

**ESS
BROCHURE**

PROFESSIONAL
ESS SOLUTION
PROVIDER

ESS BROCHURE



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ATESS COMPANY PROFILE

Our story

Founded in 2017, Shenzhen Ates Power Technology Co.,Ltd is a global supplier of solar energy storage and EV charging solutions, who is dedicated to developing and delivering affordable clean energy to every corner of the world, offering our customers worldwide the possibility for energy independence.

Based in Shenzhen, China, ATESS has a sophisticated and automated manufacturing plant. An international service network with offices and warehouses has been built in 5 continents to ensure fast shipping and after-sale service.

Our product

The ATESS ESS solutions include all-in-one hybrid inverters, battery inverters and lithium battery solutions. Inverters range from 5 kW up to 1MW, covering both residential, commercial and utility application scenarios. The EV charger portfolio is composed of 7kW to 360kW AC and DC charging stations for home and public applications, compatible with all mainstream EVs in the market, so far as to e-buses and e-ferries. Ever since the company founded, its products have been installed in over 85 countries around the globe.

Our R&D team

With an R&D team of more than 60 experienced engineers, around 15% of its revenue is put into R&D each year. Its laboratory is fully equipped with testing instruments, while product performance and quality is ensured, different customized needs of clients can be fulfilled.

Our vision

Over the past years, ATESS has helped hundreds of 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 that energized by renewable energy technology.

Global Footprint



85+

Exported to 85+ countries

Innovation



80

80 patents and copyrights

5

Hybrid Inverter

HPS5000TLS/7500TLS/
10000TLS

HPS7500TL/10000TL



HPS15000TL/20000TL



HPS30000TL/40000TL
HPS30000TL-US



HPS30/50/100/120/150



HPS50/100/150-US



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Battery Inverter

PCS100/250/500/630



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Bypass Cabinet

Bypass100/250/500/630



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Solar Charge Controller

PBD250



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Battery Solutions

BC45T/50T/60T
BR45T/50T/60T



BC75T/100T
BR75T/100T/138T/145T



BR114R/129R/143R/157R
BR172R/186R/200R/215R



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Accessories

PV-CB8M/PV-CB16M



ATS30/50/100/150



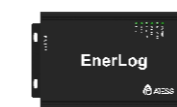
ATS30/50/150-US



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Monitoring

EnerLog



EnerClo



EnerView



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Projects



Datasheet









HPS5000TLS
HPS7500TLS
HPS10000TLS

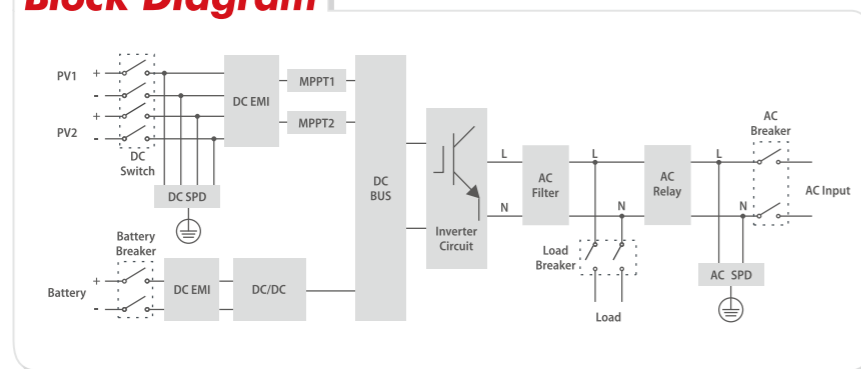
Overview

5-10kW single phase all-in-one hybrid inverter for home, school or villa application

Features

-  All-in-one hybrid inverter
-  Seamless on/off grid transfer
-  Compact design
-  Support remote control of DG
-  Touchscreen LCD
-  Programmable working mode

Block Diagram



HPS5000TLS

HPS7500TLS

HPS10000TLS

AC (Grid-connected)

Apparent power	6.25kVA	9.4kVA	12.5kVA
Rated power	5kW	7.5kW	10kW
Rated voltage	230V	230V	230V
Rated current	21.5A	32.6A	43.4A
Voltage range	210V - 250V	210V - 250V	210V - 250V
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	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading
AC connection	L/N/PE	L/N/PE	L/N/PE

AC (Off-grid)

Apparent power	6.25kVA	9.4kVA	12.5kVA
Rated power	5kW	7.5kW	10kW
Rated voltage	230V	230V	230V
Rated current	21.5A	32.6A	43.4A
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	600V	750V	750V
Recommended PV power	6kWp	9kWp	12kWp
PV MPPT voltage range	125V-550V	370V-600V	370V-600V
Number of MPPT	2	2	2
Recommended rated battery voltage	300V	350V	450V
Battery voltage range	230-600V	280-700V	280-700V
Full load battery voltage range	250-600V	300-700V	400-700V
Max. charge/discharge power	5kW	7.5kW	10kW
Max. charge/discharge current	25A	25A	25A

General Information

Protection devices	PV DC switch, battery breaker and fuse, PV fuse, AC input breaker, load breaker		
Protection degree	IP65	IP65	IP65
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	Forced-air	Forced-air	Forced-air
Relative humidity	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing
Maximum altitude	6000m (derate over 3000m)	6000m (derate over 3000m)	6000m (derate over 3000m)
Dimension (W/H/D)	600/700/250mm	600/700/250mm	600/700/250mm
Weight	50kg	50kg	50kg
Topology	Transformerless	Transformerless	Transformerless
Lighting protection	Type II	Type II	Type II
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms
Standby consumption	<20W	<20W	<20W

Communication

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

Datasheet









HPS7500TL
HPS10000TL

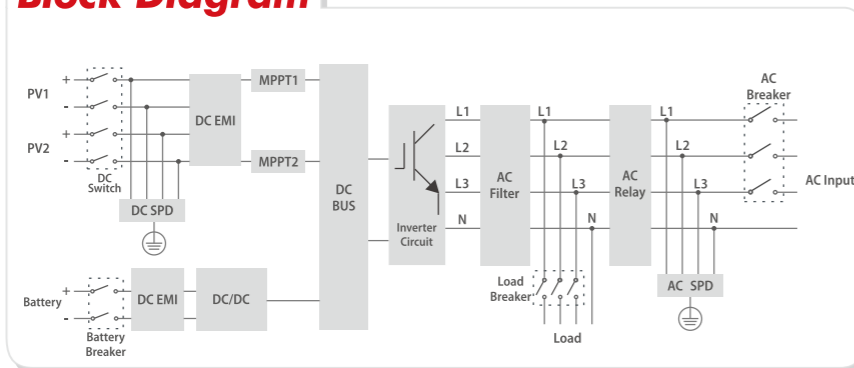
Overview

Up to 10kW three phase all-in-one hybrid inverter for villa, school or small factory application

Features

-  All-in-one hybrid inverter
-  Seamless on/off grid transfer
-  Compact design
-  Support remote control of DG
-  Touchscreen LCD
-  Programmable working mode

Block Diagram



HPS7500TL

HPS10000TL

AC (Grid-connected)

Apparent power	9.4kVA	12.5kVA
Rated power	7.5kW	10kW
Rated voltage	400V	400V
Rated current	10.8A	14.4A
Voltage range	360V - 440V	360V - 440V
Rated frequency	50/60Hz	50/60Hz
Frequency range	47~51.5/57~61.5Hz	47~51.5/57~61.5Hz
THDI	<3%	<3%
PF	0.8lagging~0.8leading	0.8lagging~0.8leading
AC connection	3/N/PE	3/N/PE

AC(Off-grid)

Apparent power	9.4kVA	12.5kVA
Rated power	7.5kW	10kW
Rated voltage	400V	400V
Rated current	10.8A	14.4A
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	750V	750V
Recommended PV power	9kWp	12kWp
PV MPPT voltage range	370V-600V	370V-600V
Number of MPPT	2	2
Recommended rated battery voltage	350V	450V
Battery voltage range	280-700V	280-700V
Full load battery voltage range	300-700V	400-700V
Max. charge/discharge power	7.5kW	10kW
Max. charge/discharge current	25A	25A

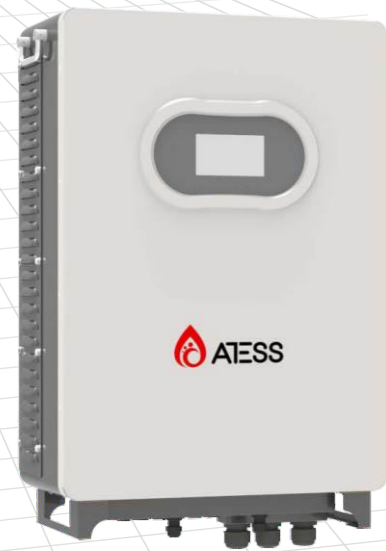
General Information

Protection devices	PV DC switch, battery breaker and fuse, PV fuse, AC input breaker, load breaker	
Protection degree	IP65	IP65
Noise emission	<65dB(A)@1m	<65dB(A)@1m
Operating temperature	-25 °C~+55 °C	-25 °C~+55 °C
Cooling	Forced-air	Forced-air
Relative humidity	0-95% non-condensing	0-95% non-condensing
Maximum altitude	6000m (derate over 3000m)	6000m (derate over 3000m)
Dimension (W/H/D)	600/700/250mm	600/700/250mm
Weight	50kg	50kg
Topology	Transformerless	Transformerless
Lighting protection	Type II	Type II
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms
Standby consumption	<20W	<20W

Communication

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

Datasheet









HPS15000TL
HPS20000TL

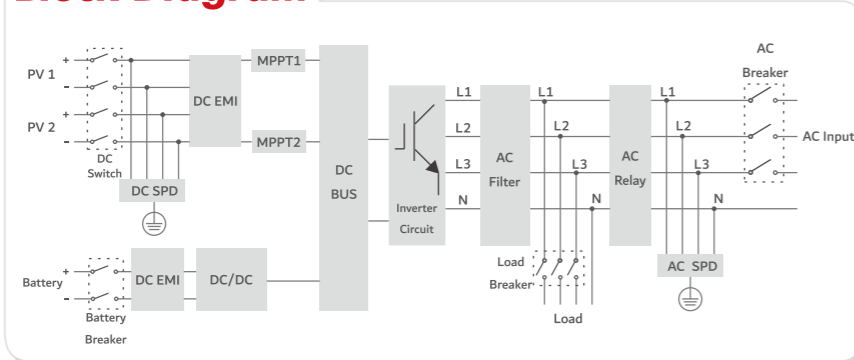
Overview

15-40kW three phase all-in-one hybrid inverter for small and medium industrial and commercial use

Features

-  All-in-one hybrid inverter
-  Seamless on/off grid transfer
-  Compact design
-  Support remote control of DG
-  Touchscreen LCD
-  Programmable working mode

Block Diagram



HPS15000TL

HPS20000TL

AC (Grid-connected)

Apparent power	16kVA	22kVA
Rated power	15kW	20kW
Rated voltage	400V	400V
Rated current	21A	28A
Voltage range	360~440V	360~440V
Rated frequency	50/60Hz	50/60Hz
Frequency range	47~51.5/57~61.5Hz	47~51.5/57~61.5Hz
THDI	<3%	<3%
PF	0.8lagging~0.8leading	0.8lagging~0.8leading
AC connection	3/N/PE	3/N/PE

AC (Off-grid)

Apparent power	16kVA	22kVA
Rated power	15kW	20kW
Rated voltage	400V	400V
Rated current	21A	28A
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	1000V
Recommended PV power	18kWp	24kWp
PV MPPT voltage range	125V-850V	125V-850V
Number of MPPT	2	2
Battery voltage range	260~700V	260~700V
Full load battery voltage range	300~700V	300~700V
Max. charge/discharge power	15kW	20kW
Max. charge/discharge current	50A	66A

General Information

Protection devices	PV DC switch, PV fuse, battery breaker and fuse	PV DC switch, PV fuse, battery breaker and fuse
Protection degree	IP54	IP54
Noise emission	<65dB(A)@1m	<65dB(A)@1m
Operating temperature	-25 °C~+55 °C	-25 °C~+55 °C
Cooling	Forced-air	Forced-air
Relative humidity	0-95% non-condensing	0-95% non-condensing
Maximum altitude	3000m (derate over 2000m)	3000m (derate over 2000m)
Dimension (W/H/D)	450/635/225mm	450/635/225mm
Weight	45kg	45kg
Topology	Transformerless	Transformerless
Lighting protection	Type II	Type II
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms
Standby consumption	<20W	<20W

Communication

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

Datasheet









HPS30000TL
HPS40000TL

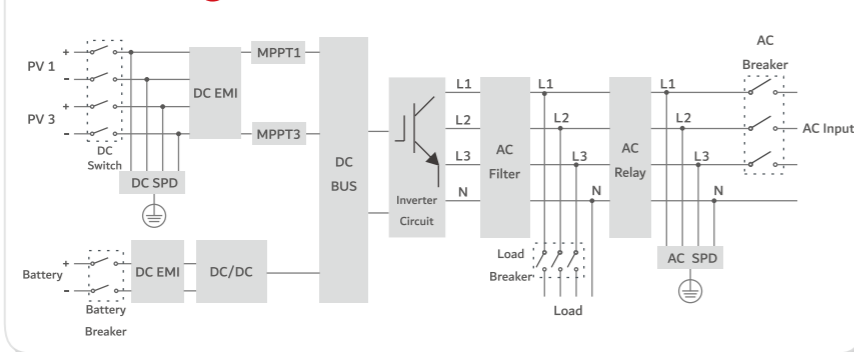
Overview

15-40kW three phase all-in-one hybrid inverter for small and medium industrial and commercial use

Features

-  All-in-one hybrid inverter
-  Seamless on/off grid transfer
-  Compact design
-  Support remote control of DG
-  Touchscreen LCD
-  Programmable working mode

Block Diagram



HPS30000TL

HPS40000TL

AC (Grid-connected)

Apparent power	33kVA	44kVA
Rated power	30kW	40kW
Rated voltage	400V	400V
Rated current	43A	57A
Voltage range	360~440V	360~440V
Rated frequency	50/60Hz	50/60Hz
Frequency range	47~51.5/57~61.5Hz	47~51.5/57~61.5Hz
THDI	<3%	<3%
PF	0.9lagging~0.9leading	0.9lagging~0.9leading
AC connection	3/N/PE	3/N/PE

AC (Off-grid)

Apparent power	33kVA	44kVA
Rated power	30kW	40kW
Rated voltage	400V	400V
Rated current	43A	57A
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	1000V
Recommended PV power	36kWp	48kWp
PV MPPT voltage range	125V-850V	125V-850V
Number of MPPT	3	3
Battery voltage range	260~700V	260~700V
Full load battery voltage range	350~720V	400~700V
Max. charge/discharge power	30kW	40kW
Max. charge/discharge current	85A	100A

General Information

Protection devices	PV DC switch, PV fuse, battery breaker and fuse	PV DC switch, PV fuse, battery breaker and fuse
Protection degree	IP54	IP54
Noise emission	<65dB(A)@1m	<65dB(A)@1m
Operating temperature	-25 °C~+55 °C	-25 °C~+55 °C
Cooling	Forced-air	Forced-air
Relative humidity	0-95% non-condensing	0-95% non-condensing
Maximum altitude	3000m (derate over 2000m)	3000m (derate over 2000m)
Dimension (W/H/D)	600/1000/315mm	600/1000/315mm
Weight	90kg	90kg
Topology	Transformerless	Transformerless
Lighting protection	Type II	Type II
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms
Standby consumption	<20W	<20W

Communication

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

Datasheet

HPS30000TL-US









HPS30000TL-US

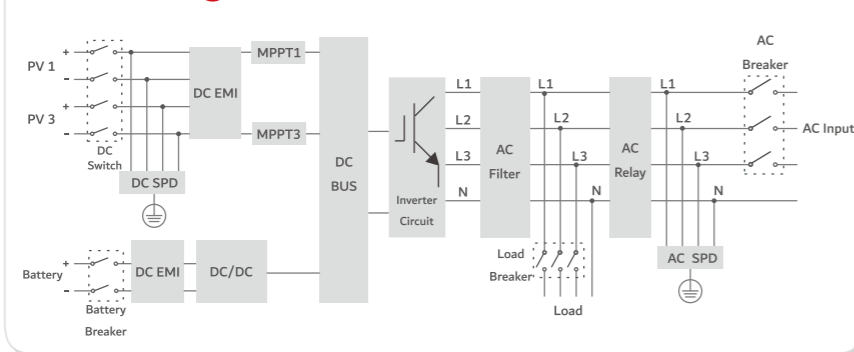
Overview

30kW three phase all-in-one hybrid inverter for small and medium industrial and commercial use

Features

-  All-in-one hybrid inverter
-  Seamless on/off grid transfer
-  Compact design
-  Support remote control of DG
-  Touchscreen LCD
-  Programmable working mode

Block Diagram



AC (Grid-connected)

Apparent power	33kVA
Rated power	30kW
Rated voltage	190~240V Wye / High-leg Delta with split phase(Opt)
Rated current	91~72A
Voltage range	190~240V
Rated frequency	50/60Hz
Frequency range	47~51.5/57~61.5Hz
THDI	<3%
PF	0.9lagging~0.9leading
AC connection	3/N/PE Wye / 3/N/PE Delta(Opt)

AC(Off-grid)

Apparent power	33kVA
Rated power	30kW
Rated voltage	190~240V Wye / High-leg Delta with split phase(Opt)
Rated current	91~72A
THDU	≤2%linear
Rated frequency	50/60Hz
Overload capability	110%-10 mins 120%-1 min

DC (Battery and PV)

Max. PV Open-circuit voltage	600V
Recommended PV power	36kWp
PV MPPT voltage range	125V-480V
Number of MPPT	3
Battery voltage range	260~600V
Full load battery voltage range	350~600V
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	IP54
Noise emission	<65dB(A)@1m
Operating temperature	-30 °C~+50 °C
Cooling	Forced-air
Relative humidity	0-95% non-condensing
Maximum altitude	3000m (derate over 2000m)
Dimension (W/H/D)	600/1000/315mm
Weight	90kg
Topology	Transformerless
Lighting protection	Type II
Transfer between on/off grid	Automatic≤10ms
Standby consumption	<20W

Communication

Display	Touch screen
Communication	RS485/CAN

Datasheet



HPS30/50
HPS100/120/150

Overview

Large capacity all-in-one hybrid inverter for commercial application, supporting up to 600kW system capacity

Features



All-in-one hybrid inverter



Seamless on/off grid transfer



Programmable working mode



Support remote control of DG

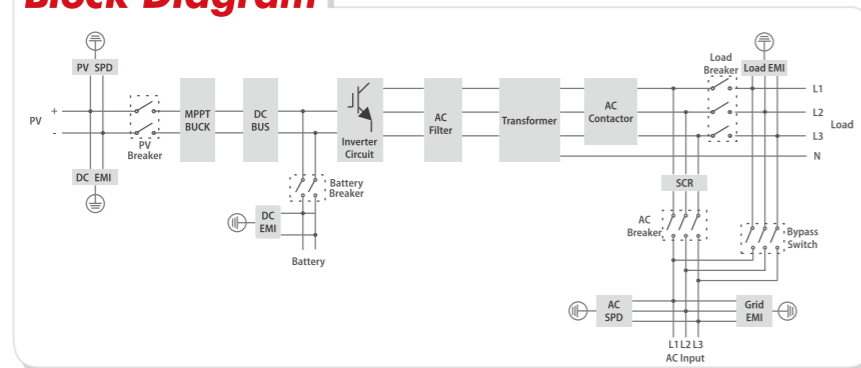


Touchscreen LCD



Quadruple capacity by paralleling 4 units

Block Diagram



	HPS30	HPS50	HPS100	HPS120	HPS150
AC (Grid-connected)					
Apparent power	33kVA	55kVA	110kVA	132kVA	165kVA
Rated power	30kW	50kW	100kW	120kW	150kW
Rated voltage	400V	400V	400V	400V	400V
Rated current	43A	72A	144A	173A	217A
Voltage range	360V - 440V	360V - 440V	360V - 440V	360V - 440V	360V - 440V
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	45~55/55~65Hz
THDI	<3%	<3%	<3%	<3%	<3%
PF	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading
AC connection	3/N/PE	3/N/PE	3/N/PE	3/N/PE	3/N/PE
AC input	60kVA	100kVA	200kVA	240kVA	240kVA

AC (Off-grid)					
Apparent power	33kVA	55kVA	110kVA	132kVA	165kVA
Rated power	30kW	50kW	100kW	120kW	150kW
Rated voltage	400V	400V	400V	400V	400V
Rated current	43A	72A	144A	173A	217A
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)					
Max. PV open-circuit voltage	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Max. PV power	45kWp	75kWp	150kWp	180kWp	225kWp
PV MPPT voltage range	480V-800V DC	480V-800V DC	480V-800V DC	480V-800V DC	480V-800V DC
Battery voltage range at Max. charge power	450V-600V	500V-600V	500V-600V	517V-600V	500V-600V
Battery voltage range	352-600V	352-600V	352-600V	352-600V	352-600V
Max. charge power	45kW	75kW	150kW	180kW	225kW
Max. discharge power	33kW	55kW	110kW	132kW	165kW
Max. charge current	100A	150A	300A	350A	450A
Max. discharge current	93A	156A	313A	374A	467A

General Information					
Protection degree	IP20	IP20	IP20	IP20	IP20
Noise emission	<65dB(A)@1m	<65dB(A)@1m	<65dB(A)@1m	<65dB(A)@1m	<65dB(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	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
Maximum altitude	6000m (derate over 3000m)	6000m (derate over 3000m)	6000m (derate over 3000m)	6000m (derate over 3000m)	6000m (derate over 3000m)
Dimension (W/H/D)	700/1660/600mm	950/1860/750mm	1200/1900/800mm	1200/1900/800mm	1200/1900/800mm
Weight	355kg	610kg	948kg	1025kg	1230kg
Build-in transformer	Yes	Yes	Yes	Yes	Yes
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms
Standby consumption	<30W	<30W	<30W	<30W	<30W

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

Certificate CE, MEA, PEA, UKCA, AS 4777.2, EN 61000-6-4:2007+A1:2011, EN 61000-6-2:2005, EN 62109-1:2010, EN 62109-2:2011, EN 50549-1:2019, IEC 62109.1, IEC 62109.2, NRS 097-2-1:2017, G99, VDE-AR-N 4105:2018, DIN VDE V 0124-100:2020-06, PSE:2018-12

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

Datasheet



HPS50/100/150-US

Overview

Large capacity all-in-one hybrid inverter for commercial application, supporting up to 600kW system capacity

Features



All-in-one hybrid inverter



Seamless on/off grid transfer



Programmable working mode



Support remote control of DG

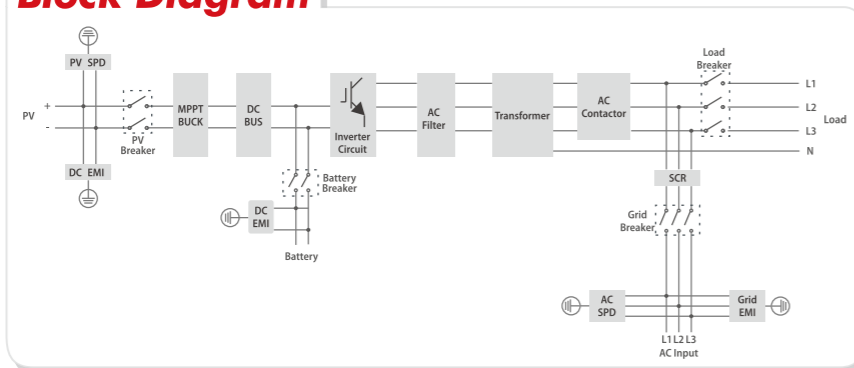


Touchscreen LCD



Quadruple capacity by paralleling 4 units

Block Diagram



	HPS50-US	HPS100-US	HPS150-US
AC (Grid-connected)			
Apparent power	55kVA	110kVA	165kVA
Rated power	50kW	100kW	150kW
Rated voltage	190~240V Wye / High-leg Delta with split phase(Opt)	190~240V Wye / High-leg Delta with split phase(Opt)	190~240V Wye / High-leg Delta with split phase(Opt)
Rated current	152~120A	304~241A	456~361A
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	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading
AC 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	50kVA	100kVA	150kVA

AC(Off-grid)			
Apparent power	55kVA	110kVA	165kVA
Rated power	50kW	100kW	150kW
Rated voltage	190~240V Wye / High-leg Delta with split phase(Opt)	190~240V Wye / High-leg Delta with split phase(Opt)	190~240V Wye / High-leg Delta with split phase(Opt)
Rated current	152~120A	304~241A	456~361A
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
Battery voltage range	352-600V	400-600V	400-600V
Max. charge power	75kW	150kW	225kW
Max. discharge power	55kW	110kW	165kW
Max. charge current	150A	300A	450A
Max. discharge current	156A	275A	413A

General Information			
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	Forced-air	Forced-air	Forced-air
Relative humidity	0-95% non-condensing	0-95% non-condensing	0-95% non-condensing
Maximum 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
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.



PCS100/250
PCS500/630

Overview

Bidirectional battery inverter from 100kW to 630kW, can be used alone or with solar charge controller and other accessories for different application scenarios

Features



Paralleling multiple units



Flexible configuration



Programmable working mode

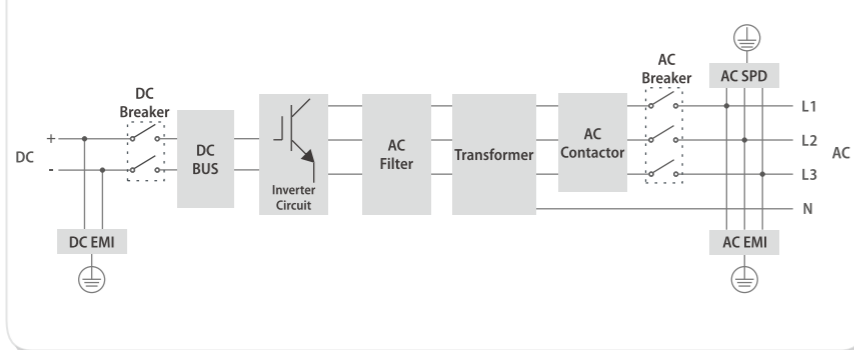


Support remote control of DG



Touchscreen LCD

Block Diagram



Note: Inbuilt transformer is only available for PCS100 and PCS250

Datasheet

	PCS100	PCS250	PCS500	PCS630
AC (Grid-connected)				
Apparent power	110kVA	275kVA	550kVA	693kVA
Rated power	100kW	250kW	500kW	630kW
Rated voltage	400V	400V	400V	400V
Rated current	144A	361A	722A	909A
Voltage range	360V - 440V	360V - 440V	360V - 440V	360V - 440V
Rated frequency	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
THDI	<3%	<3%	<3%	<3%
PF	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading
AC connection	3/N/PE	3/N/PE	3/PE	3/PE

AC(Off-grid)				
Apparent power	110kVA	275kVA	550kVA	693kVA
Rated power	100kW	250kW	500kW	630kW
Rated voltage	400V	400V	400V	400V
Rated current	144A	361A	722A	909A
THDU	≤2% linear	≤2% linear	≤2% linear	≤2% linear
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Overload capability	110%-10mins 120%-1min	110%-10mins 120%-1min	110%-10mins 120%-1min	110%-10mins 120%-1min

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

General Information				
Maximum efficiency	97.10%	97.30%	98.50%	98.50%
Protection degree	IP20	IP20	IP20	IP20
Noise emission	<65dB(A)@1m	<65dB(A)@1m	<65dB(A)@1m	<65dB(A)@1m
Operating temperature	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C
Cooling	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
Maximum altitude	6000m (derate above 3000m)	6000m (derate above 3000m)	6000m (derate above 3000m)	6000m (derate above 3000m)
Dimension(W/H/D)	1100/1890/850mm	1600/2080/850mm	1200/1900/800mm	1200/1900/800mm
Weight	820kg	1465kg	870kg	900kg
Build-in transformer	Yes	Yes	No	No
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

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

Certificate CE, MEA, PEA, EN 61000-6-4:2007+A1:2011, EN61000-6-2:2005, EN62109-1:2010, EN62109-2:2011, NRS 097-2-1:2017, EN 50549-1:2019, PSE:2018-12

Datasheet



Bypass100/250
Bypass500/630

Overview

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

Features



Zero-export function



Seamless on/off grid transfer

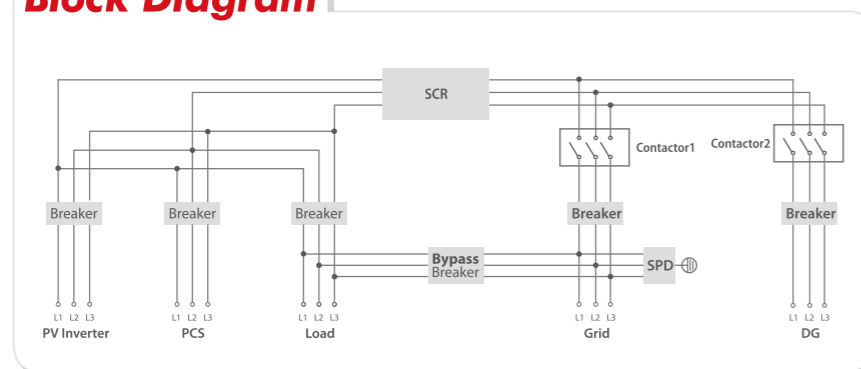


Flexible management



DG connection supported

Block Diagram



	Bypass100	Bypass250	Bypass500	Bypass630
Rated voltage	400V	400V	400V	400V
Rated current	144A	360A	722A	910A
Rated frequency	50Hz	50Hz	50Hz	50Hz
Rated power	100KVA	250KVA	500KVA	630KVA
Max. current	175A	435A	866A	1091A
Transfer between on/off grid	Automatics10ms	Automatics10ms	Automatics10ms	Automatics10ms
Zero export function	Opt	Opt	Opt	Opt
PV inverter breaker	Opt	Opt	Opt	Opt
PCS breaker	250A	630A	1250A	1250A
Grid breaker	250A	630A	1250A	1250A
Load breaker	250A	630A	1250A	1250A
Bypass breaker	250A	630A	1250A	1250A
DG breaker	Opt	Opt	Opt	Opt
Lightning protection	Type II	Type II	Type II	Type II
Protection degree	IP20	IP20	IP20	IP20
Relative humidity	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
Dimension (W/H/D)	700/1630/500mm	750/1800/500mm	1600/1900/800mm	1600/1900/800mm
Weight	135kg	205kg	900kg	1040kg
Communication	RS485/CAN	RS485/CAN	RS485/CAN	RS485/CAN

Datasheet



PBD250

Overview

1000V level DC to DC solar charge controller, used together with ATESS PCS and Bypass for large scale solar projects

Features



Multiple units parallelable



Up to 5 MPPTs

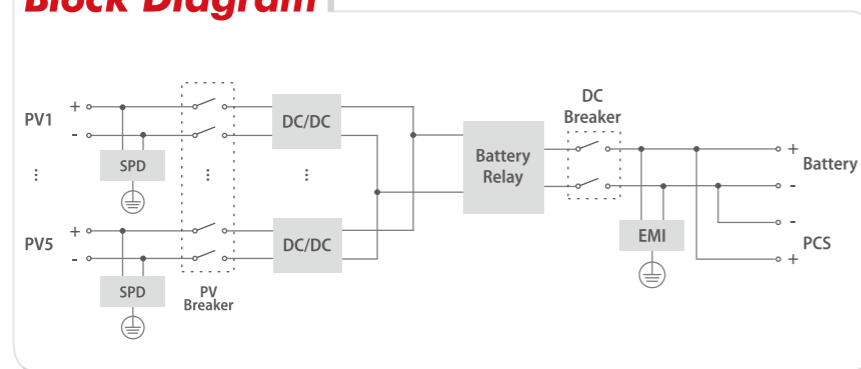


Modular design



Transformerless design

Block Diagram



PBD250

Input (PV)

Max. PV power	250kW
MPPT voltage range	350V-850V
Full load MPPT voltage range	480V-850V
Max. input current	575A(115A*5)
Number of MPPT	5

Output (Battery and PCS)

Output voltage	600V-900V
Max. charge power	250kW
Max. charge current	416A
Max. charge efficiency	99%

Protection

Input & output OV/UV protection	Yes
Input & output OC protection	Yes
Short circuit protection	Yes
Over temperature protection	Yes
Lightning protection	Type II
DC breaker	Yes
Emergency stop	Yes

General Information

Protection degree	IP20
Noise emission	<65dB(A)@1m
Operating temperature	-25°C~+55°C
Cooling	Forced-air
Relative humidity	0-95% non-condensing
Maximum altitude	6000m (derate above 3000m)
Dimension (W/H/D)	850/1900/700mm
Weight	343kg
Topology	Transformerless
Standby power	<100W

Communication

Display	Touch screen
Communication	RS485/CAN



BC45T/50T/60T
BR45T/50T/60T

Overview

Outdoor battery cabinet with IP54 protection level, indoor battery rack with IP20 protection level, inbuilt lithium-ion battery and BMS

Features



Easy installation and maintenance

Local and remote management, standard rack & module design, front maintenance



Safety first

Self-developed 3-level BMS, complex protection, safe and reliable



High density

LFP high-capacity Li-Ion battery with aluminum shell, over 130wh/kg



Long lifespan

Long cycle life, 6000 cycles *



Cell balancing technology

Active cell balancing and passive cell balancing

Note: At specific test condition

Datasheet

	BC45T	BR45T	BC50T	BR50T	BC60T	BR60T
Battery module specification						
Configuration	24S1P		24S1P		24S1P	
Rated capacity	100Ah		100Ah		100Ah	
Rated energy	7.68kWh		7.68kWh		7.68kWh	
Rated voltage	76.8V		76.8V		76.8V	
Voltage range	67.2-87.6V		67.2-87.6V		67.2-87.6V	
Rated charge/discharge	0.5C		0.5C		0.5C	
Rated charge/discharge	1C(Opt)		1C(Opt)		1C(Opt)	
AC internal resistance	≤15mΩ		≤15mΩ		≤15mΩ	
Dimension (W/H/D)mm	360/285/692		360/285/692		360/285/692	
Weight	≤74kg		≤74kg		≤74kg	

	6 battery modules +1 BPU		7 battery modules +1 BPU		8 battery modules +1 BPU	
Battery rack specification						
Configuration	6 battery modules +1 BPU		7 battery modules +1 BPU		8 battery modules +1 BPU	
Rated capacity	100Ah		100Ah		100Ah	
Rated energy	46.08kWh		53.76kWh		61.44kWh	
Rated voltage	460.8V		537.6V		614.4V	
Voltage range	403.2V-525.6V		470.4V-613.2V		537.6V-700.8V	
Rated charge/discharge	0.5C		0.5C		0.5C	
Rated charge/discharge	1C(Opt)		1C(Opt)		1C(Opt)	
AC internal resistance	≤90mΩ		≤105mΩ		≤120mΩ	
Display	7" Touch screen		7" Touch screen		7" Touch screen	
BMS	Included		Included		Included	
Communication	CAN		CAN		CAN	
Monitoring	RS485		RS485		RS485	
Dimension (W/H/D)mm	950/2150/1025	752/1760/660	950/2150/1025	752/1760/660	950/2150/1025	752/1760/660
Weight	≤716kg	≤539kg	≤792kg	≤615kg	≤868kg	≤691kg
Protection degree	IP54	IP20	IP54	IP20	IP54	IP20

	BC45T	BR45T	BC50T	BR50T	BC60T	BR60T
Balancing methods						
Passive cell balancing	Yes		Yes		Yes	
Active cell balancing	Opt		Opt		Opt	

	BC45T	BR45T	BC50T	BR50T	BC60T	BR60T
BMS parameters on LCD						
Cell voltage	Yes		Yes		Yes	
Cell high voltage	Yes		Yes		Yes	
Cell low voltage	Yes		Yes		Yes	
Cell temperature	Yes		Yes		Yes	
Charge and discharge current	Yes		Yes		Yes	
Total battery voltage	Yes		Yes		Yes	
Battery SOC	Yes		Yes		Yes	
Fault warning	Yes		Yes		Yes	

	BC45T	BR45T	BC50T	BR50T	BC60T	BR60T
Protection						
Short circuit protection	Yes		Yes		Yes	
Over current protection	Yes		Yes		Yes	
Over charge protection	Yes		Yes		Yes	
Over discharge protection	Yes		Yes		Yes	
Cell over voltage protection	Yes		Yes		Yes	
Cell under voltage protection	Yes		Yes		Yes	
Over temperature protection	Yes		Yes		Yes	

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



BC75T/100T
BR75T/100T/138T/145T

Overview

Outdoor battery cabinet with IP54 protection level, indoor battery rack with IP20 protection level, inbuilt lithium-ion battery and BMS

Features



Easy installation and maintenance

Local and remote management, standard rack & module design, front maintenance



Safety first

Self-developed 3-level BMS, complex protection, safe and reliable



High density

LFP high-capacity Li-Ion battery with aluminum shell, over 130wh/kg



Long lifespan

Long cycle life, 6000 cycles *



Cell balancing technology

Active cell balancing and passive cell balancing

Note: At specific test condition

Datasheet

	BC75T	BR75T	BC100T	BR100T	BR138T	BR145T
Battery module specification						
Configuration	12S2P		12S2P		12S2P	12S2P
Rated capacity	200Ah		200Ah		200Ah	200Ah
Rated energy	7.68kWh		7.68kWh		7.68kWh	7.68kWh
Rated voltage	38.4V		38.4V		38.4V	38.4V
Voltage range	33.6~43.8V		33.6~43.8V		33.6~43.8V	33.6~43.8V
Rated charge/discharge	0.5C		0.5C		0.5C	0.5C
Rated charge/discharge	1C(Opt)		1C(Opt)		1C(Opt)	1C(Opt)
AC internal resistance	≤5mΩ		≤5mΩ		≤5mΩ	≤5mΩ
Dimension (W/H/D)mm	360/285/692		360/285/692		360/285/692	360/285/692
Weight	≤74.5kg		≤74.5kg		≤74.5kg	≤74.5kg

	10 battery modules +1 BPU	14 battery modules +1 BPU	18 battery modules +1 BPU	19 battery modules +1 BPU
Battery rack specification				
Configuration	10 battery modules +1 BPU	14 battery modules +1 BPU	18 battery modules +1 BPU	19 battery modules +1 BPU
Rated capacity	200Ah	200Ah	200Ah	200Ah
Rated energy	76.8kWh	107.52kWh	138.24kWh	145.92kWh
Rated voltage	384V	537.6V	691.2V	729.6V
Voltage range	336V-438V	470.4V-613.2V	604.8V~766.8V	638.4V~832.2V
Rated charge/discharge	0.5C	0.5C	0.5C	0.5C
Rated charge/discharge	1C(Opt)	1C(Opt)	1C(Opt)	1C(Opt)
AC internal resistance	≤50mΩ	≤70mΩ	≤90mΩ	≤95mΩ
Display	7" Touch screen	7" Touch screen	7" Touch screen	7" Touch screen
BMS	Included	Included	Included	Included
Communication	CAN	CAN	CAN	CAN
Monitoring	RS485	RS485	RS485	RS485
Dimension (W/H/D)mm	1310/2150/1025	1119/1760/660	1310/2150/1025	1119/1760/660
Weight	≤1130kg	≤877kg	≤1436kg	≤1183kg
Protection degree	IP54	IP20	IP54	IP20

	10 battery modules +1 BPU	14 battery modules +1 BPU	18 battery modules +1 BPU	19 battery modules +1 BPU
Balancing methods				
Passive cell balancing	Yes	Yes	Yes	Yes
Active cell balancing	Opt	Opt	Opt	Opt

	10 battery modules +1 BPU	14 battery modules +1 BPU	18 battery modules +1 BPU	19 battery modules +1 BPU
BMS parameters on LCD				
Cell voltage	Yes	Yes	Yes	Yes
Cell high voltage	Yes	Yes	Yes	Yes
Cell low voltage	Yes	Yes	Yes	Yes
Cell temperature	Yes	Yes	Yes	Yes
Charge and discharge current	Yes	Yes	Yes	Yes
Total battery voltage	Yes	Yes	Yes	Yes
Battery SOC	Yes	Yes	Yes	Yes
Fault warning	Yes	Yes	Yes	Yes

	10 battery modules +1 BPU	14 battery modules +1 BPU	18 battery modules +1 BPU	19 battery modules +1 BPU
Protection				
Short circuit protection	Yes	Yes	Yes	Yes
Over current protection	Yes	Yes	Yes	Yes
Over charge protection	Yes	Yes	Yes	Yes
Over discharge protection	Yes	Yes	Yes	Yes
Cell over voltage protection	Yes	Yes	Yes	Yes
Cell under voltage protection	Yes	Yes	Yes	Yes
Over temperature protection	Yes	Yes	Yes	Yes

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



BR114R/129R/143R/157R

Overview

Indoor battery rack with IP20 protection level, inbuilt lithium-ion battery and BMS

Features



Easy installation and maintenance

Local and remote management, standard rack & module design, front maintenance



Safety first

Self-developed 3-level BMS, complex protection, safe and reliable



High density

LFP high-capacity Li-Ion battery with aluminum shell, over 166wh/kg



Long lifespan

Long cycle life, 6000 cycles *



Cell balancing technology

Passive cell balancing

Note: at specific test condition

Datasheet

	BR114R	BR129R	BR143R	BR157R	BR114R for container
Battery module specification					
Configuration	16S1P	16S1P	16S1P	16S1P	16S1P
Rated capacity	280Ah	280Ah	280Ah	280Ah	280Ah
Rated energy	14.336kWh	14.336kWh	14.336kWh	14.336kWh	14.336kWh
Rated voltage	51.2V	51.2V	51.2V	51.2V	51.2V
Voltage range	44.8~57.6V	44.8~57.6V	44.8~57.6V	44.8~57.6V	44.8~57.6V
Rated charge/discharge	0.5C	0.5C	0.5C	0.5C	0.5C
AC internal resistance	≤8mΩ	≤8mΩ	≤8mΩ	≤8mΩ	≤8mΩ
Dimension(W/H/D)mm	523/231/805	523/231/805	523/231/805	523/231/805	523/231/805
Weight	113kg	113kg	113kg	113kg	113kg

Battery rack specification

	8 modules + 1 BPU	9 modules + 1 BPU	10 modules + 1 BPU	11 modules + 1 BPU	8 modules + 1 BPU
Configuration	8 modules + 1 BPU	9 modules + 1 BPU	10 modules + 1 BPU	11 modules + 1 BPU	8 modules + 1 BPU
Rated capacity	280Ah	280Ah	280Ah	280Ah	280Ah
Rated energy	114.688kWh	129.024kWh	143.36kWh	157.696kWh	114.688kWh
Rated voltage	409.6V	460.8V	512V	563.2V	409.6V
Voltage range	358.4~460.8V	403.2~518.4V	448~576V	492.8~633.6V	358.4~460.8V
Rated charge/discharge	0.5C	0.5C	0.5C	0.5C	0.5C
AC internal resistance	≤64mΩ	≤72mΩ	≤80mΩ	≤88mΩ	≤64mΩ
Display	7" Touch screen	7" Touch screen	7" Touch screen	7" Touch screen	7" Touch screen
BMS	Included	Included	Included	Included	Included
Communication	CAN	CAN	CAN	CAN	CAN
Monitoring	RS485	RS485	RS485	RS485	RS485
Dimension(W/H/D)mm	1055/1615/755	1055/1615/755	1055/1615/755	1055/1615/755	528/2380/755
Weight	1044kg	1157kg	1270kg	1383kg	999kg
Protection degree	IP20	IP20	IP20	IP20	IP20

BMS parameters on LCD

Cell voltage	Yes	Yes	Yes	Yes	Yes
Cell high voltage	Yes	Yes	Yes	Yes	Yes
Cell low voltage	Yes	Yes	Yes	Yes	Yes
Cell temperature	Yes	Yes	Yes	Yes	Yes
Charge and discharge current	Yes	Yes	Yes	Yes	Yes
Total battery voltage	Yes	Yes	Yes	Yes	Yes
Battery SOC	Yes	Yes	Yes	Yes	Yes
Fault warning	Yes	Yes	Yes	Yes	Yes

Protection

Short circuit protection	Yes	Yes	Yes	Yes	Yes
Over current protection	Yes	Yes	Yes	Yes	Yes
Over charge protection	Yes	Yes	Yes	Yes	Yes
Over discharge protection	Yes	Yes	Yes	Yes	Yes
Cell over voltage protection	Yes	Yes	Yes	Yes	Yes
Cell under voltage protection	Yes	Yes	Yes	Yes	Yes
Over temperature protection	Yes	Yes	Yes	Yes	Yes

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



BR172R/186R/200R/215R

Overview

Indoor battery rack with IP20 protection level, inbuilt lithium-ion battery and BMS

Features



Easy installation and maintenance

Local and remote management, standard rack & module design, front maintenance



Safety first

Self-developed 3-level BMS, complex protection, safe and reliable



High density

LFP high-capacity Li-Ion battery with aluminum shell, over 166wh/kg



Long lifespan

Long cycle life, 6000 cycles *



Cell balancing technology

Passive cell balancing

Note: at specific test condition

Datasheet

	BR172R	BR186R	BR200R	BR215R
Battery module specification				
Configuration	16S1P	16S1P	16S1P	16S1P
Rated capacity	280Ah	280Ah	280Ah	280Ah
Rated energy	14.336kWh	14.336kWh	14.336kWh	14.336kWh
Rated voltage	51.2V	51.2V	51.2V	51.2V
Voltage range	44.8~57.6V	44.8~57.6V	44.8~57.6V	44.8~57.6V
Rated charge/discharge	0.5C	0.5C	0.5C	0.5C
AC internal resistance	≤8mΩ	≤8mΩ	≤8mΩ	≤8mΩ
Dimension(W/H/D)mm	523/231/805	523/231/805	523/231/805	523/231/805
Weight	113kg	113kg	113kg	113kg

	BR172R	BR186R	BR200R	BR215R
Battery rack specification				
Configuration	12 modules + 1 BPU	13 modules + 1 BPU	14 modules + 1 BPU	15 modules + 1 BPU
Rated capacity	280Ah	280Ah	280Ah	280Ah
Rated energy	172.032kWh	186.386kWh	200.704kWh	215.04kWh
Rated voltage	614.4V	665.6V	716.8V	768V
Voltage range	537.6~691.2V	582.4~748.8V	627.2~806.4V	672~864V
Rated charge/discharge	0.5C	0.5C	0.5C	0.5C
AC internal resistance	≤96mΩ	≤104mΩ	≤112mΩ	≤120mΩ
Display	7" Touch screen	7" Touch screen	7" Touch screen	7" Touch screen
BMS	Included	Included	Included	Included
Communication	CAN	CAN	CAN	CAN
Monitoring	RS485	RS485	RS485	RS485
Dimension(W/H/D)mm	1055/2125/755	1055/2125/755	1055/2125/755	1055/2125/755
Weight	1511kg	1624kg	1737kg	1850kg
Protection degree	IP20	IP20	IP20	IP20

	BR172R	BR186R	BR200R	BR215R
BMS parameters on LCD				
Cell voltage	Yes	Yes	Yes	Yes
Cell high voltage	Yes	Yes	Yes	Yes
Cell low voltage	Yes	Yes	Yes	Yes
Cell temperature	Yes	Yes	Yes	Yes
Charge and discharge current	Yes	Yes	Yes	Yes
Total battery voltage	Yes	Yes	Yes	Yes
Battery SOC	Yes	Yes	Yes	Yes
Fault warning	Yes	Yes	Yes	Yes

	BR172R	BR186R	BR200R	BR215R
Protection				
Short circuit protection	Yes	Yes	Yes	Yes
Over current protection	Yes	Yes	Yes	Yes
Over charge protection	Yes	Yes	Yes	Yes
Over discharge protection	Yes	Yes	Yes	Yes
Cell over voltage protection	Yes	Yes	Yes	Yes
Cell under voltage protection	Yes	Yes	Yes	Yes
Over temperature protection	Yes	Yes	Yes	Yes

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

Datasheet









PV-CB8M
PV-CB16M

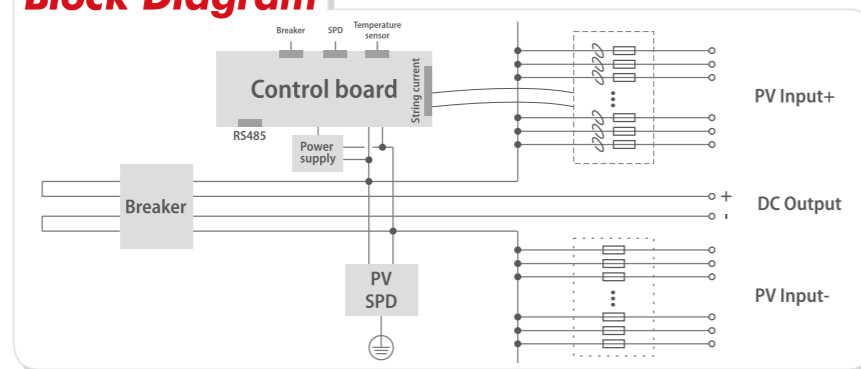
Overview

PV combiner box is an accessory for multiple PV strings connection, it is with smart controller inbuilt for monitoring, along with comprehensive protections including fuse and SPD

Features

-  **Lightning protection**
-  **Optional string monitoring function**
-  **IP65 environment compatibility**
-  **Flexible design, 8, 16 inputs optional**
-  **RS485 communication interface**
-  **Input fuse for over current protection**

Block Diagram



	PV-CB8M	PV-CB16M
Input DC		
Max. input voltage	1000V	1000V
Max. string Isc	15A	15A
Number of input string	8	16
Input fuse	1 on negative and positive pole of each string, 25A, 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	120A	240A
Output breaker	200A	250A
Output cable terminal	50mm ²	95mm ²
Output cable gland	13mm-18mm cable diameter	16mm-21mm cable diameter
General Information		
Dimension (W/H/D)	700/640/192mm	700/640/192mm
Weight	25kg	25kg
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	Natural convection	Natural convection
Mounting	Wall-mount	Wall-mount
Monitoring	String current, string voltage, breaker status, surge arrestor status, internal temperature	
Power supply	DC300V~1000V	DC300V~1000V
Power consumption	14W	14W
Communication	RS485	RS485



ATS30/50/100/150

Overview

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

Features



HPS compatible



Transfer automatically between grid and DG

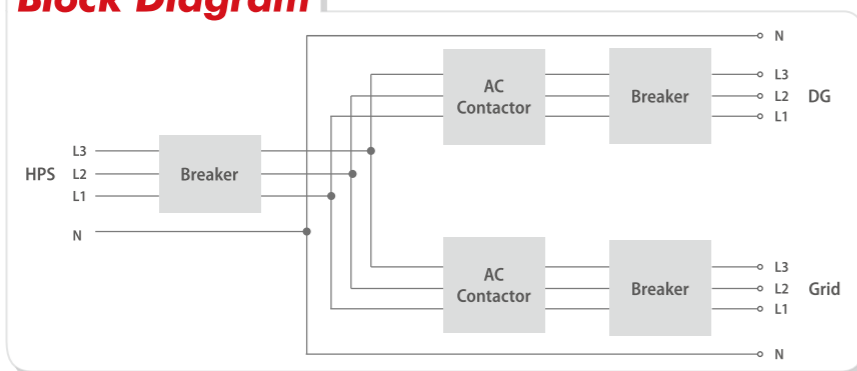


Flexible management



Support remote control of DG

Block Diagram



Datasheet

	ATS30	ATS50	ATS100	ATS150
Rated voltage	400V	400V	400V	400V
Rated current	86A	144A	288A	346A
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Rated power	60kVA	100kVA	200kVA	240kVA
Zero export function	Opt	Opt	Opt	Opt
Output breaker	100A	250A	400A	630A
Grid breaker	100A	250A	400A	630A
DG breaker	100A	250A	400A	630A
Lightning protection	Type II	Type II	Type II	Type II
Protection degree	IP20	IP20	IP20	IP20
Relative humidity	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
Dimension (W/H/D)	600/1500/450mm	600/1500/450mm	700/1650/500mm	700/1650/500mm
Weight	75kg	77kg	125kg	125kg
Communication	RS485/CAN	RS485/CAN	RS485/CAN	RS485/CAN

Datasheet



ATS30/50/150-US

Overview

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

Features



HPS compatible



Transfer automatically between grid and DG

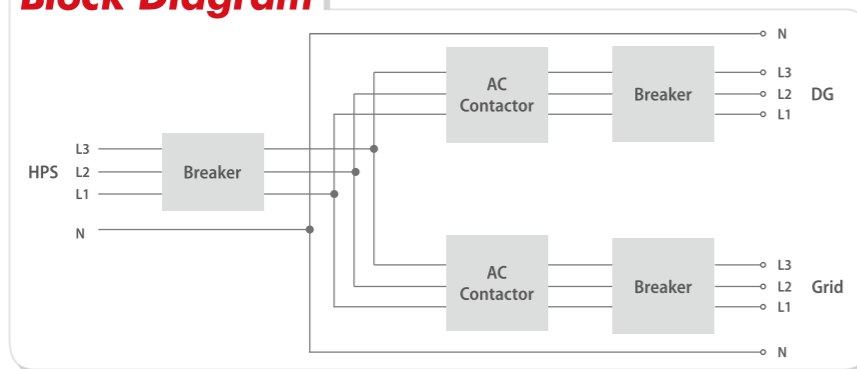


Flexible management



Support remote control of DG

Block Diagram



	ATS30-US					ATS50-US					ATS150-US				
Rated voltage	190V	200V	208V	220V	240V	190V	200V	208V	220V	240V	190V	200V	208V	220V	240V
Rated current	137A	130A	125A	118A	108A	228A	217A	208A	197A	180A	547A	520A	500A	472A	433A
Rated frequency	50/60Hz					50/60Hz					50/60Hz				
Rated power	45kVA					75kVA					180kVA 190kVA 195kVA 205kVA 225kVA				
Zero export function	Opt					Opt					Opt				
Output breaker	160A					250A					630A				
Grid breaker	160A					250A					630A				
DG breaker	160A					250A					630A				
Lightning protection	Type II					Type II					Type II				
Protection degree	IP20					IP20					IP20				
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)	600/1500/450mm					600/1500/450mm					700/1650/500mm				
Weight	75kg					77kg					125kg				
Communication	RS485/CAN					RS485/CAN					RS485/CAN				



EnerLog

Overview

Data logger for overall system monitoring, collect operation data from different units via Modbus RS485 and communicate with ATESS server via Ethernet

Features



Up to 32 inverters connection



Multi-function and high performance

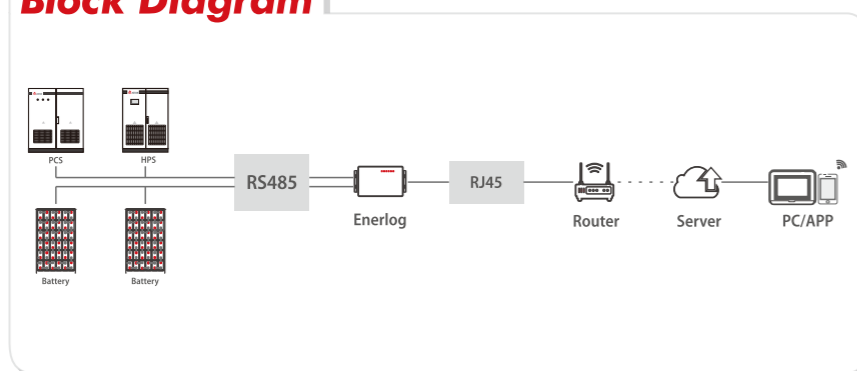


Support external sensor to realize zero-export function



Local web server for easy configuration

Block Diagram



Datasheet

EnerLog

Hardware Parameters

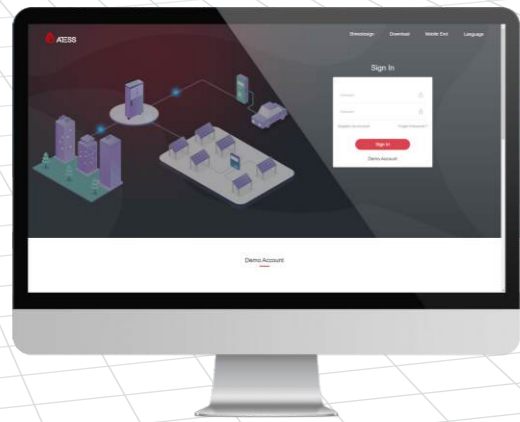
Power adapter	Input: 100-240V, 50/60Hz AC Output 12V(+/-15%), 1A DC
Power consumption	2.5W

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

Overview

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

Features



Quick and easy overview



Real-time monitoring



Professional analysis



Detail report downloadable



PC and mobile phone accessible



Online control and maintenance

Datasheet

EnerClo

Languages

Available languages

Chinese, English, French, Greek, German, Nederlands, Italian, Japanese, Polish, Portuguese, Spanish, Turkish, Vietnamese, Korean

System Requirements

Supported operating systems

All

Recommended browsers

Internet explore 8, Firefox 5, Google chrome 14, Safari 5, Opera 11

Supported data logger

EnerLog

Access

Website

ess-server.atesspower.com

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

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

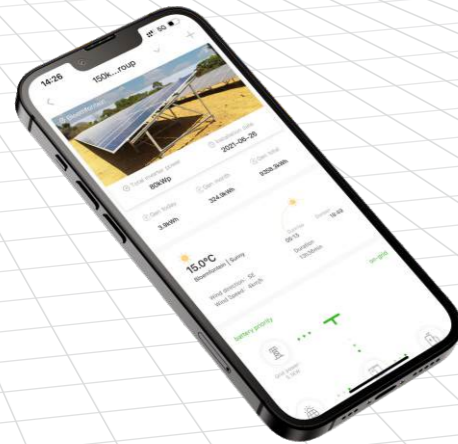
Add new plant, edit and delete existing plant

Device management

Intuitive operation to manage all devices

Inverter setting

Simple parameters setting for inverters including power management



EnerView

Overview

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

Features



Quick and easy overview



Real-time monitoring



Professional analysis



Detail report downloadable



PC and mobile phone accessible



Online control and maintenance

Datasheet

EnerView

General Data

Available languages	English, Chinese
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 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 inverter running status are recorded automatically, the warning of fault is highlighted and immediate
Event reports	Timely e-mail reports on system fault and plant error
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

Projects



Okayama Power Plant

Location Japan
Capacity 1MW/3.4MWh
Inverter Model PCS500
Date of Operation 2020/3



40 Island Power Stations

Location Thailand
Capacity 400kW/3.75MWh
Inverter Model HPS5000/10000TLS, BR50/100
Date of Operation 2019/11



Twin Containerized Power Plant

Location Singapore
Capacity 300kW/252kWh
Inverter Model HPS150, BR84
Date of Operation 2021/3



Renjiang Storage System

Location Xinjiang
Capacity 100kW/200kWh
Inverter Model PCS100
Date of Operation 2016/7



Putian Car Park Micro-grid

Location Shenzhen
Capacity 100kW/200kWh
Inverter Model PCS100
Date of Operation 2015/5



CNBM Yingjisha Off-grid System

Location Xinjiang
Capacity 1MW/1MWh
Inverter Model PCS500
Date of Operation 2014/12



Huizhou Factory Power Station

Location China
Capacity 1.5MW/4MWh
Inverter Model PCS500, BR145
Date of Operation 2021/7



Nari Wangjingkeng Storage System

Location Shenzhen
Capacity 100kW/200kWh
Inverter Model PCS100
Date of Operation 2016/1



Nari Rongchao Building Storage System

Location Shenzhen
Capacity 500kW/500kWh
Inverter Model PCS500
Date of Operation 2015/1



Brazil Factory Storage System

Location Brazil
Capacity 250kW/500kWh
Inverter Model PCS250, Bypass250
Date of Operation 2019/6



PV Plant for Brazilian Military

Location Brazil
Capacity 100kW/253kWh
Inverter Model HPS50
Date of Operation 2021/01



Central America Factory Storage System

Location Jamaica
Capacity 100kW/200kWh
Inverter Model PCS100
Date of Operation 2016/8



ESS Station

Location Iraq
Capacity 250kW/138kWh
Inverter Model PCS250, PBD250, BR138
Date of Operation 2021/3



Hybrid Power Station for Garment Factory

Location Cambodia
Capacity 768kW/810kWh
Inverter Model PCS500
Date of Operation 2020/9



Sierra Leone Mine Project

Location Sierra Leone
Capacity 50kW/105kWh
Inverter Model HPS100
Date of Operation 2019/9



Mhondoro Lodge Project

Location South Africa
Capacity 250kW/1MWh
Inverter Model HPS120
Date of Operation 2020/7



Enviroearth Hybrid Plant

Location Sierra Leone
Capacity 120kW/300kWh
Inverter Model HPS120
Date of Operation 2016/7



Zambia Resort Project

Location Zambia
Capacity 500kW/828kWh
Inverter Model PCS500
Date of Operation 2018/11



Mombasa Port Project

Location Kenya
Capacity 500kW/730kWh
Inverter Model HPS150
Date of Operation 2020/3

