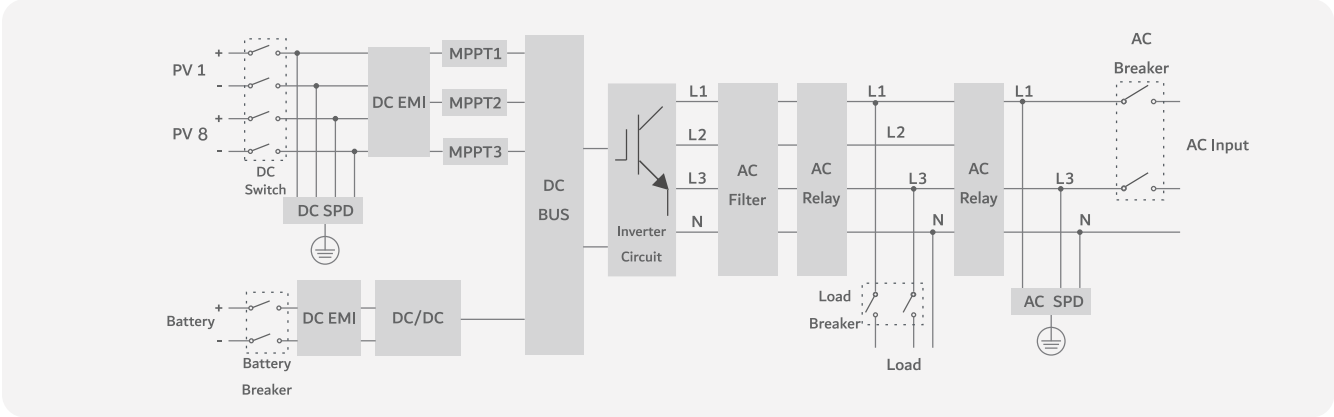
HPS20000TLSP-US

20kW split phase all-in-one hybrid inverter for small commercial use.

Features

- All-in-one hybrid inverter
- Compact design
- Touchscreen LCD
- Seamless on/off grid transfer within 10 ms
- Support remote control of DG
- Programmable working mode
- Multiple MPPT inputs
- Max. 4 units in parallel for on&off grid operation

Block Diagram



HPS20000TLSP-US

AC(on-grid)

Apparent power	20kVA
Rated power	20kW
Rated voltage	LN:120V/LL:240V Split phase
Rated current	83A
Voltage range	LN:100V-120V/LL:200V-240V
Rated frequency	50/60Hz
Frequency range	47~53/57~63Hz
THDI	<3%
PF	0.8 lagging~0.8 leading
AC connection	2L/N/PE
MAX. AC Input Power	26kW

AC(off-grid)

Apparent power	20kVA
Rated power	20kW
Rated voltage	LN:120V/LL:240V Split phase
Rated current	83A
Voltage range	LN:100V-120V/LL:200V-240V
THDU	≤2% linear
Rated frequency	50/60Hz
Overload capability	110%-10 mins 120%-1 min

DC (Battery and PV)

Max. PV Open-circuit voltage	800V
Max. PV power	45kWp
PV MPPT voltage range	125V-620V
Number of MPPT	3
PV input/MPPT	2/3/3
PV input current/MPPT	40/60/60A
Max. PV input current	160A
Max. PV Isc/MPPT	60/90/90A
Battery voltage range	260-620V
Full load battery voltage range	300-600V
Max. charge/discharge power	20kW
Max. charge/discharge current	100A

General Information

Protection devices	PV DC switch, PV fuse, battery breaker and fuse
Protection degree	Type 3R or IP54
Noise emission	<65dB(A)@1m
Operating temperature	-25 °C~+55 °C
Cooling method	Forced-air
Relative humidity	0-95% non-condensing
Max. altitude	2000m (derate over 2000m)
Dimension (W/H/D)	600/1000/315mm
Weight	90kg
Topology	Transformerless
Lightning protection	Type II
Transfer between on/off grid	Automatic≤10ms
Standby consumption	<20W

Communication

Display	Touch screen
Communication	RS485/CAN
Monitoring	WiFi or 4G module available

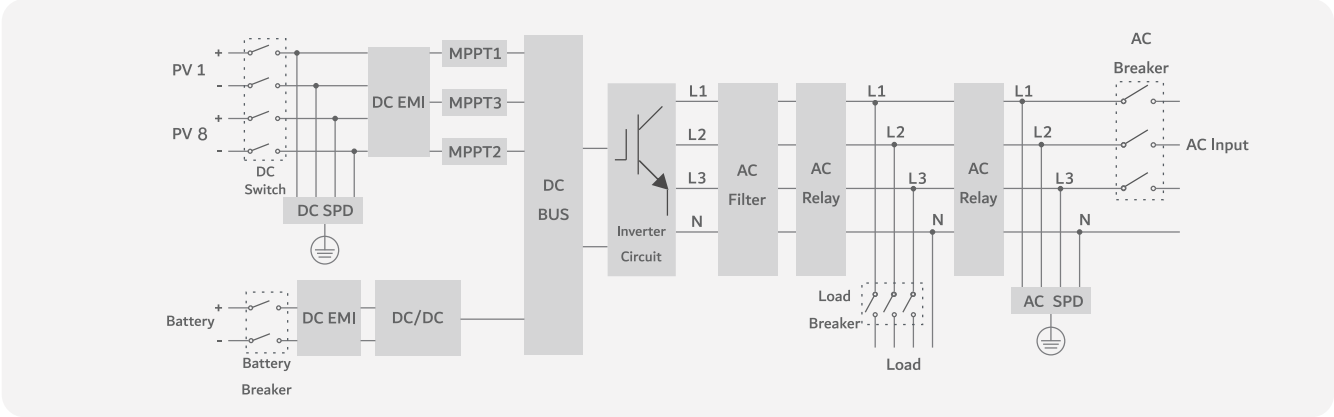
HPS30000TL-US-208

30kW three phase all-in-one hybrid inverter for small commercial use.

Features

- All-in-one hybrid inverter
- Compact design
- Touchscreen LCD
- Seamless on/off grid transfer within 10 ms
- Support remote control of DG
- Programmable working mode
- Multiple MPPT inputs
- Max. 10 units in parallel for on&off grid operation

Block Diagram



HPS30000TL-US-208

AC(on-grid)

Apparent power	30kVA
Rated power	30kW
Rated voltage	208V
Rated current	83A
Voltage range	190-240V Wye/High-leg delta with split phase (Opt) (Derate below 208V 3P)
Rated frequency	50/60Hz
Frequency range	47~53/57~63Hz
THDI	<3%
PF	0.8 lagging~0.8 leading
AC connection	3L/N/PE
MAX. AC Input Power	40kW

AC(off-grid)

Apparent power	30kVA
Rated power	30kW
Rated voltage	208V
Rated current	83A
Voltage range	190-240V Wye/High-leg delta with split phase (Opt) (Derate below 208V 3P)
THDU	≤2% linear
Rated frequency	50/60Hz
Overload capability	110%-10 mins 120%-1 min

DC (Battery and PV)

Max. PV Open-circuit voltage	800V
Max. PV power	45kWp
PV MPPT voltage range	125V-620V
Number of MPPT	3
PV input/MPPT	2/3/3
PV input current/MPPT	40/60/60A
Max. PV input current	160A
Max. PV Isc/MPPT	60/90/90A
Battery voltage range	260-620V
Full load battery voltage range	300-600V
Max. charge/discharge power	30kW
Max. charge/discharge current	85A

General Information

Protection devices	PV DC switch, PV fuse, battery breaker and fuse
Protection degree	Type 3R or IP54
Noise emission	<65dB(A)@1m
Operating temperature	-25 °C~+55 °C
Cooling method	Forced-air
Relative humidity	0-95% non-condensing
Max. altitude	2000m (derate over 2000m)
Dimension (W/H/D)	600/1000/315mm
Weight	90kg
Topology	Transformerless
Lightning protection	Type II
Transfer between on/off grid	Automatic≤10ms
Standby consumption	<20W

Communication

Display	Touch screen
Communication	RS485/CAN
Monitoring	WiFi or 4G module available

HPS30000TL-US-208A

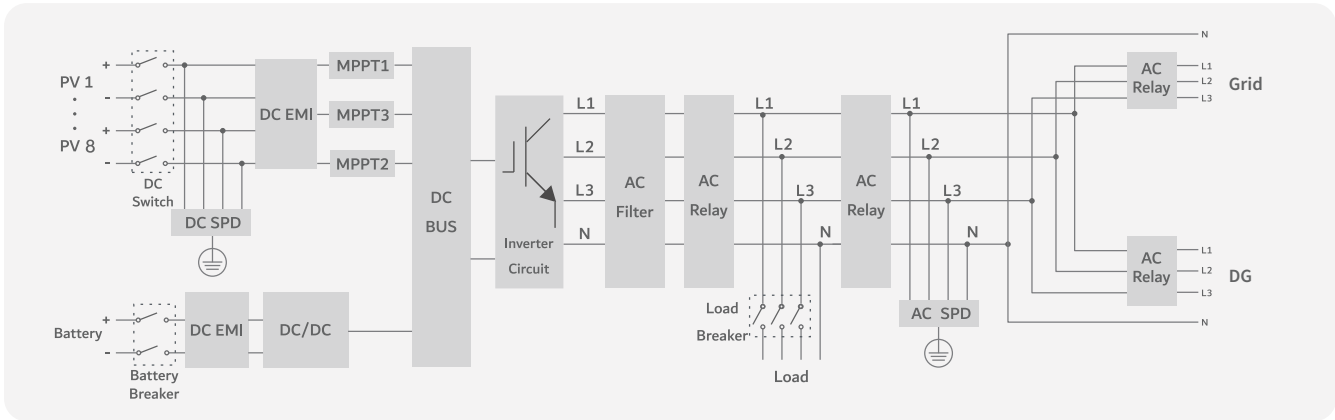
HPS50000TL-US-208A

30-50kW three phase all-in-one hybrid inverter for small commercial use.

Features

- All-in-one hybrid inverter
- Compact design
- Touchscreen LCD
- Seamless on/off grid transfer within 10 ms
- Support remote control of DG
- Programmable working mode
- Multiple MPPT inputs
- Max. 10 units in parallel for on&off grid operation

Block Diagram



HPS30000TL-US-208A

HPS50000TL-US-208A

AC(on-grid)

Apparent power	30kVA	50kVA
Rated power	30kW	50kW
Rated voltage	120/208V Wye	120/208V Wye
Rated current	83A	138A
Voltage range	190-240V Wye	190-240V Wye
Rated frequency	50/60Hz	50/60Hz
Frequency range	48~52/58~62Hz	48~52/58~62Hz
THDI	<3%	<3%
PF	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading
AC connection	3L/N/PE Wye / 3L/N/PE Delta(Opt)	3L/N/PE Wye / 3L/N/PE Delta(Opt)
AC Input	45kVA(Built-in ATS)	75kVA (Built-in ATS)

AC(off-grid)

Apparent power	30kVA	50kVA
Rated power	30kW	50kW
Rated voltage	120/208V Wye	120/208V Wye
Rated current	83A	138A
Voltage range	190-240V Wye	190-240V Wye
THDU	≤2% linear	≤2% linear
Rated frequency	50/60Hz	50/60Hz
Overload capability	110%-10 mins 120%-1 min	110%-10mins 120%-1min

DC (Battery and PV)

Max. PV Open-circuit voltage	650V	650VDC
Max. PV power	45kWp	75kWp
PV MPPT voltage range	125V-550V	125-550V
Number of MPPT	3	3
PV input/MPPT	2/3/3	2/3/3
PV input current/MPPT	40/60/60A	40/60/60A
Max. PV input current	160A	160A
Max. PV Isc/MPPT	60/90/90A	60/90/90A
Battery voltage range	260-620V	260-620V
Full load battery voltage range	300-600V	500-620V
Max. charge/discharge power	30kW	50kW
Max. charge/discharge current	100A	100A

General Information

Protection devices	PV DC switch, battery breaker and fuse	PV DC switch, battery breaker
Protection degree	Type 3R or IP65	Type 3R or IP65
Noise emission	<65dB(A)@1m	<65dB(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	2000m (derate over 2000m)	2000m(derate over 2000m)
Dimension (W/H/D)	600/1030/300mm	650/1155/300mm
Weight	97kg	110kg
Topology	Transformerless	Transformerless
Surge Protection	DC Type II / AC Type III	DC Type II / AC Type III
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms
Standby consumption	<20W	<20W
Warranty	10 Years	10 Years

Communication

Display	Touch screen	Touch screen
Communication	RS485/CAN	RS485/CAN
Monitoring	WiFi or 4G module available	WiFi of 4G module available

Certificate

UL1741, CSA-C22.2 for HPS30000TL-US-208A

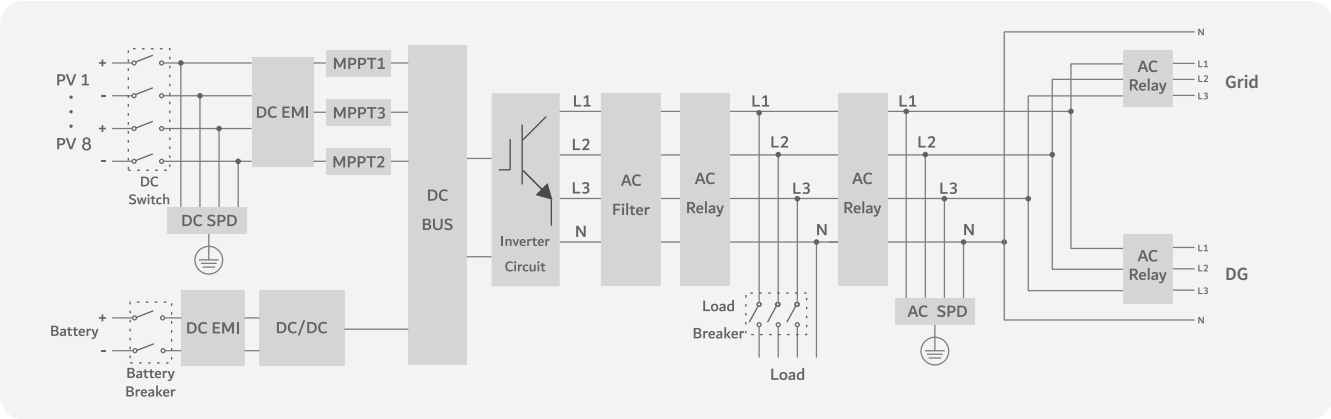
HPS60000TL-US-480A

60kW three phase all-in-one hybrid inverter for small commercial use.

Features

- All-in-one hybrid inverter
- Compact design
- Touchscreen LCD
- Seamless on/off grid transfer within 10 ms
- Support remote control of DG
- Programmable working mode
- Multiple MPPT inputs
- Max. 10 units in parallel for on&off grid operation

Block Diagram



HPS60000TL-US-480A

AC(on-grid)

Apparent power	60kVA
Rated power	60kW
Rated voltage	277/480V Wye
Rated current	72A
Voltage range	432V-528V 3P
Rated frequency	50/60Hz
Frequency range	48~52/58~62Hz
THDI	<3%
PF	0.8 lagging~0.8 leading
AC connection	3L/N/PE
AC Input	90kVA(Built-in ATS)

AC(off-grid)

Apparent power	60kVA
Rated power	60kW
Rated voltage	277/480V Wye
Rated current	72A
Voltage range	432V-528V 3P
THDU	≤2% linear
Rated frequency	50/60Hz
Overload capability	110%-10 mins 120%-1 min

DC (Battery and PV)

Max. PV Open-circuit voltage	1000V
Max. PV power	90kWp
PV MPPT voltage range	125V-850V
Number of MPPT	3
PV input/MPPT	2/3/3
PV input current/MPPT	40/60/60A
Max. PV input current	160A
Max. PV Isc/MPPT	60/90/90A
Battery voltage range	260-700V
Full load battery voltage range	500-700V
Max. charge/discharge power	60kW
Max. charge/discharge current	100A

General Information

Protection devices	PV DC switch, battery breaker and fuse
Protection degree	Type 3R or IP65
Noise emission	<65dB(A)@1m
Operating temperature	-25 °C~+55 °C
Cooling method	Forced-air
Relative humidity	0-95% non-condensing
Max. altitude	2000m (derate over 2000m)
Dimension (W/H/D)	600/1030/300mm
Weight	97kg
Topology	Transformerless
Surge Protection	DC Type II / AC Type III
Transfer between on/off grid	Automatic≤10ms
Standby consumption	<20W
Warranty	10 Years

Communication

Display	Touch screen
Communication	RS485/CAN
Monitoring	WiFi or 4G module available

Certificate

UL1741, CSA-C22.2

SMC200

SMC200HV

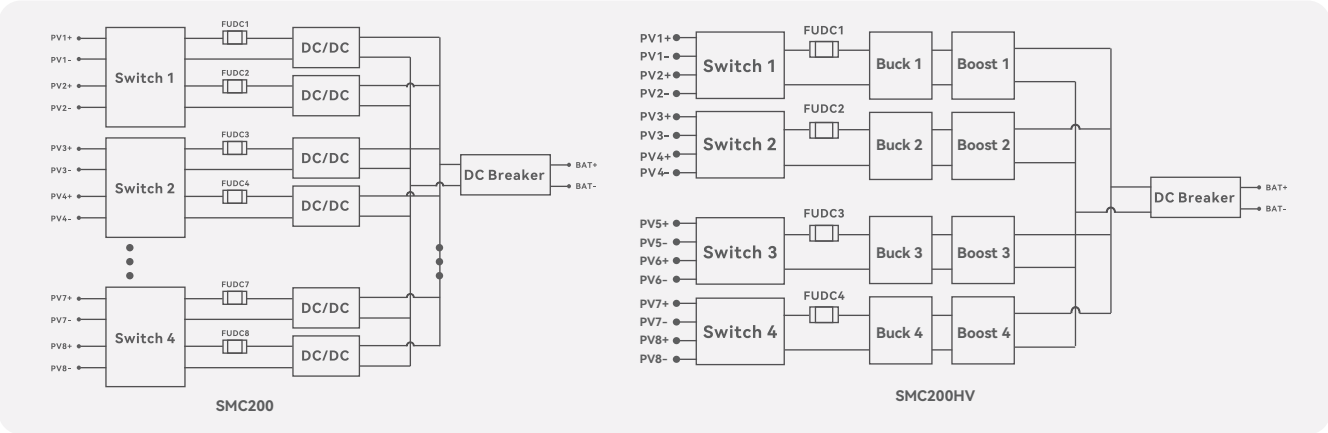
Smart MPPT controller,used together with ATESS PCS for large scale solar projects.

Features

-  Modular design
-  Up to 8 MPPTs
-  Transformerless design
-  Multiple units parallelable



Block Diagram



	SMC200	SMC200HV
Input(PV)		
Max. PV power	200kW	200kW
Rated PV power	180kW	180kW
MPPT voltage range	900V-1300V	900V-1300V
Max. input current	160A(20A*8)	160A(20A*8)
Number of MPPT	8	4
Output (Battery and PCS)		
Ouput voltage	600V-900V(700V-900V full load)	900V-1500V(1250V-1500V full load)
Max. charge power	180kW	180kW
Max. charge current	280A	160A
Max. charge efficiency	99%	98%
Battery type	Lead-acid or lithium-ion	Lead-acid or lithium-ion
Protection		
Input & output OV/UV protection	Yes	Yes
Input & output OC protection	Yes	Yes
Short circuit protection	Yes	Yes
Over temperature protection	Yes	Yes
Lightning protection	Type II	Type II
DC breaker	Yes	Yes
Emergency stop	Yes	Yes
General Information		
Protection degree	IP65	IP65
Noise emission	<65dB(A)@1m	<65dB(A)@1m
Operating temperature	-25 °C~+55 °C	-25 °C~+55 °C
Cooling method	Intelligent fan cooling	Intelligent fan cooling
Relative humidity	0-95% non-condensing	0-95% non-condensing
Max. altitude	6000m (derate over 3000m)	6000m (derate over 3000m)
Dimension (W/H/D)	780/770/210 mm	890/660/210 mm
Weight	65kg	68kg
Topology	Transformerless	Transformerless
Standby power	<100W	<100W
Communication		
Communication	RS485/CAN	RS485/CAN

PCS100/250/500-US-480

PCS630/1000-US-480

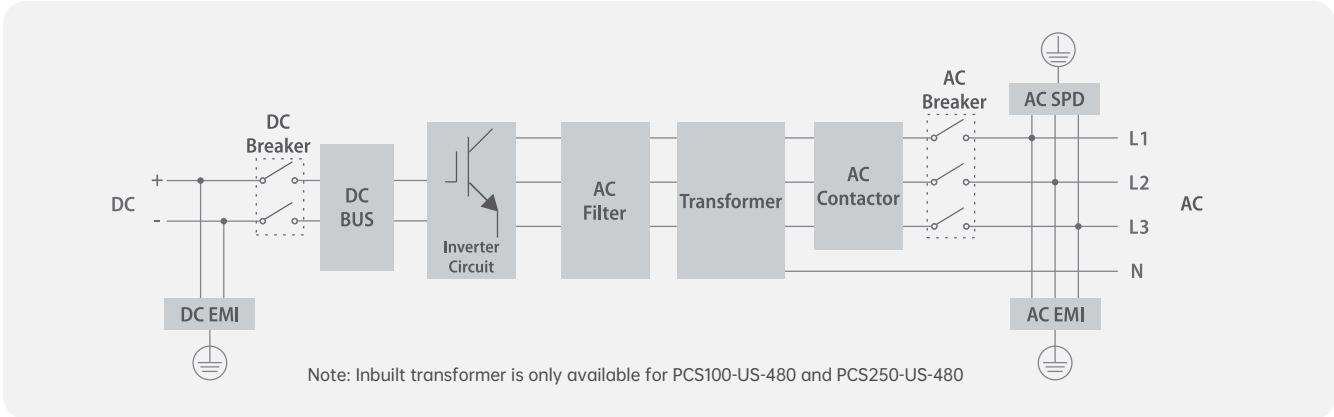
Bidirectional battery inverter from 100kW to 1000kW, can be used alone or with solar charge controllers and other accessories for different application scenarios.

Features

- Programmable working mode
- Flexible configuration
- Touchscreen LCD
- Support remote control of DG
- Max. 8 units in parallel for on&off grid operation



Block Diagram



	PCS100-US-480	PCS250-US-480	PCS500-US-480	PCS630-US-480	PCS1000-US-480
AC(on-grid)					
Apparent power	100kVA	250kVA	500kVA	630kVA	1000kVA
Rated power	100kW	250kW	500kW	630kW	1000kW
Rated voltage	480V	480V	480V	480V	480V
Rated current	120A	301A	601A	758A	1203A
Voltage range	432V-528V	432V-528V	432V-528V	432V-528V	432V-528V
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Frequency range	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz	47~51.5/57~61.5Hz
THDI	<3%	<3%	<3%	<3%	<3%
PF	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading
AC connection	3/N/PE	3/N/PE	3/PE	3/PE	3/PE

AC(off-grid)					
Apparent power	100kVA	250kVA	500kVA	630kVA	1000kVA
Rated power	100kW	250kW	500kW	630kW	1000kW
Rated voltage	480V	480V	480V	480V	480V
Rated current	120A	301A	601A	758A	1203A
THDU	≤2% linear	≤2% linear	≤2% linear	≤2% linear	≤2% linear
Rated frequency	50/60Hz	50/60Hz	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	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min

DC (Battery and PV)					
Rated power	100kW	250kW	500kW	630kW	1000kW
Current regulation	±1%	±1%	±1%	±1%	±1%
Voltage regulatoion	±1%	±1%	±1%	±1%	±1%
Voltage ripple	<3%	<3%	<3%	<3%	<3%
Current ripple	<2%	<2%	<2%	<2%	<2%
Voltage range	500V-820V	500V-820V	600V-900V	650V-900V	700V-900V
Max. charge/discharge current	220A	550A	917A	1155A	1430A

General Information					
Max. efficiency	97.10%	97.30%	98.50%	98.50%	99.0%
Protection degree	Type 1	Type 1	Type 1	Type 1	Type 1
Noise emission	<75dB(A)@1m	<75dB(A)@1m	<75dB(A)@1m	<75dB(A)@1m	<75dB(A)@1m
Operating temperature	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C
Cooling method	Forced-air	Forced-air	Forced-air	Forced-air	Forced-air
Relative humidity	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing
Max. altitude	6000m (derate above 3000m)	6000m (derate above 3000m)	6000m (derate above 3000m)	6000m (derate above 3000m)	6000m (derate over 3000m)
Dimension(W/H/D)	1100/1890/850mm	1600/2080/850mm	1200/1900/800mm	1200/1900/800mm	1510/1900/850mm
Weight	820kg	1465kg	870kg	900kg	1500kg
Build-in transformer	Yes	Yes	No	No	No
Lightning protection	Type II	Type II	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	Manual(default) Automatic(optional) ≤10ms	Manual(default) Automatic(optional) ≤10ms

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

Certificate					
UL1741 , CSA-C22.2 for PCS500/630-US-480					

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

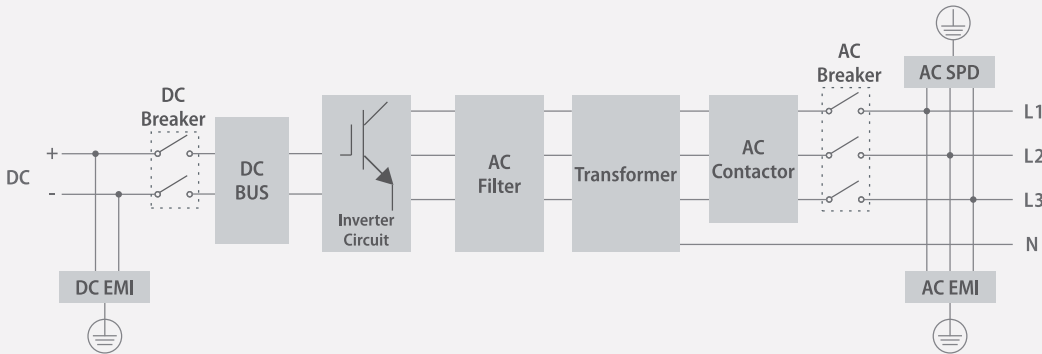
- Bidirectional power conversion system with full four-quadrant operation
- Compatible with high voltage battery system, low system cost
- Battery charge & dis-charge management and black start function integrated



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.

PCS1000HV/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



High yield

- Advanced three-level technology, max. efficiency 98.5%
- 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

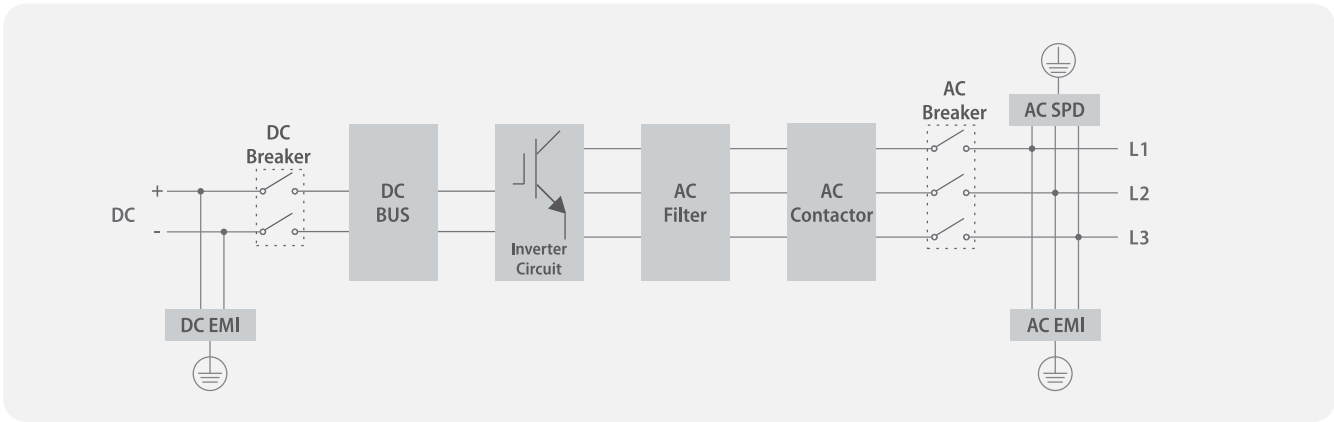
- Bidirectional power conversion system with full four-quadrant operation
- Compatible with high voltage battery system, low system cost
- Battery charge & dis-charge management and black start function integrated
- VSG, VF, PQ and other operating modes



Grid support

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

Block Diagram



	PCS1000HV	PCS1200HV	PCS1500HV
AC(on-grid)			
Apparent power	1000kVA	1200kVA	1500kVA
Rated power	1000kW	1200kW	1500kW
Rated voltage	540V	550V	690V
Rated current	1443A	1260A	1260A
Voltage range	360V-440V	495V-605V	621V-759V
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Frequency range	46-54/56-64Hz	46-54/56-64Hz	46-54/56-64Hz
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	1000kW	1200kW	1500kW

AC(off-grid)			
Apparent power	1000kVA	1200kVA	1500kVA
Rated power	1000kW	1200kW	1500kW
Rated voltage	400/540V*	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

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	900V-1500V	900V-1500V	1000V-1500V
Max. charge/discharge current	1111A	1111A/1334A	1300A/1500A

General Information			
Max. efficiency	98.5%	98.5%	98.5%
Protection degree	IP20	IP20	IP20
Noise emission	<75dB(A)@1m	<75dB(A)@1m	<75dB(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	5000m(derate over 2000m)	5000m(derate over 2000m)	5000m(derate over 2000m)
Dimension(W/H/D)	1510/2135/890mm	1510/2135/890mm	1510/2135/890mm
Weight	1524kg	1524kg	1524kg
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, IEC 62109-1:2010, IEC 62109-2:2011, IEC 61000-6-2:2019, IEC 61000-6-4:2019, IEC 61000-4			

*The direct output voltage of PCS1000HV is 540V, and a transformer is required to output 400V or other voltages.

Bypass100/250/500-US-480

Bypass630/1000-US-480

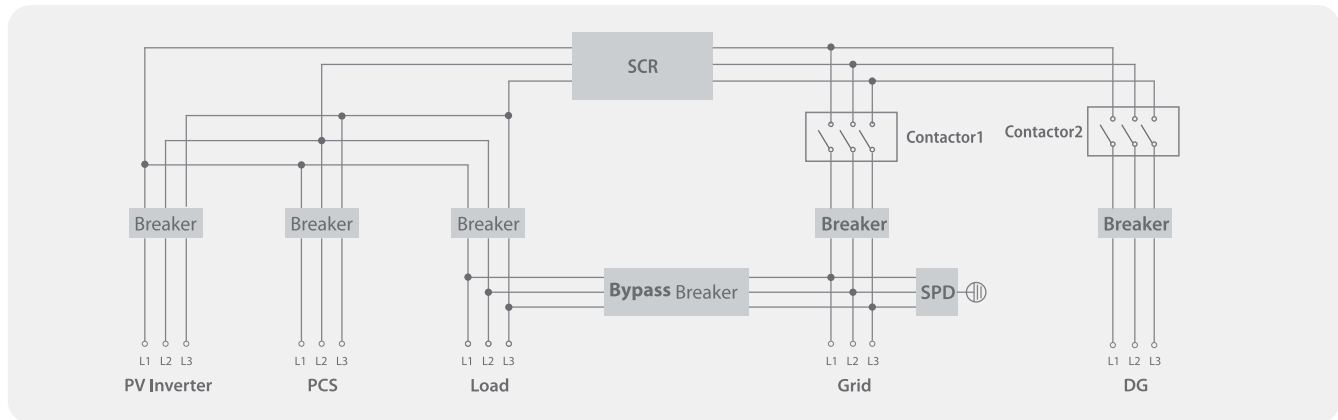
ATESS bypass cabinet is designed to be used together with the bidirectional battery inverter to realize seamless transfer between on-grid and off-grid modes automatically.

Features

- Import/export control
- Seamless on/off grid transfer within 10ms
- Flexible management
- DG connection supported



Block Diagram



	Bypass100-US-480	Bypass250-US-480	Bypass500-US-480	Bypass630-US-480	Bypass1000-US-480
Rated voltage	480V	480V	480V	480V	480V
Rated current	120A	301A	601A	758A	1202A
Rated frequency	50Hz	50Hz	50Hz	50Hz	50Hz
Rated power	100KVA	250KVA	500KVA	630KVA	1000KVA
Max. current	175A	435A	866A	1091A	1443A
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms
Zero export function	Opt	Opt	Opt	Opt	Opt
Power limit(grid)	Opt	Opt	Opt	Opt	Opt
PV inverter breaker	250A	630A	1250A	1250A	2000A/3P
PCS breaker	250A	630A	1250A	1250A	2000A/3P
Grid breaker	250A	630A	1250A	1250A	2000A/3P
Load breaker	250A	630A	1250A	1250A	2000A/3P
Bypass breaker	250A	630A	1250A	1250A	1600A/3P
DG breaker	Opt	Opt	Opt	Opt	Opt
Lightning protection	Type II	Type II	Type II	Type II	Type II
Protection degree	Type 1	Type 1	Type 1	Type 1	Type 1
Relative humidity	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing
Operating temperature	-25 °C~+55 °C	-25 °C~+55 °C	-25 °C~+55 °C	-25 °C~+55 °C	-25 °C~+55 °C
Dimension (W/H/D)	700/1630/500mm	700/1800/500mm	1600/1900/800mm	1600/1900/800mm	2850/2100/800mm
Weight	135kg	205kg	900kg	1040kg	1500kg
Communication	RS485/CAN	RS485/CAN	RS485/CAN	RS485/CAN	RS485/CAN

RTF600/600A

RTF1200AHV

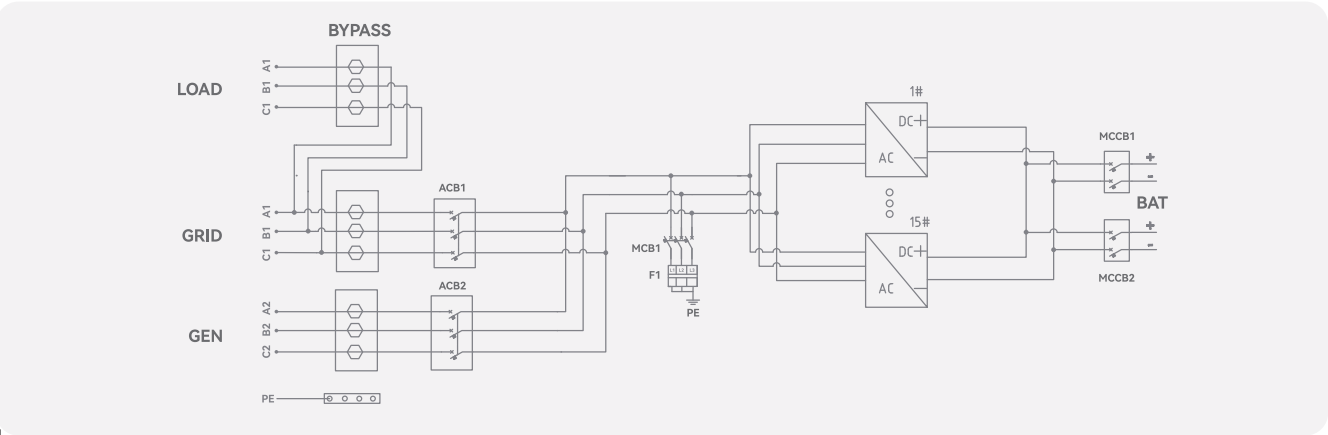
Modular rectifier cabinet, 600KW and 1200KW optional, can be combined with ATESS PCS to form a DC coupling solution, suitable for large industrial scenarios.

Features

- AC-DC converter only
- Flexible configuration
- Touchscreen LCD
- Paralleling multiple units



Block Diagram



	RTF600	RTF600A	RTF1200AHV
AC(on-grid)			
Rated power	600kW	600kW	1200kW
Rated voltage	400V	400V	400V
Rated current	866A	866A	1732A
Voltage range	360V-440V	360V-440V	360V-440V
Rated frequency	50±10%	50±10%	50±10%
PF	≥0.98	≥0.98	≥0.98
THDI	≤5%	≤5%	≤5%
Efficiency	≥95%	≥95%	≥95%
AC input port	1(grid or generator)	2(grid and generator)	2(grid and generator)

DC(output)			
Voltage range	200Vdc-950Vdc (full above 500V derate below 500V)	500Vdc-1000Vdc	900Vdc-1500Vdc
Max. output current	1200A	1000A	1333A
Output current ripple	≤1%	≤1%	≤1%
Voltage accuracy	≤0.5%	≤0.5%	≤0.5%
Current accuracy	≤1%	≤1%	≤1%

General Information			
Nosie emission	≤68Db(A)@1m	≤68Db(A)@1m	≤80Db(A)@1m
Operating temperature	-40 °C~+45 °C, full load; 45 °C~55 °C, half load	-25 °C~+55 °C (Derating above 45 °C)	-25 °C~+55 °C (Derating above 45 °C)
Storage temperature	-40 °C~85 °C	-40 °C~85 °C	-40 °C~85 °C
Relative humidity	0~95% non-condensing	0~95% non-condensing	0~95% non-condensing
Max. altitude	< 2000m	< 2000m	< 2000m
Cooling method	Forced-air	Forced-air	Intelligent air cooling
Dimension (W/H/D)	1204/1958/853mm	1204/1957/798mm	1902/1902.4/903mm
Weight	350kg	623kg	1299kg

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

Certificate			
CE			

PCS250S/350S-US-480

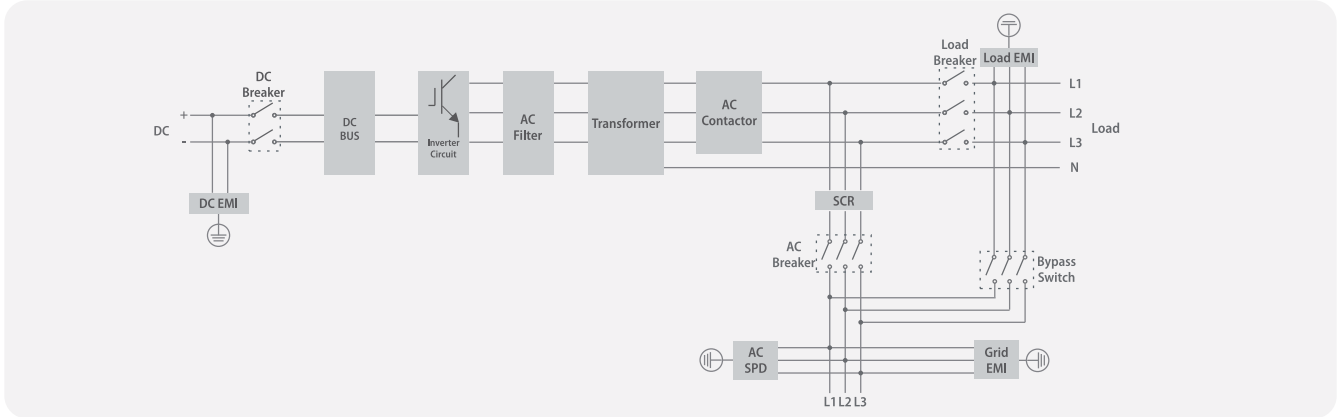
Bidirectional battery inverter from 250kW to 350kW with built-in STS function, can be used alone or with solar charge controllers and other accessories for different application scenarios. No need for extra bypass cabinet for grid/off-grid switch.

Features

- Built-in STS
- Seamless on/off grid transfer within 10 ms
- Flexible configuration
- Touchscreen LCD
- Support remote control of DG
- Programmable working mode
- Max. 8 units in parallel for on&off grid operation



Block Diagram



	PCS250S-US-480	PCS350S-US-480
AC(on-grid)		
Apparent power	250KVA	350KVA
Rated power	250KW	350KW
Max.AC input	375KW	525KW
Rated voltage	480Vac	480Vac
Rated current	301A	421A
Voltage range	432V-528V	432V-528V
Rated frequency	50/60Hz	50/60Hz
Frequency range	45~55/55~65Hz	45~55/55~65Hz
THDI	<3%(@Pac,r)	<3%(@Pac,r)
PF	0.8 lagging~0.8 leading	0.8 lagging~0.8 leading
AC connection	3/N/PE	3/N/PE
Max. rectified power	250KW	350KW
AC(off-grid)		
Apparent power	250KVA	350KVA
Rated power	250KW	350KW
Rated voltage	480Vac	480Vac
Rated current	301A	421A
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
Max. rectified power	250KW	350KW
DC (Battery and PV)		
Rated power	250KW	350KW
Current regulation	±1%	±1%
Voltage regulatoion	±1%	±1%
Voltage ripple	<3%	<3%
Current ripple	<2%	<2%
Voltage range	600V-900V	600V-900V
Max. charge/discharge power	275KW	358KW
Max. charge/discharge current	458A	641A
General Information		
Max. efficiency	97.30%	97.50%
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
Standby consumption	<100W	<100W
Relative humidity	0-95% non-condensing	0-95% non-condensing
Max. altitude	6000m(derate above 3000m)	6000m(derate above 3000m)
Dimension(W/H/D)	1400/1900/850mm	1400/1900/850mm
Weight	1460kg	1524kg
Build-in transformer	Yes	Yes
Build-in STS	Yes	Yes
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	Touch screen
Communication	RS485/CAN	RS485/CAN

PV-CB8M

PV-CB16M-P

The PV combiner box is an accessory for multiple PV strings connections, and it is with a smart controller inbuilt for monitoring, along with comprehensive protections including the fuse and SPD.

Features

-  Lightning protection
-  IP65 environment compatibility
-  RS485 communication interface
-  Monitoring function
-  Flexible design with 8 or 16 optional inputs
-  Input fuse for over current protection



	PV-CB8M	PV-CB16M-P
Input DC		
Max. input voltage	1000V	1000V
Max. string Isc	20A	20A
Number of input string	8	16
Input fuse	1 on negative and positive pole of each string, 25A, 10*38mm	1 on negative and positive pole of each string, 30A, 10*38mm
Input cable gland	4mm-8mm cable diameter	4mm-8mm cable diameter
Input cable terminal	4mm ² -6mm ²	4mm ² -6mm ²

Output DC		
Number of output	1	1
Max. output current	144A	320A
Output breaker	200A	400A
Output cable terminal	50mm ²	120mm ²
Output cable gland	13mm-18mm cable diameter	18mm-25mm cable diameter

General Information		
Dimension (W/H/D)	600/500/172mm	600/500/202mm
Weight	22.5kg	29kg
Enclosure material	Galvanized steel	Galvanized steel
Protection degree	IP65	IP65
Operating temperature	-25°C~55°C	-25°C~55°C
Humidity	0~99%	0~99%
Altitude	2000m without derating	2000m without derating
Lightning protection	Type II	Type II
Cooling method	Natural convection	Natural convection
Mounting	Wall-mount	Wall-mount
Monitoring	String current, bus voltage, breaker status, surge arrestor status, internal temperature	String current, bus voltage, breaker status, surge arrestor status, internal temperature
Power supply	DC300V~1000V	DC300V~1000V
Power consumption	14W	14W
Communication	RS485	RS485

MatrixOne IC261-US-208S

Outdoor All-in-one 125kW, 261kWh BESS cabinet with IP66/IP55 protection level, inbuilt PCS and liquid-cooling lithium-ion battery. Suitable for factory, industrial park, office, malls etc. to do peak-shaving and load-shifting. Integrated STS, can acheive on/off grid switch within 10ms.

Features

-  Parallel up to 6 units
-  Comprehensive protection
-  Built-in STS
-  IP66/IP55 protection
-  100% three-phase unbalanced load
-  AI-driven revenue optimization
-  All-in-one BESS cabinet
-  Distributed PV integration solution
-  Liquid-cooling battery ensure long lifespan

MatrixOne IC261-US-208S

Battery specification

Cell type	LFP/314
Pack configuration	52.2kWh/1P52S
System configuration	261kWh/1P260S
Rated capacity	314Ah
Rated voltage	832V
Voltage range	728~936V
Rated charge/discharge	157A(0.5C)

PCS specification (on-grid)

Apparent power	125kVA
Rated power	125kW
Rated voltage	120/208Vac, 127/220Vac
Rated current	347A
Voltage range	102-148Vac/190-242Vac
Rated frequency	50/60Hz
Frequency range	45~55/55~65Hz
THDI	<3%
PF	0.8 lagging~0.8 leading
AC connection	3L/N/PE
Max. AC input power	187.5kW

PCS specification (off-grid)

Apparent power	125kVA
Rated power	125kW
Rated voltage	208V
Rated current	347A
THDU	≤2% linear
Rated frequency	50/60Hz
Overload capability	1.1times (long-term) 1.2times (10min)

General information

Dimensions (W*D*H)	1050*1350*2400 mm
Weight	2780kg
Max. round trip efficiency	92%
Cycle life	≥8000 cycles
Communication	MODBUS TCP/IP or RTU
HMI	Optional
Fire suppression system	Aerosol
Ingress rating	IP66(Battery Compartment)/ IP55
Cooling	Liquid cooling for battery + Forced air cooling for PCS
Operating temperature	-25°C~55°C (Derating after 45°C)
Anti-corrosion rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	≤75 dB
Altitude	3000m (Derating above 2000m)

MatrixOne IC418-US-480

Outdoor All-in-one 150kW, 418kWh BESS cabinet with IP66/IP55 protection level, inbuilt PCS and liquid-cooling lithium-ion battery. Suitable for factory, industrial park, office, malls etc. to do peak-shaving and load-shifting. Integrated with black-start function.

Features

-  Parallel up to 6 units
-  Comprehensive protection
-  Black start function
-  IP66/IP55 protection
-  100% three-phase unbalanced load
-  AI-driven revenue optimization
-  All-in-one BESS cabinet
-  Distributed PV integration solution
-  Liquid-cooling battery ensure long lifespan



MatrixOne IC418-US-480

Battery specification	
Cell type	LFP/314
Pack configuration	52.2kWh/1P52S
System configuration	418kWh/1P416S
Rated capacity	314Ah
Rated voltage	1331.2V
Voltage range	1164.8~1497.6V
Rated charge/discharge	157A(0.5C)

PCS specification	
Rated output power	150kW
Rated AC voltage	480V
AC voltage range	432V-528V
Grid type	3W+PE
Rated frequency	50/60Hz
PF	0.99/ -1 ~ +1
THDI	≤3%

General information	
Dimensions (W*D*H)	1400*1450*2400 mm
Weight	3900kg
Max. round trip efficiency	92%
Cycle life	≥8000 cycles
Communication	MODBUS TCP/IP or RTU
HMI	Optional
Fire suppression system	Aerosol
Ingress rating	IP66(Battery compartment)/ IP55
Cooling	Liquid cooling for battery +Forced air cooling for PCS
Operating temperature	-25°C~55°C (Derating after 45°C)
Anti-corrosion rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	≤75 dB
Altitude	3000m (Derating above 2000m)

EnerStack100

The EnerStack100 outdoor stackable batteries require no complex wiring and can be easily stacked for immediate use. With an IP65 protection rating, they can be deployed outdoors, avoiding taking up indoor space. An online intelligent operation and maintenance system makes home energy management more worry-free and reliable.

Features

-  Foolproof installation
-  Efficient deployment
-  Future ready
-  Intelligent operation and maintenance
-  Targeted prevention and control
-  IP65 waterproof design

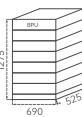
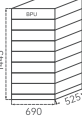
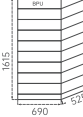
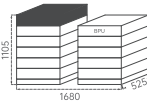
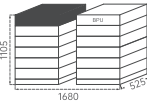
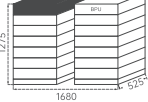


EnerStack100

ATESS ESS-BM-51.2-100CPB-S

Configuration	16S1P
Rate capacity	100Ah
Rate energy	5.12KWh
Rate voltage	51.2V
Voltage range	44.8~57.6V
Rate charge/discharge	0.5C
Max. charge/discharge	0.65C
AC internal resistance	≤8mΩ
Dimension(W/H/D)mm	690mm*170mm*525mm
Weight	55Kg
Cell chemistry	LiFePO4
Cooling method	Fan air cooling

Battery cluster specification

Energy code	BS30	BS35	BS40	BS46	BS51	BS56	BS61
Module Number	6	7	8	9	10	11	12
Weight	308kg	356kg	404kg	464kg	512kg	560kg	608kg
Dimension(W/H/D)mm							
Normal capacity/Ah	100						
Normal Energy/KWh	5.12n (n=Module Number)						
Normal Voltage/V	51.2n (n=Module Number)						
Voltage Range/V	44.8n~57.6n (n=Module Number)						
Recommended charge&discharge current	50A(0.5C)						
Max. charge&discharge current	65A(0.65C)						
Depth of discharge	90%						
Cycle life	≥6000 cycles						
Charging temperature range	0°C~55°C						
Disharging temperature range	-20°C~55°C						
Communication	CAN/RS485						
Protection grade	IP65						
Fire extinguishing system	Aerosol						
Installation method	Stacked installation						
Cooling method	Smart air cooling						
Max. altitude	3000m						

Certificate

CE,CB,UL.UN38.3,IEC62619,MSDS,ROHS

EnerStack314

The EnerStack314 indoor stackable batteries require no complex wiring and can be easily stacked for immediate use. Its intelligent temperature control system maintains efficient battery operation around the clock, while its online intelligent operation and maintenance system helps businesses manage energy more easily and reliably.

Features

-  Foolproof installation
-  Efficient deployment
-  Future ready
-  Intelligent operation and maintenance
-  Intelligent temperature control
-  Targeted prevention and control

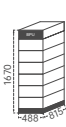
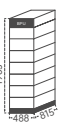
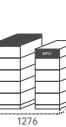
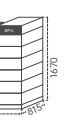


EnerStack314

ATESS ESS-BM-51.2-314RPB-S

Configuration	16S1P
Rate capacity	314Ah
Rate energy	16.076KWh
Rate voltage	51.2V
Voltage range	44.8~57.6V
Rate charge/discharge	0.5C
Max. charge/discharge	0.65C
AC internal resistance	≤8mΩ
Dimension(W/H/D)mm	490mm*282mm*815mm
Weight	118Kg
Cell chemistry	LiFePO4
Cooling method	Fan cooling

Battery cluster specification

Energy code	BS96	BS112	BS128	BS144	BS160	BS176	BS192	BS208	BS225	BS241
Module Number	6	7	8	9	10	11	12	13	14	15
Weight(kg)	733	851	969	1102	1220	1338	1456	1574	1692	1810
Dimension(W/H/D)mm										

Norminal capacity/Ah	314
Norminal Energy/KWh	16.076n (n=Module Number)
Norminal Voltage/V	51.2n (n=Module Number)
Voltage Range/V	44.8n~57.6n (n=Module Number)
Recommended charge&discharge current	157A(0.5C)
Max. charge&discharge current	204A(0.65C)
Depth of discharge	90%
Cycle life	≥6000 cycles
Charging temperature range	0°C~55°C
Disharging temperature range	-20°C~55°C
Communication	CAN/RS485
Protection grade	IP20
Fire extinguishing system	Aerosol
Installation method	Stacked installation
Cooling method	Smart air cooling
Max. altitude	3000m

Certificate

CE,CB,UL,UN38.3,IEC62619,MSDS,ROHS

EnerLog

Data logger for overall system monitoring collects operation data from different units via Modbus RS485 and communicates with the ATESS server via Ethernet.

Features

-  Up to 32 devices connection
-  Support external sensors to realize the zero-export function
-  Multi-function and high performance
-  Local web server for easy configuration



EnerLog

Hardware Parameters

Power adapter	Input: 100-240V, 50/60Hz AC Output 12V(+/-15%), 1A DC
Power consumption	2.5W

Application Parameters

Max. communication range	500m
Communication with inverters	RS485
Communication with server	TCP(Modbus TCP protocol)
Support network	Ethernet
Data transfer interval	5 Minutes
Default server URL	ess-server.atesspower.com

General Information

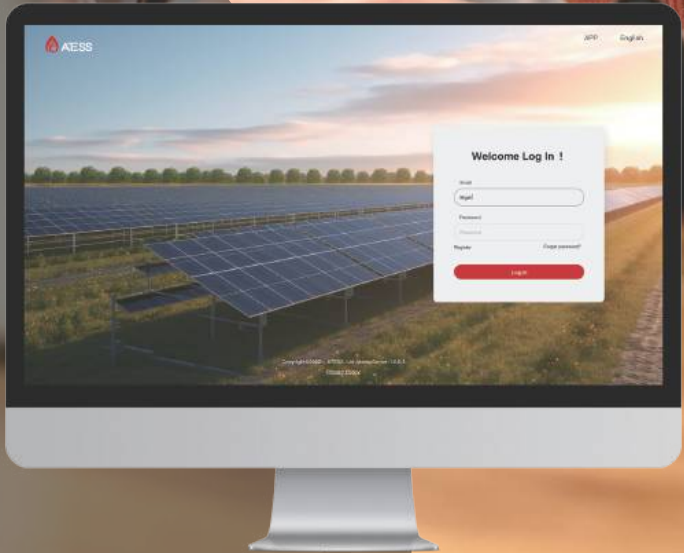
Dimension(W/H/D)	175/105/31mm
Weight	320g
Language	Chinese, English
Mounting	Wall-mounted
Operating temperature	-30°C~+60°C
Degree of protection	IP30
Warranty	1 year
Certificate	CE

EnerClo

ATESS monitoring cloud platform for different applications including residential, commercial, and utility grade on/off grid solar storage systems.

Features

-  Quick and easy overview
-  Professional analysis
-  PC and mobile phone accessible
-  Real-time monitoring
-  Detail report downloadable
-  Online control and maintenance



EnerClo

Languages

Available languages	Chinese, English, German, French, Spanish, Arabic, Ukrainian
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System Requirments

Supported operating systems	All
Recommended browsers	Internet explore 8, Firefox 5, Google chrome 14, Safari 5, Opera 11
Supported data logger	EnerLog

Access

Website	www.enerclo-atesspower.com
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Plant Information

Plant overview	Quick yield overview of all your PV plants
Specified plant	All important data at a glance including energy output, yield gains, environment status
Plant installation data	Summary of all plant information which contains installation data, location data and other key devices
Device overview	Display of all important data about data logger, environment monitor and other key devices
Time period	5 mins

Plant Management

Account	User could manage all PV plants with one same account
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Monitoring

Inverter status	All inverter running status are recorded automatically, the warning of fault is highlighted immediately
-----------------	---

Status Reporting

Event reports	Timely e-mail reports on system fault and plant error
---------------	---

Background Operating

Plant management	Add new plant, edit and delete existing plant
Device management	Intuitive operation to manage all devices
Inverter setting	Simple parameters setting for inverters including power management

Enerview Pro

Mobile phone app available on both IOS and Android to access EnerClo for online monitoring and maintenance

Features

- Quick and easy overview
- Professional analysis
- PC and mobile phone accessible
- Real-time monitoring
- Detail report downloadable
- Online control and maintenance



Enerview Pro

General Data	
Available languages	Chinese, English, German, French, Spanish, Arabic, Ukrainian
Supported operating systems	Android/iOS
Recommended browsers	All
Source of data	ess-server.atesspower.com
Supported data logger	EnerLog

Plant Information	
Plant overview	Quick yield overview of all your PV plants
Specified plant	All important data at a glance including energy output, yield gains, environment status
Device overview	Display of all important data about the data logger, environment monitor, and other key devices
Plant event log	Display of all the warning events of the plant

Device Information	
Inverter status	All inverters' running status is recorded automatically, and the warning of fault is highlighted immediately
Event reports	Timely e-mail reports on system fault and plant error
Plant management	Add a new plant, edit and delete the existing plant
Device management	intuitive operation to manage all devices
Inverter setting	Simple parameters setting for inverters including power management

NOVO EVA-07/09/12S-PU

Single-phase AC home electric vehicle charging station, Type 1 plug, single output, US standard.



Features

- 

Programmable charging mode
- 

Compact and exquisite
- 

Comprehensive protection
- 

US standard
- 

Multiple communication modes
- 

Flexible installation

Model	NOVO EVA-07S-PU	NOVO EVA-09S-PU	NOVO EVA-12S-PU
Input & Output			
Input voltage	240V AC	240V AC	240V AC
Input frequency		60Hz	
Output voltage	240V AC	240V AC	240V AC
Max.output power	7.6kW	9.6kW	12kW
Max.output current	32A	40A	50A
Charging interface type		Type1	
Connection		Plug	
Cable Length		25ft(7.6m)	
Number of connection		1	
Protection			
Over voltage protection		Yes	
Under voltage protection		Yes	
Over load protection		Yes	
Earth leakage protection		20mA CCID	
Over-temp protection		Yes	
Lightning protection		Yes	
Function & Accessory			
Ethernet/WIFI/4G		Yes/Yes/Opt	
LCD		Opt	
Charging Mode		APP / RFID / Plug and charge	
LED Indicator Light		Yes	
Intelligent power adjustment		Yes	
PV linkage		Yes	
Installation		Floor/wall-mounting	
Appearance colour		Black/Silver	
OCP		1.6JSON	
Working Environment			
Ingress Protection		NEMA 3R	
Operating temperature		-22°F ~+122°F	
Relative humidity		5-95% non-condensing	
Maximum altitude		6500ft(2000m)	
Cooling		Natural cooling	
Standby power consumption		<8W	
Mechanical			
Dimension (W/H/D)		246/382/162mm	
Weight	<5kg	<6kg	<7kg
Certificate & Standard			
Certificate		UL, CSA	
Standard		UL2594, CSA-C22.2, UL2231-1, UL2231-2, UL1998, FCC part15	

EVD-40SU

EVD-40DU

Large capacity fast DC EV charging stationfor public use,
CCS Type 1 plug, US standard.



Features

-  Programmable charging mode
-  Comprehensive protection
-  Multiple communication modes
-  7 inch touch screen
-  US standard
-  Flexible installation

Model	EVD-40SU		EVD-40DU	
Input & Output				
Rated input voltage	208/240/480 VAC			
Rated input current	110/102/51A			
AC input connection	L1/L2/L3/PE(Three phase, No Neutral)			
Rated frequency	60Hz			
DC connector type	SAE J1772 CCS1			
Output voltage Range	150-1000V			
Max.output power	37.6-40KW			
Max.output current	100A	Single output: 100A		Double output: 100A
Voltage accuracy	≤±0.5%			
Current accuracy	≤±1% (at 20%-100% of rated power)			
Voltage-regulating accuracy	≤±0.5%			
Current-regulating accuracy	≤±1%			
Ripple coefficient	Peak≤±1%			
Metering accuracy	Class 0.5			
Efficiency	>95%			
Power factor	98%			
Cable length	16ft(5m)			
Protection				
Over voltage protection	Yes			
Under voltage protection	Yes			
Over load protection	Yes			
Over-temp protection	Yes			
Lightning protection	Yes			
Emergency Protection	Yes			
Function & Accessory				
Display	7 inch touch screen			
Ethernet/WIFI/4G	Yes/Yes/Opt			
Charging mode	APP/ RFID /plug and charge			
Indicator	Yes			
Installation	Floor/wall-mounting			
OCPP	1.6JSON			
Working Environment				
Ingress Protection	NEMA 3R			
Operating temperature	-22°F ~+122°F			
Relative humidity	5-95% non-condensing			
Maximum altitude	6500ft(2000m)			
Cooling	Forced air			
Standby power consumption	<40W			
Noise emission	≤65db			
Mechanical				
Dimension (W/H/D)	632/858/300mm			
Weight	80kg	92kg		
Certificate				
	UL, CSA			

EneRace

ATESS charging system includes operational platform and App.
Through App, operational platform and charging equipment connection,
it provides the best use experience for users with different roles.

Features

- 

Quick and easy overview
- 

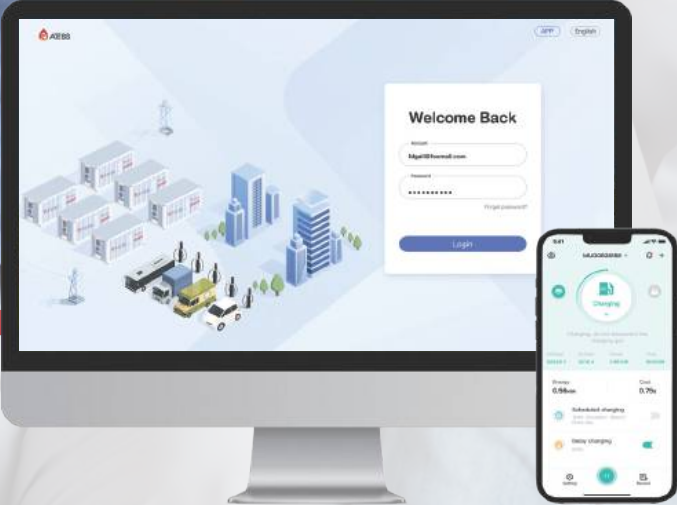
Real-time monitoring
- 

Data analysable
- 

Detail report downloadable
- 

Multi-roleco-management
- 

Online control and maintenance



	EneRace
Charging system	The charging system includes operational platform and App. Through App, operational platform and charging equipment connection, it provides the best use experience for users with different roles.
Operational platform	Operational platform mainly for operators to provide user management, monitoring and fault early warning, RFID card charger management functions such as service.
Mobile APP	Mobile App for end users to provide remote monitoring, charging in advance, peak valley charging function such as service.  



Accessories



Model	NOVO EVA-07/09/12S-PU
Mounting pole	
Dimension (W/H/D)	255/1500/154mm
Weight	11kg



Model	EVD-40SU	EVD-40DU
Mounting pole		
Dimension (W/H/D)	500/1652/300mm	
Weight	31kg	



Model	CARD WRITER
Contactless IC card	Supports Mifare 1 cards, TypeA CPU cards, and TypeB CPU cards that comply with the ISO14443 standard widely applied in the market.
Standard	RF interface that complies with ISO/IEC14443 TypeA and TypeB standard
Working frequency	13.56 MHz
Perating temperature	-20°C ~ 65°C;
Storage temperature	-20°C ~ 70°C;
Relative humidity	20-90%
Protection	TypeA CPU cards and TypeB CPU cards (embedded with CPU chips) for better encryption and security

Racecourse storage power station

Location: Jamaica
Capacity: 1.7MW / 5MWh
Product: HPS100/PCS500, BR100/145



America



Autoconsumption microgrid

Location: Peru
Capacity: 400kW/ 2500kWh
Product: HPS100, HPS150, BR1157R/BR143R



PV plant for brazilian military

Location: Brazil
Capacity: 100kW/ 253kWh
Product: HPS50*2



3 off-grid power plants in Jujuy

Location: Argentina
Capacity: ESS 540kW/ 1945.2kWh
Product: HPS120*2, HPS100*2, HPS50*2



BESS with 0 ms transfer for industrial

Location: Mexico
Capacity: 500kW / 1200kWh
Product: PCS500-US, RTF600-US, BR215R

BESS containers powering for a trading company

Location: Spain
Capacity: 1.26MW / 5MWh
Product: PCS630,Bypass630,
SMC200



Europe



Micro grid system for remote village

Location: Ukraine
Capacity: 300kW / 387kWh
Product: HPS150*2, BR129R*3



Hybrid power plant

Location: Poland
Capacity: 250kW / 500kWh
Product: HPS50, BR100T



Asparagus processing factory

Location: Germany
Capacity: 450kW / 464kWh
Product: HPS150



Food factory project

Location: Greece
Capacity: 1MW / 2MWh
Product: PCS500

Charging station for business district

Location: UK
Product: EVD-40D



Case



Charging station for business district

Location: UK
Product: EVA-22D-SE



Public charging station

Location: France
Product: REVO EVD-180D



Sideway charging station

Location: Italy
Product: EVD-40S



Fast charging station for 4S store

Location: Hungary
Product: EVC-AC22D/DC150D