

Solar Makes a Cleaner and Better World



Psmart Solar Co., Ltd.

Smart Power. Smart City.

PSMART®

COMPANY PROFILE

PSMART is a new energy enterprise dedicated to the R&D and manufacturing of solar inverter and UPS, including off grid inverter, off grid solar system, MPPT solar charge controller, storage inverters and low frequency online UPS, power guard, and smart energy monitoring management solutions as well. The power capacity of PSMART off grid inverters ranges from 0.5 kW to 300 kW, and low frequency online UPS covers a power range from 10 kW to 200 kW. PSMART inverters and UPS are widely used for applications in residential, commercial, PV poverty alleviation as well as other storage power station projects.



Founded in 2012, PSMART has focused on developing products that are most suitable for the needs of clients from worldwide. PSMART always sticks to technology innovation, and provides customers with premium products and services through its key inverter and UPS technology, strict quality control and continuous improvement of customer service. PSMART has been the supplier of Chinese government since 2016, and has finished many PAP (Poverty Alleviation Program) projects and capital construction projects. By the end of 2021, PSMART has shipped over 1 million inverters and UPS to over 50 countries and regions across the globe.

PSMART will always insist on leading technology and put quality in the first place with its people-oriented and client-oriented spirit. In addition, PSMART will continue to integrate global resources, promote technology innovation and strive to lead in providing the best energy solutions across the world.

C series single phase inverter

Features:

- Toroidal transformer, low self-consumption
- Wide input voltage range and high-precision output
- Three working modes: AC priority, DC priority, ECO mode
- Settings for battery type, charging voltage and current are available
- Power frequency design, pure sine wave, suitable for various types of loads
- Protection: Battery over / low voltage, overload, short circuit, over- temp. and etc
- Lightning arrester (optional)
- 4G/WiFi monitoring (optional)
- Unattended function (optional)
- Built in MPPT controller, higher charging efficiency(Optional)
- Touch screen, more accurate and intuitive, and easier operation(Optional)



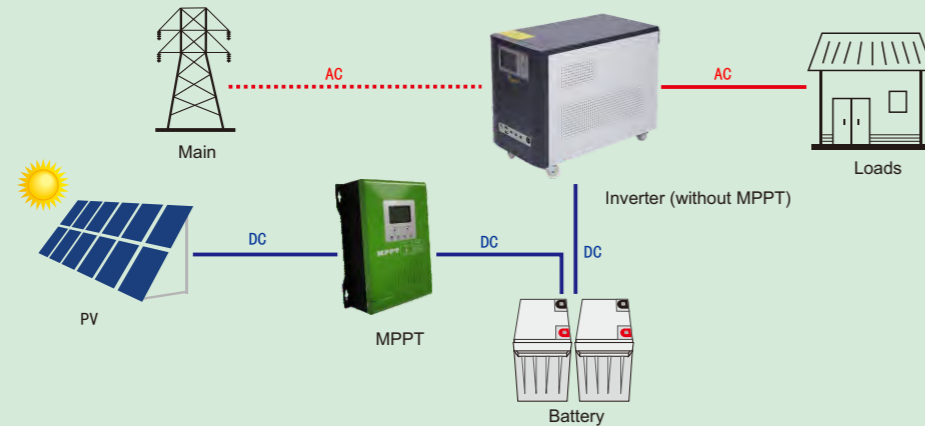
Floor-standing Design

Application

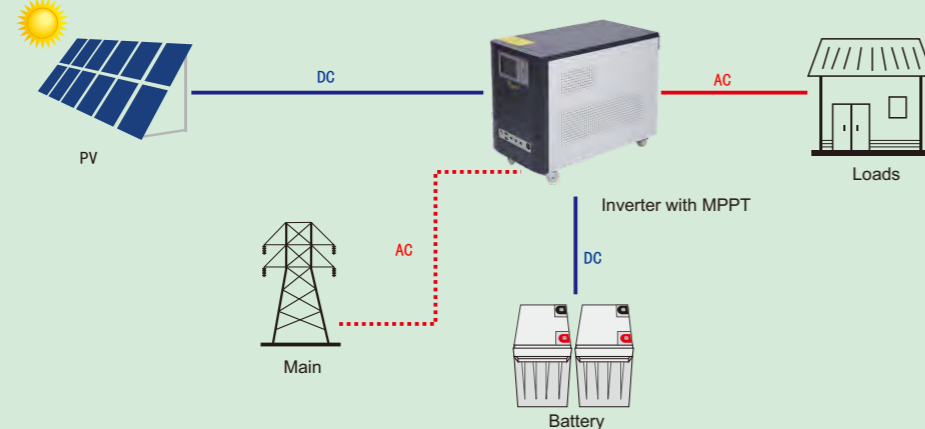


Application diagram

Inverter without built-in MPPT controller



Inverter with built-in MPPT controller



Technical Parameters

Inverter	CN150	CN200	CN300	CN400	CN500	CN600	CN400	CN500	CN600	CN800	CN1000
Inverter with MPPT	CM150	CM200	CM300	CM400	CM500	CM600	CM400	CM500	CM600	CM800	CM1000
Rated power	1500W	2000W	3000W	4000W	5000W	6000W	4000W	5000W	6000W	8000W	10000W
Battery voltage	24V/48V			48V			96V			48V	
Size (L*W*H/mm)	520*220*360			520*250*400			620*350*500				
Package size (L*W*H/mm)	560*265*400			580*310*450			680*410*550				
N.W. (KG)	15	20	23	29	33	34	29	33	34	49	52
G.W.(KG)	17	23	26	36.5	40.5	41.5	36.5	40.5	41.5	56	59

Input

Phase	L+N+G
AC input range	110V:85-138VAC;220V:170-275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

Output

Output voltage	Inverter mode: 110VAC/220V±5%; AC mode: 110VAC/220VAC±10%
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms(Typical loads)
Waveform	Pure sine wave
Efficiency	>85%(80% resistive loads)
Protection functions	Battery overvoltage protection,battery undervoltage protection,overload protection, short circuit protection,overtemperature protection,etc.

Built-in solar charge controller(Optional)

Max charge current	40A	50A	60A	100A	120A
Battery voltage	24V/48V	24V/48V/96V	24V/48V/96V	24V/48V	24V/48V
PV input voltage range	24V:38V-150V		48V:65V-150V	96V:145V-200V	
Max PV input	24V:960W 48V:1920W	24V:1200W 48V:2400W 96V:4800W	24V:1440W 48V:2880W 96V:5760W	24V:2400W 48V:4800W	24V:2880W 48V:5760W
Cooling method	Fans cooling				

Environmental conditions

Operating temperature	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m,it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

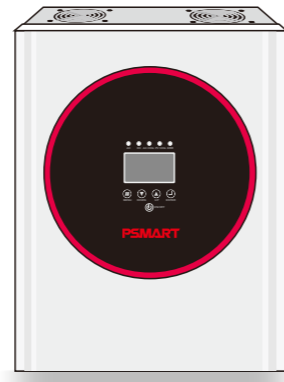
Display	LCD+LED
Communication interface	Rs232(Optional)

*The specifications, dimensions and materials are subject to change without further notice.

D series single phase inverter

Features:

- Toroidal transformer, low self-consumption
- Wide input voltage range and high-precision output
- Three working modes: AC priority, DC priority, ECO mode
- Settings for battery type, charging voltage and current are available
- Power frequency design, pure sine wave, suitable for various types of loads
- Protection: Battery over / low voltage, overload, short circuit, over- temp. and etc
- Lightning arrester (optional)
- 4G/WiFi monitoring (optional)
- Unattended function (optional)
- Built in MPPT controller, higher charging efficiency(Optional)
- Touch screen, more accurate and intuitive, and easier operation(Optional)

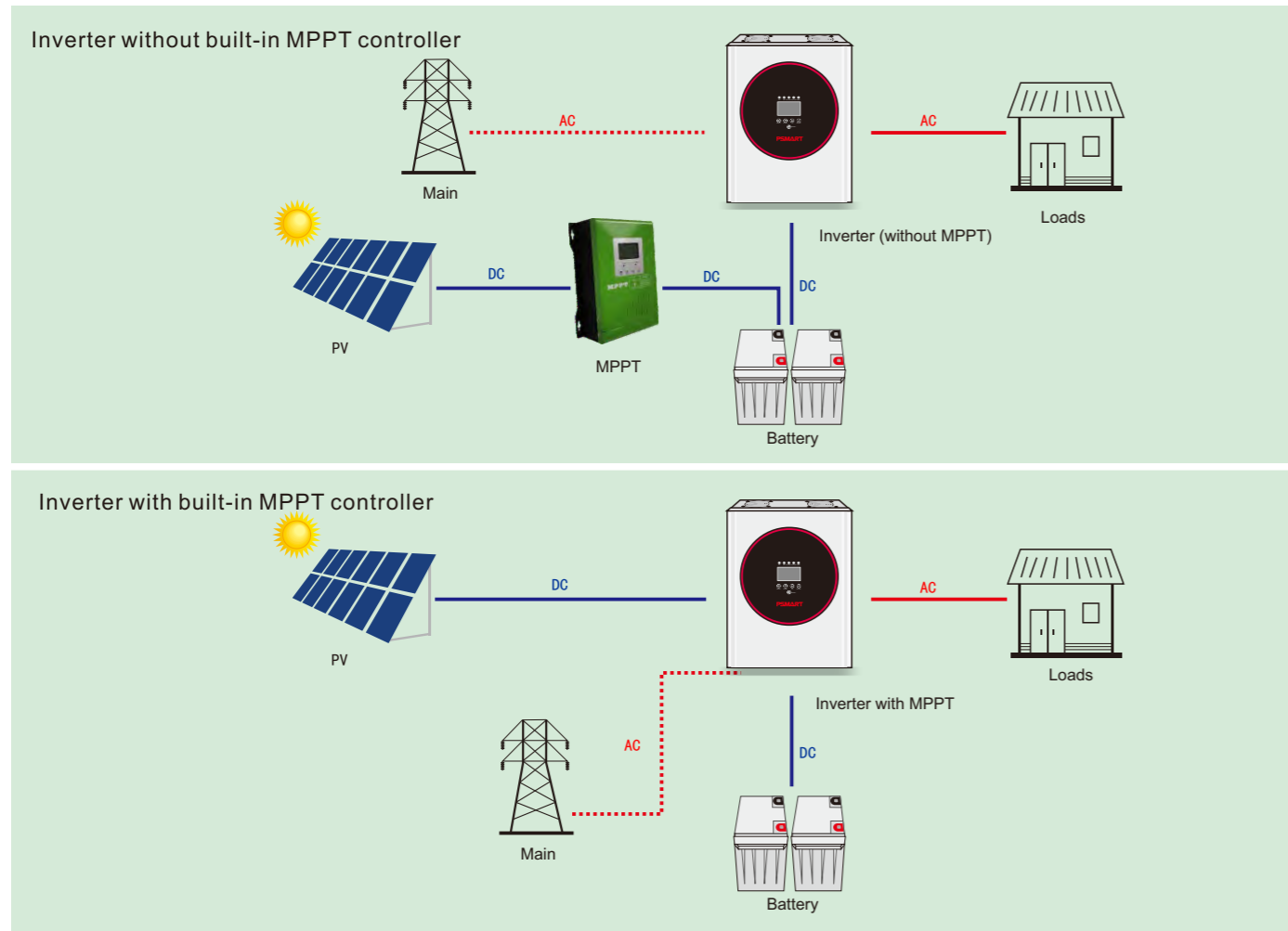


Wall-mounted Design

Application



Application diagram



Technical Parameters

Inverter	DN150	DN200	DN300	DN400	DN500	DN600
Inverter with MPPT	DM150	DM200	DM300	DM400	DM500	DM600
Rated power	1500W	2000W	3000W	4000W	5000W	6000W
Battery voltage	24V/48V	48V				
Size (L*W*H/mm)	440*320*165	560*400*200 / 570*450*230(100A)				
Package size (L*W*H/mm)	515*370*210	647*457*252 / 658*508*288(100A)				
N.W. (KG)	15	20	22	27	29	31
G.W.(KG)	17	23	25	30	32	34

Input

Phase	L+N+G
AC input range	110V:85-138VAC;220V:170-275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

Output

Output voltage	Inverter mode: 110VAC/220V±5%; AC mode: 110VAC/220VAC±10%
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms(Typical loads)
Waveform	Pure sine wave
Efficiency	>85%(80% resistive loads)
Protection functions	Battery overvoltage protection,battery undervoltage protection,overload protection, short circuit protection,overtemperature protection,etc.

Built-in solar charge controller(Optional)

Max charge current	40A	50A	60A	100A	120A
Battery voltage	24V/48V	24V/48V	24V/48V	24V/48V	24V/48V
PV input voltage range	24V:38V-150V 48V:65V-150V 96V:145V-200V				
Max PV input	24V:960W 48V:1920W	24V:1200W 48V:2400W	24V:1440W 48V:2880W	24V:2400W 48V:4800W	24V:2880W 48V:5760W
Cooling method	Fans cooling				

Environmental conditions

Operating temperature	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m,it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

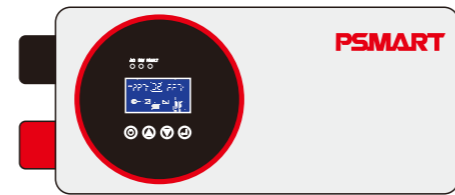
Display	LCD+LED
Communication interface	Rs232(Optional)

*The specifications, dimensions and materials are subject to change without further notice.

E Series Single Phase Inverter

Features:

- LCD digital display
- Automatic voltage stabilization
- Dual MCU design, excellent performance
- Toroidal transformer, low self-consumption
- Wide input voltage range and high-precision output
- LVD / HVD and battery cut-off settings are available
- Three working modes: AC priority, DC priority, ECO mode
- Settings for battery type, charging voltage and current are available
- Power frequency design, pure sine wave, suitable for various types of loads
- Protection: Battery over / low voltage, overload, short circuit, over- temp. and etc
- External LCD digital display(Optional)



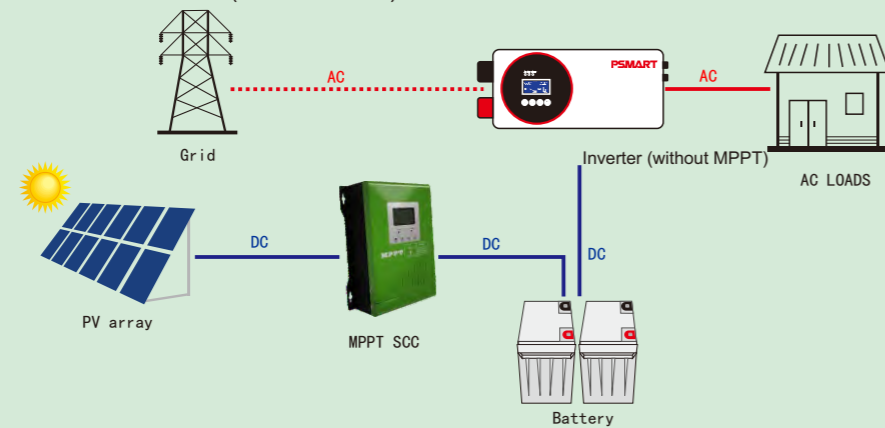
Wall-mounted Design

Application

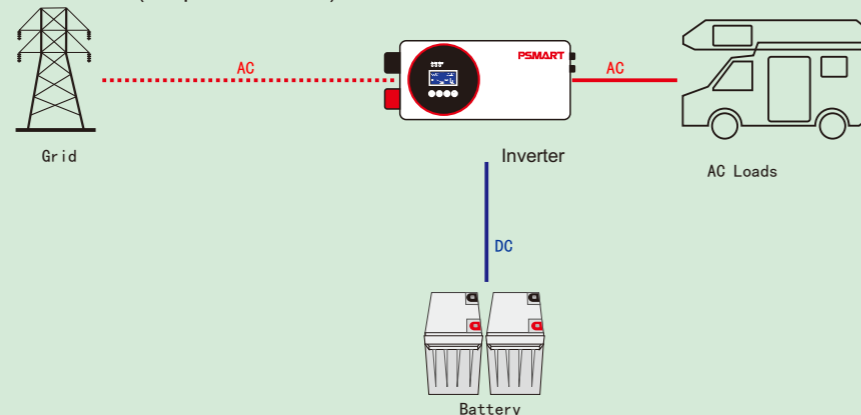


Application diagram

Inverter without built-in MPPT controller (for home use)



Inverter without built-in MPPT controller (for portable use)



Technical Parameters

Inverter	EN100	EN150	EN200	EN300	EN400	EN500	EN600
Rated power	1000W	1500W	2000W	3000W	4000W	5000W	6000W
Battery voltage	12V/24V/48V	24V/48V			48V		
Size (L*W*Hmm)	535*262*185				575*337*215		
package size (L*W*Hmm)	575*312*235				615*387*265		
N.W. (KG)	10.5	12.5	15	17.5	20	24	25
G.W.(KG)	13	15	17.5	20	23	27	28

Input

Phase	L+N+G
AC input range	110V:85-138VAC;220V:170-275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

Output

Output voltage	Inverter mode: 110VAC/220V±5%; AC mode: 110VAC/220VAC±10%
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms(Typical loads)
Waveform	Pure sine wave
Efficiency	>85%(80% resistive loads)
Protection functions	Battery overvoltage protection,battery undervoltage protection,overload protection, short circuit protection,overtemperature protection,etc.
Cooling method	Fans cooling

Environmental conditions

Operating temperature	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m,it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

Display	LCD+LED
Communication interface	Rs232(Optional)

*The specifications, dimensions and materials are subject to change without further notice.

G series single phase inverter

Features:

- Toroidal transformer, low self-consumption
- Wide input voltage range and high-precision output
- Three working modes: AC priority, DC priority, ECO mode
- Settings for battery type, charging voltage and current are available
- Power frequency design, pure sine wave, suitable for various types of loads
- Protection: Battery over / low voltage, overload, short circuit, over- temp. and etc;
- Lightning arrester (optional)
- Unattended function (optional);
- Built in PWM controller(Optional)

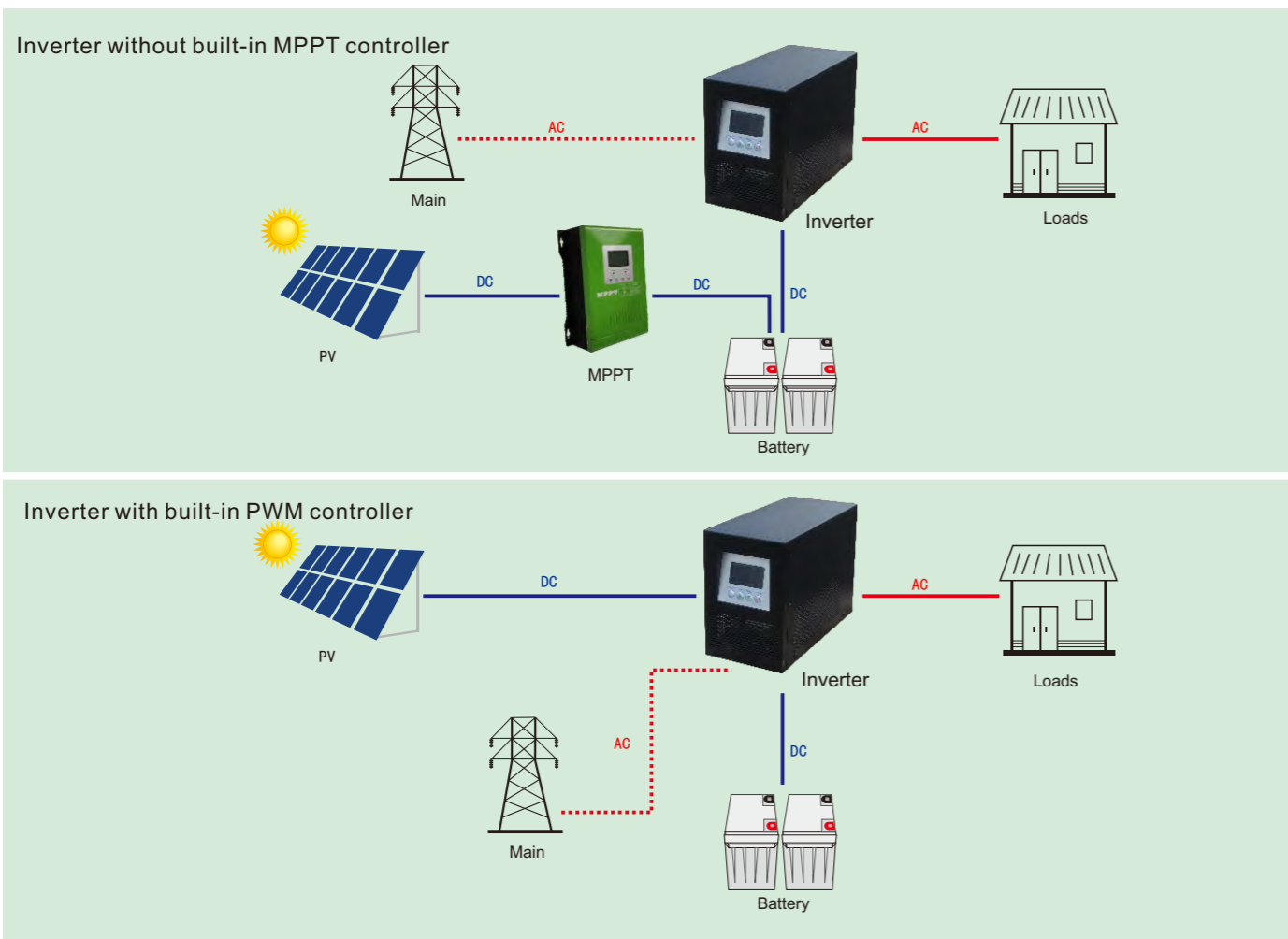


Floor-standing Design

Application



Application diagram



Technical Parameters

Inverter	GN050	GN100
Inverter with PWM	GP0530	GP1030
Rated power	1000W	1000W
Battery voltage	12V/24V/48V	
Size (L*W*Hmm)	310*142*215	
package size (L*W*Hmm)	360*195*280	
N.W. (KG)	6	8
G.W.(KG)	7	9

Input

Phase	L+N+G
AC input range	110V:85-138VAC;220V:170-275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

Output

Output voltage	Inverter mode: 110VAC/220V±5%; AC mode: 110VAC/220VAC±10%
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms(Typical loads)
Waveform	Pure sine wave
Efficiency	>85%(80% resistive loads)
Protection functions	Battery overvoltage protection,battery undervoltage protection,overload protection, short circuit protection,overtemperature protection,etc.

Built-in solar charge controller(Optional)

Max charge current	30A
PV input voltage range	12V : 16V~36V ; 24V : 30V~50V
Max PV input	12V : 360W ; 24V : 720W
Cooling method	Fans cooling

Environmental conditions

Operating temperature	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m,it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

Display	LCD+LED
Communication interface	RS232(Optional)

*The specifications, dimensions and materials are subject to change without further notice.

ESS Single phase All-in-one Unit

Features:

- Toroidal transformer, low self-consumption
- Built in MPPT controller, higher charging efficiency
- Wide input voltage range and high-precision output
- Integrated USB and DC outputs for convenient uses
- Large battery cabinet compartment for different batteries
- Three working modes: AC priority, DC priority, ECO mode
- Settings for battery type, charging voltage and current are available
- Power frequency design, pure sine wave, suitable for various types of loads
- Protection: Battery over / low voltage, overload, short circuit, over-temp. and etc
- Lightning arrester (optional)
- 4G/WiFi monitoring (optional)
- Unattended function (optional)
- Touch screen, more accurate and intuitive, and easier operation(Optional)



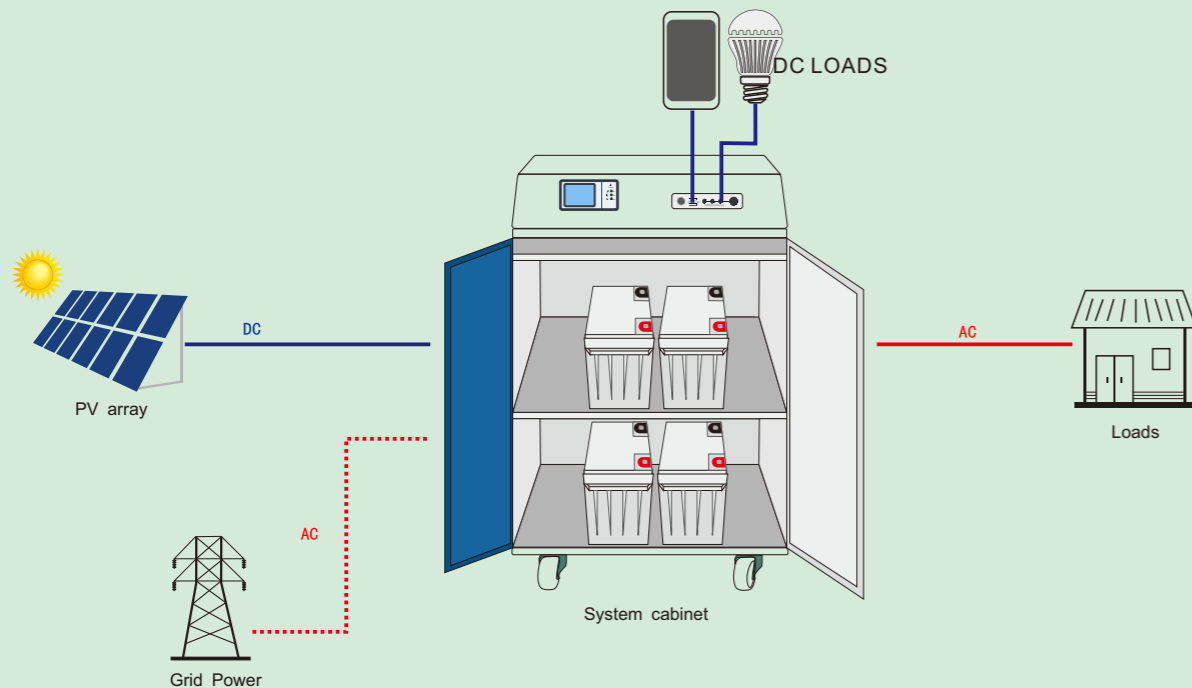
All-in-one Unit Design(ESS)

Application



Application diagram

ESS with built-in MPPT controller



Technical Parameters

Model	ST050	ST100	ST150	ST200	ST300	ST400	ST500	ST600
Rated power	500W	1000W	1500W	2000W	3000W	4000W	5000W	6000W
Battery voltage	12V/24V			24V/48V		48V		
Size (L*W*Hmm)	580*350*605(12V)			590*340*940(24V)		590*560*940(48V)		
package size (L*W*Hmm)	730*500*775(12V)			700*430*1090(24V)		730*710*1090(48V)		
Battery type	1*12V200Ah			2*12V200Ah		4*12V200Ah		
N.W. (KG)	12V:24 24V:39	12V:25 24V:40	12V:26 24V:41	24V:47 48V:62	24V:49 48V:64	67	71	72
G.W.(KG)	12V:28 24V:51	12V:29 24V:52	12V:30 24V:53	24V:59 48V:77	24V:61 48V:79	82	86	87

Input

Phase	L+N+G
AC input range	110V:85-138VAC;220V:170-275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

Output

Output voltage	Inverter mode: 110VAC/220V±5%; AC mode: 110VAC/220VAC±10%
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms(Typical loads)
Waveform	Pure sine wave
Efficiency	>85%(80% resistive loads)
Protection functions	Battery overvoltage protection, battery undervoltage protection, overload protection, short circuit protection, overtemperature protection, etc.
DC output (adjust)	USB 5VDC/1A*2 DC2.0 12VDC/5A*4

Built-in solar charge controller(Optional)

Max charge current	40A	50A	60A	100A	120A
Battery voltage	24V/48V	24V/48V	24V/48V	24V/48V	24V/48V
PV input voltage range	PWM:12V:16-36V 24V:30V-50V 48V:60V-80V MPPT:12V:20-100V 24V:38V-150V 48V:65V-150V				
Max PV input	24V:960W 48V:1920W	24V:1200W 48V:2400W	24V:1440W 48V:2880W	24V:2400W 48V:4800W	24V:2880W 48V:5760W
Cooling method	Fans cooling				

Environmental conditions

Operating temperature	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m,it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

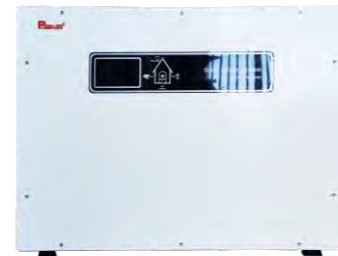
Display	LCD+LED
Communication interface	RS232(Optional)

*The specifications, dimensions and materials are subject to change without further notice.

Titan Series 1Phase IGBT Solar Power Inverter

Features

- Able to work without battery when PV is available
- IGBT (Germany Infineon) technology for both inverter and MPPT
- High level protection for PCB boards (No more dusts and insects)
- Colourful LCD touch screen
- Transfer time :1ms(No break) SCR ATS Switching
- Lithium batteries compatible with Rs485 interface
- LVD / HVD and battery cut-off settings are available
- Solar can support the loads without going through batteries
- AC / PV charging currents and voltages settings are available
- Transformer based rugged design with 3 times peak power (inductive loads)
- Online 4G/WIFI monitoring (optional)

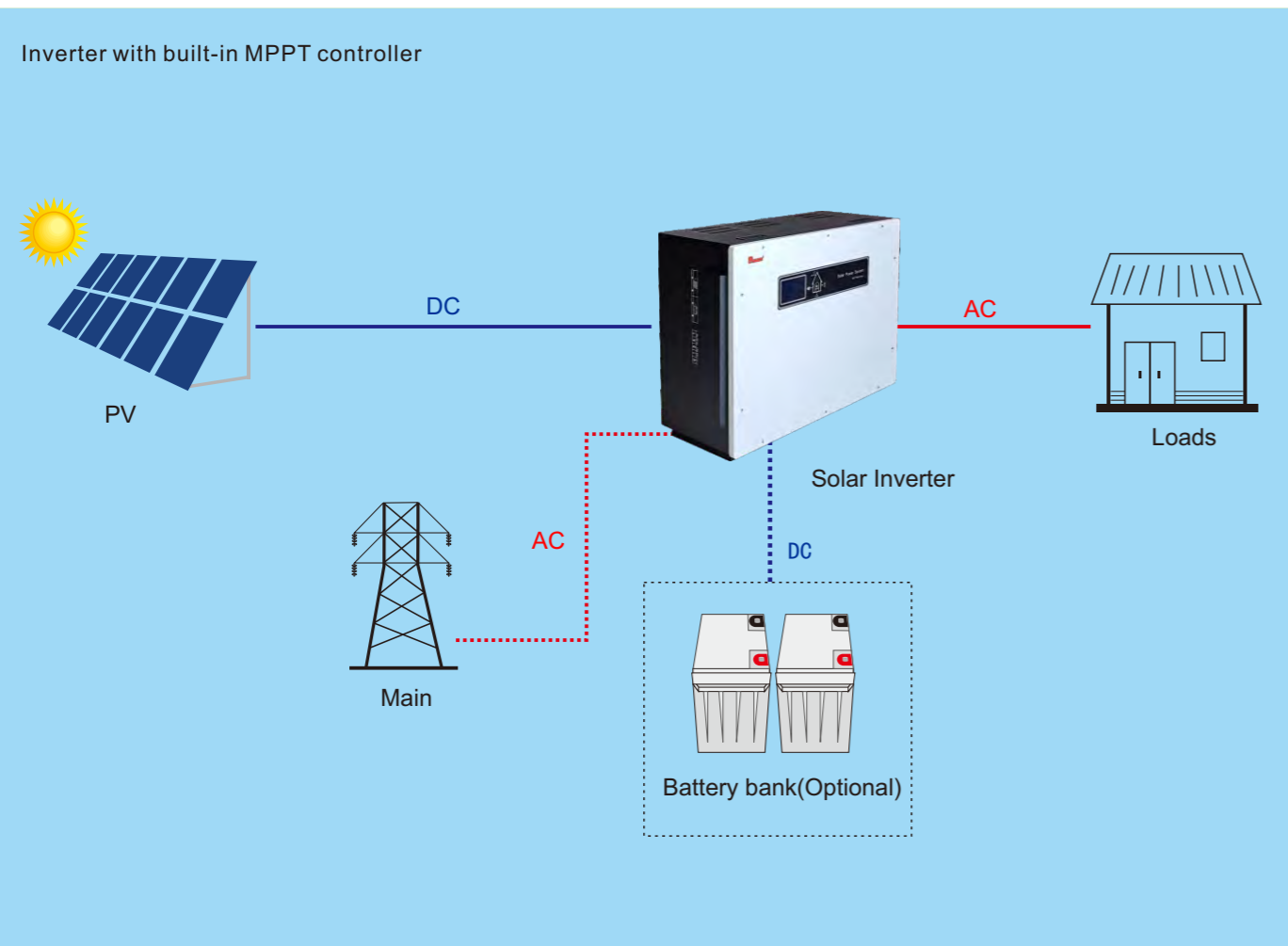


Wall-mounted Design

Application



Application diagram



Technical Parameters

Inverter with MPPT	PT8K	PT10K	PT12K
Rated power	8000W	10000W	12000W
Battery voltage	48VDC		
Size (L*W*H)	800*630*320mm	900*630*320mm	
Package size (L*W*H)	900*725*480mm	1025*740*480mm	
N.W. (KG)	108	116	129
G.W. (KG)	130	140	153

AC Input

Phase	L+N+G
AC input range	110V: 85-138VAC ; 220V: 170-275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

AC Output

Output voltage	Inverter mode: 110VAC/220V±5% ; AC mode: 110VAC/220VAC±10%;
Frequency (AC mode)	Auto-detect
Frequency (INV mode)	50Hz/ 60Hz±1%
Over load capacity	AC mode: (100%~110% with 10mins ; 110%~130% with 1min ; >130% with 1s)
	INV mode: (100%~110% with 30s ; 110%~130% with 10s ; >130% with 1s)
Crest ratio	3:1max
Transfer time	<1ms (Typical loads)
Waveform	Pure sine wave
Efficiency	>85% (Max with 91%)
Protections	Battery over-voltage protection, battery low-voltage protection, overload protection, short circuit protection, over-temperature protection, etc.

Built in MPPT (IGBT based)

Charging current	150A	180A	200A
Battery voltage	48VDC		
PV input voltage	65-250VOC		
Max solar power	7200W	8640W	9600W
Cooling method	Fans cooling		

Environmental conditions

Operating temp	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m (with increase of 100m, it will reduce output of 1%) max5000m
Noise	<58dB (distance to machine 1meter)

Management

Display	LED+Touch screen
Communication	RS485(Optional)

*The specifications, dimensions and materials are subject to change without further notice.

Apollo Series 1Phase IGBT Solar Power Inverter

Features

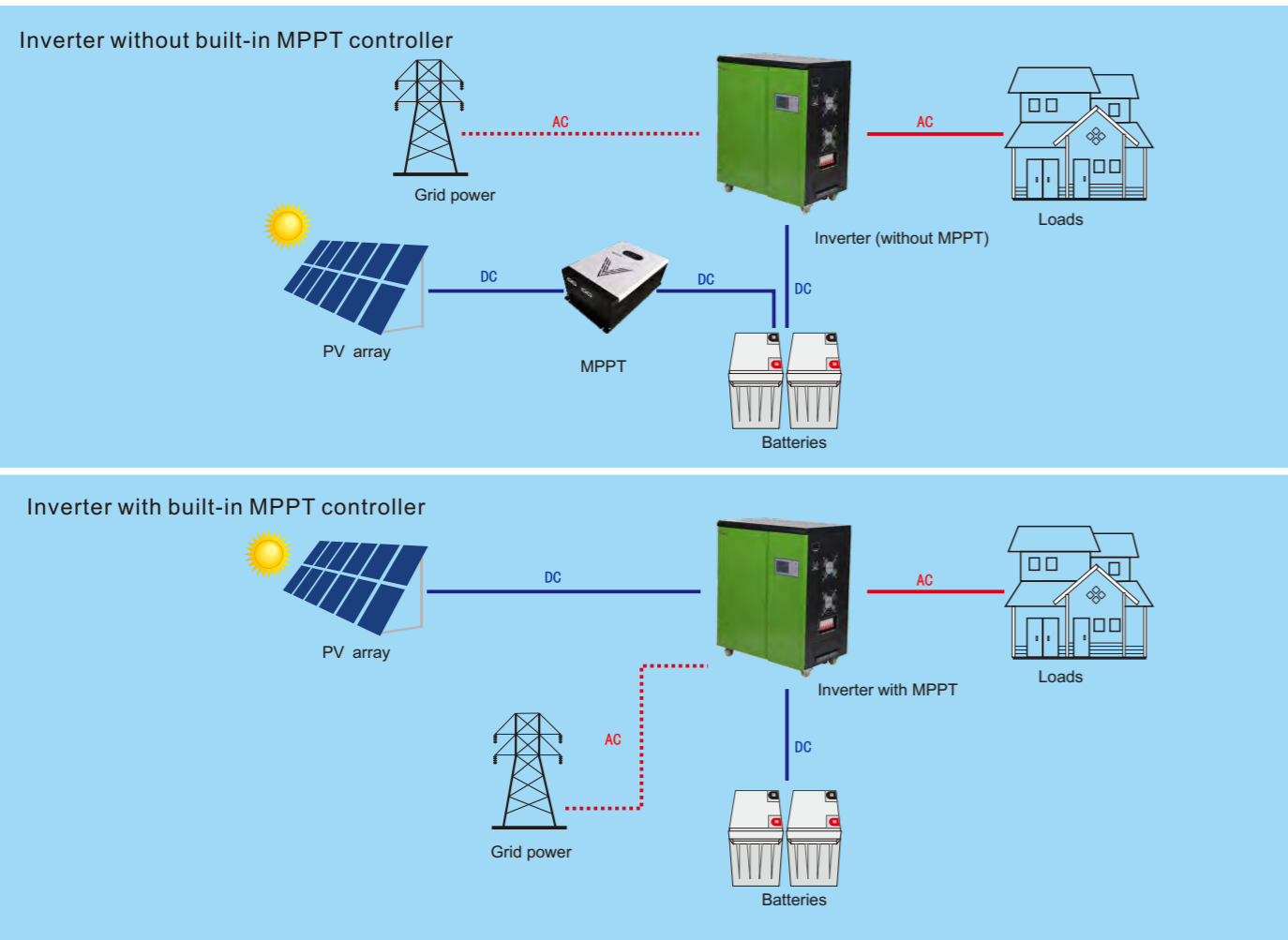
- IGBT design, pure sine wave
- MCU, SPWM control technology
- Unattended function, auto-switching
- Strong overload and impact resistance
- High efficiency, low noise, ECO friendly
- Communication: USB/SNMP/GSM SMS
- Unique dynamic current loop control technology
- Stable performance, safe and reliable, long lifespan
- Resistive /inductive /capacitive load or mixed load are compatible
- Protection:
Input low/over voltage, output low/over voltage, overload, short circuit, over- temp. and etc



Application



Application diagram



Technical Parameters

Inverter	Apollo10K	Apollo12K	Apollo15K	Apollo20K	Apollo25K	Apollo30K
Inverter with MPPT	Apollo10K(M)	Apollo12K(M)	Apollo15K(M)	Apollo20K(M)	Apollo25K(M)	Apollo30K(M)
Rated power	10KW	12KW	15KW	20KW	25KW	30KW
Battery voltage	96V/192V		192V		360V	
Size (L*W*Hmm)	580*370*730			740*400*930		
package size (L*W*Hmm)	650*420*840			820*480*1050		
N.W. (KG)	85	92	116	133	150	169
G.W.(KG)	97	104	132	149	166	185

AC Input

Phase	L+N+G
AC input range	110V: 85-138VAC; 220V: 170-275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

AC Output

Output voltage	inverter mode: 110VAC/220V±5%; AC mode: 110VAC/220VAC±10%;
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms(Typical loads)
Waveform	Pure sine wave
Efficiency	>85%(80% resistive loads)
Protection functions	Battery overvoltage protection, battery undervoltage protection, overload protection, short circuit protection, overtemperature protection, etc.

Built in MPPT (IGBT based)

Max charge current	50A	60A	100A	120A
Battery voltage	96V/192V	96V/192V	96V/192V	96V/192V
PV input voltage range	96V: 145V-230V 192V: 260V-400V			
Max PV input	96V: 4800W 192V: 9600W	96V: 5760W 192V: 11520W	96V: 9600W 192V: 19200W	96V: 11520W 192V: 23040W
Cooling method	Fans cooling			

Environmental conditions

Operating temperature	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m, it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

Display	LCD+LED
Communication	RS485(Optional)

*The specifications, dimensions and materials are subject to change without further notice.

Alpha Series 1Phase IGBT Solar Power Inverter

Features

- IGBT design, pure sine wave
- Can work without battery bank
- Strong overload and impact resistance
- High efficiency, low noise, ECO friendly
- PV+AC to run loads(PV priority, AC for backup)
- Stable performance, safe and reliable, long lifespan
- 3 times PV power input as rated power and wide PV input voltage
- Resistive /inductive /capacitive load or mixed load are compatible
- Protection:
Input low/over voltage, output low/over voltage, overload, short circuit, over- temp. and etc

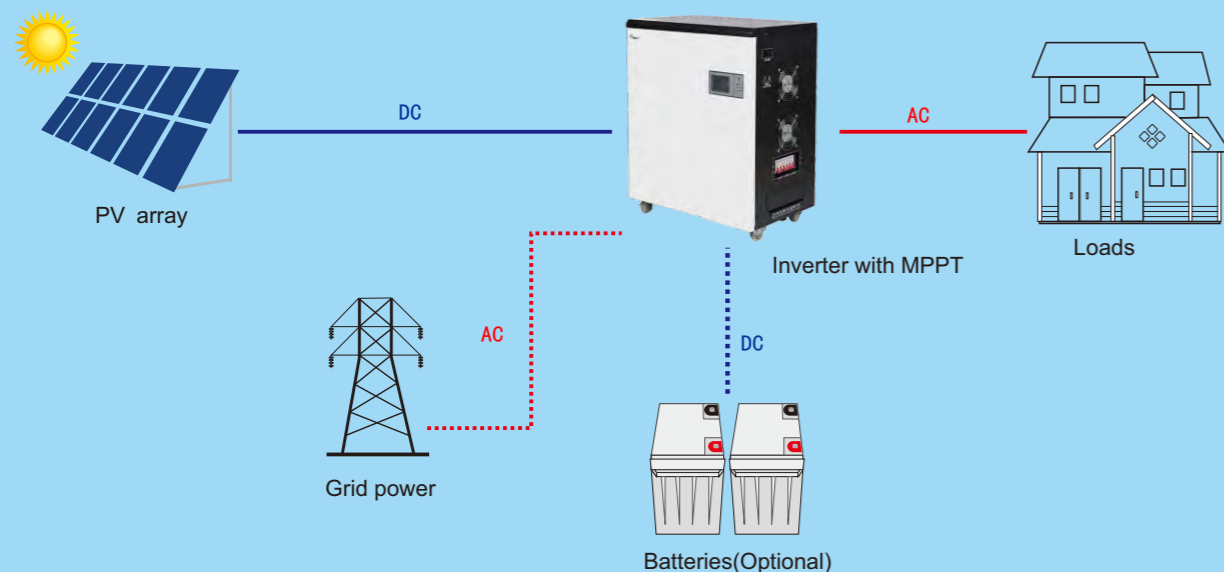


Application



Application diagram

Inverter with built-in MPPT controller



Technical Parameters

Inverter with MPPT	Alpha 10K	Alpha 20K	Alpha 30K
Rated power	10KW	20KW	30KW
Battery voltage	192V		
Size (L*W*Hmm)	580*370*730	740*400*930	
package size (L*W*Hmm)	650*420*840	820*480*1050	
N.W. (KG)	71	111	151
G.W.(KG)	88	131	171

AC Input

Phase	L+N+G
AC input range	110V: 85~138VAC; 220V: 170~275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

AC Output

Output voltage	inverter mode: 110VAC/220V±5%; AC mode: 110VAC/220VAC±10%;
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms(Typical loads)
Waveform	Pure sine wave
Efficiency	>85%(80% resistive loads)
Protection functions	Battery overvoltage protection, battery undervoltage protection, overload protection, short circuit protection, overtemperature protection, etc.

Built in MPPT (Mosfet based)

Max charge current	50A		
Battery voltage	192V		
PV input voltage range(VOC)	200-390Vdc		
Max PV input	30KW(10KW for MPPT charger)	60KW(10KW for MPPT charger)	90KW(10KW for MPPT charger)
Cooling method	Fans cooling		

Environmental conditions

Operating temperature	0°C~40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m, it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

Display	LED+Touch Screen
Communication	RS485(Optional)

*The specifications, dimensions and materials are subject to change without further notice.

Gamma Series 3Phase IGBT Solar Power Inverter

Features

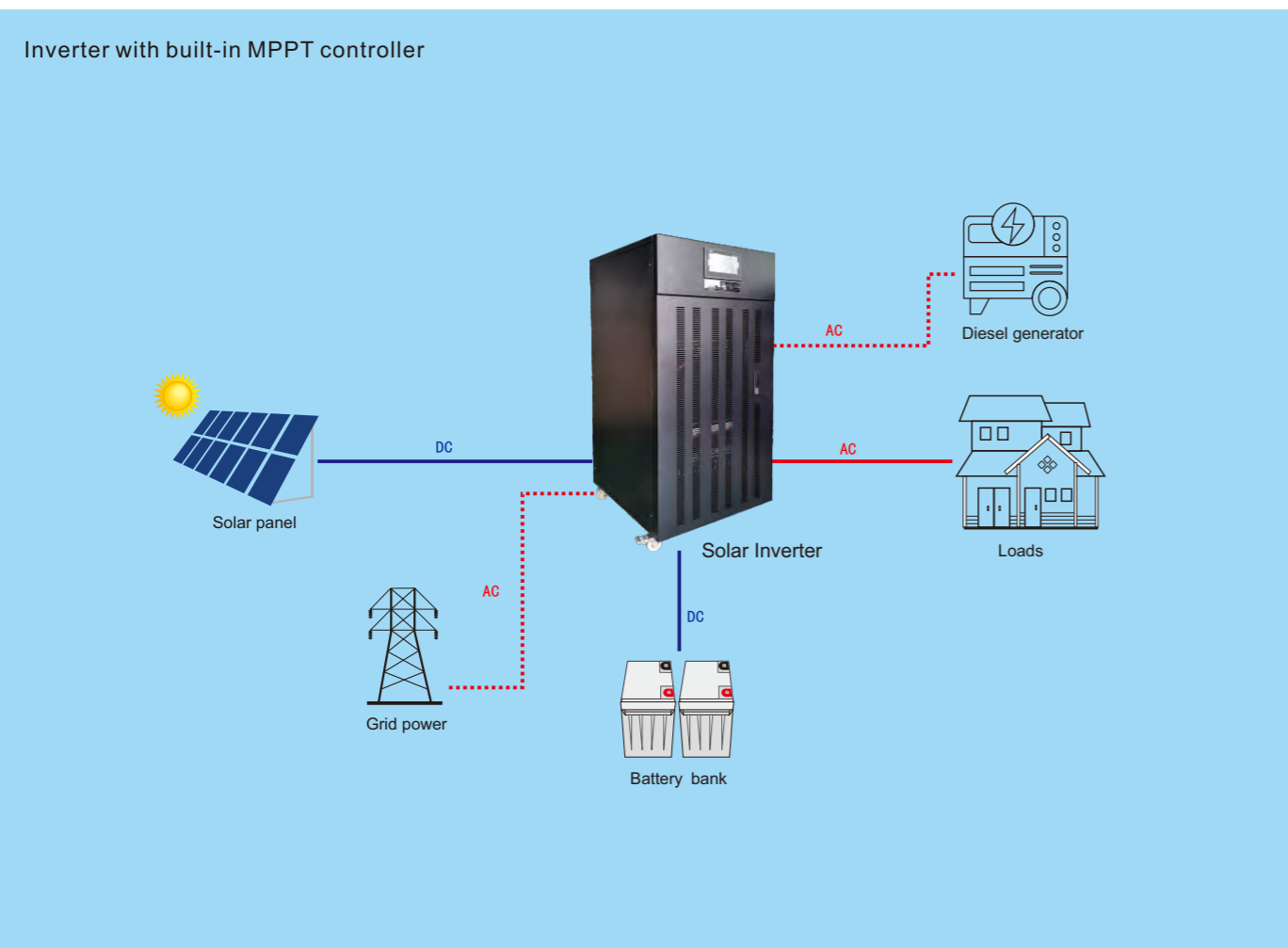
- Parameter settings are available on screen
- Perfect protection function, safe and reliable
- High efficiency IGBT technology, higher efficiency
- Multiple working modes to meet user requirements
- 7-inch touch screen system, more accurate and intuitive
- Built in MPPT control module, and view real-time power generation
- Vector control technology of DSP, MCU and DDC real-time processing



Application



Application diagram



Technical Parameters

Inverter with MPPT	Gamma8K	Gamma10K	Gamma15K	Gamma20K	Gamma25K	Gamma30K	Gamma40K
Capacity	8KW	10KW	15KW	20KW	25KW	30KW	40KW
Battery voltage	192/360VDC					360VDC	
Size:(L*W*Hmm)	750*550*1600 (W*D*Hmm)						
package size (L*W*Hmm)	900*700*1750 (W*D*Hmm)						
N.W. (KG)	140	150	220	250	280	310	340
G.W.(KG)	175	185	255	285	315	345	375

AC Input

Phase	Three-phase+N+G
AC input range	380VAC±20%
Input frequency	45Hz~55Hz or 55Hz~65Hz

AC Output

Output voltage	inverter mode: 380Vac±3%;AC mode: 380Vac±20%;
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±0.1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms
Waveform	Pure sine wave
Harmonic distortion	Linear load<3%; Non-linear load<5%
Balance load voltage	<±1%
Imbalance load voltage	<±5%
Efficiency	85%
Isolation type	output isolation

Battery

battery capacity	It depends on requirement, need to be big size battery models
battery number	Must match system DC voltage

Environmental conditions

Operating temperature	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m,it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Built in MPPT

Battery voltage	192/360VDC	360V
PV input voltage range	260V-400V	430V-600V
Max charge current	50A	100A
Max PV input	192V:10KW 360V:18KW	192V:20KW 360V:36KW

Management

Display	7-inch touch screen system
Communication interface	Standard: Rs232 Optional: Rs485

*The specifications, dimensions and materials are subject to change without further notice.

Delta Series 3Phase IGBT Solar Power Inverter

Features

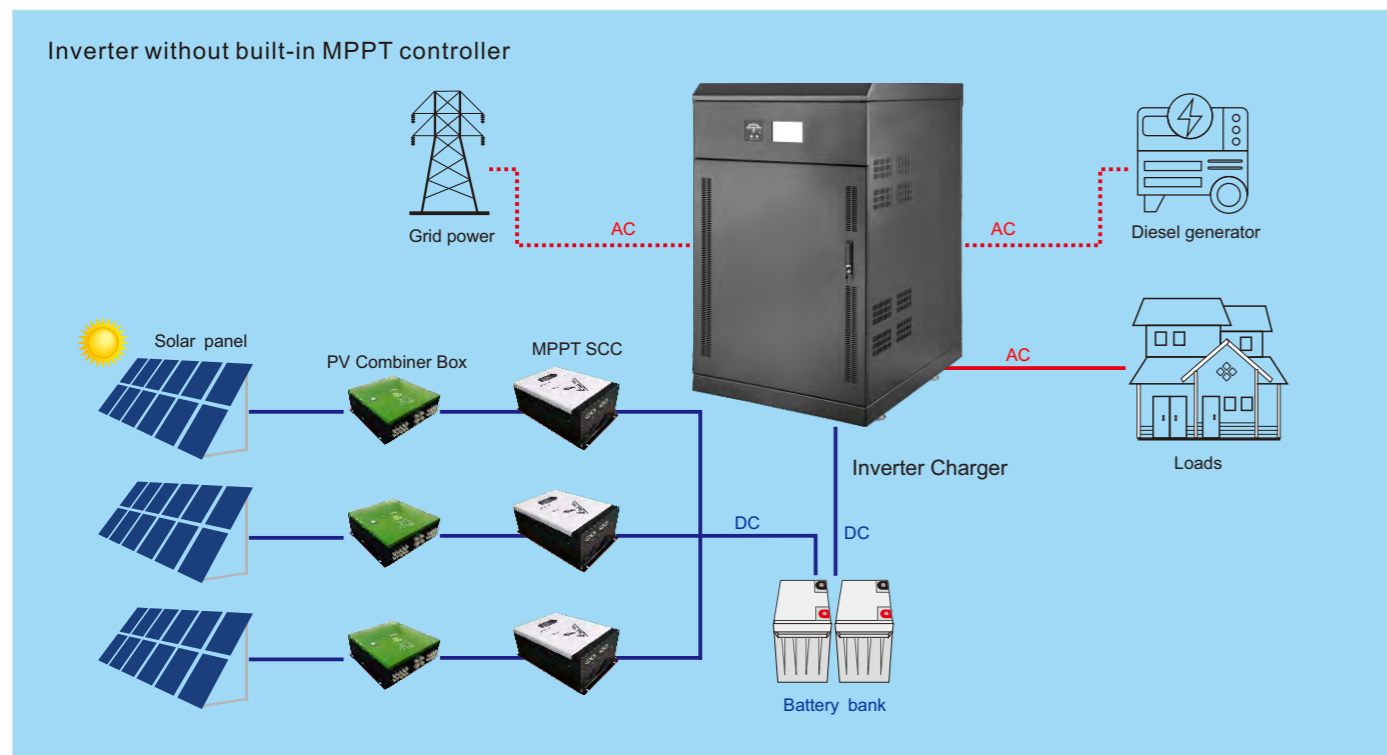
- 7-inch touch screen digital display
- IGBT inverter technology and high frequency PWM technology
- Advanced control technology of DSP, MCU and DDC real-time processing
- AC input over-voltage / undervoltage, output over-voltage / undervoltage, output overload, short circuit protection, over temperature protection, undervoltage warning, battery overcharge protection



Application



Application diagram



Technical Parameters

Inverter	Delta10K	Delta15K	Delta20K	Delta30K	Delta40K	Delta50K	Delta60K	Delta80K	Delta100K	Delta120K	Delta160K	Delta200K	
Capacity	10KVA	15KVA	20KVA	30KVA	40KVA	50KVA	60KVA	80KVA	100KVA	120KVA	160KVA	200KVA	
Battery voltage	192V/220V/360V/384V			220V/360V/384V			360V/384V						
Size:(L*W*Hmm)	720*460*1180			730*570*1150			800*670*1550			1130*910*1510		1210*875*1680	
package size (L*W*Hmm)	880*610*1350			850*700*1250			1070*820*1680			1260*1070*1780		1370*1025*1850	
N.W. (KG)	195	240	270	330	380	430	550	630	680	750	950	1300	
G.W.(KG)	210	210	210	360	410	465	585	670	720	790	1000	1350	

AC Input

Phase	Three-phase+N+G
AC input range	380VAC±20%
Input frequency	45Hz~55Hz or 55Hz~65Hz

AC Output

Output voltage	inverter mode: 380Vac±3%;AC mode: 380Vac±20%;
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±0.1%
Over load capacity	AC mode:(100%~110%:10min;110%~130%:1min;>130%:1s;) inverter mode:(100%~110%:30s;110%~130%:10s;>130%:1s;)
Crest ratio	3:1max
Transfer time	<10ms
Waveform	Pure sine wave
Harmonic distortion	Linear load<3%;Non-linear load<5%
Balance load voltage	<±1%
Imbalance load voltage	<±5%
Efficiency	85%
Isolation type	output isolation

Battery

battery capacity	It depends on requirement, need to be big size battery models
battery number	Must match system DC voltage

Environmental conditions

Operating temperature	0°C-40°C (Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m(with increase of 100m,it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

Display	7-inch touch screen system
Communication interface	Standard: Rs232 Optional: Rs485

*The specifications, dimensions and materials are subject to change without further notice.

LVC Series MPPT SCC

Features

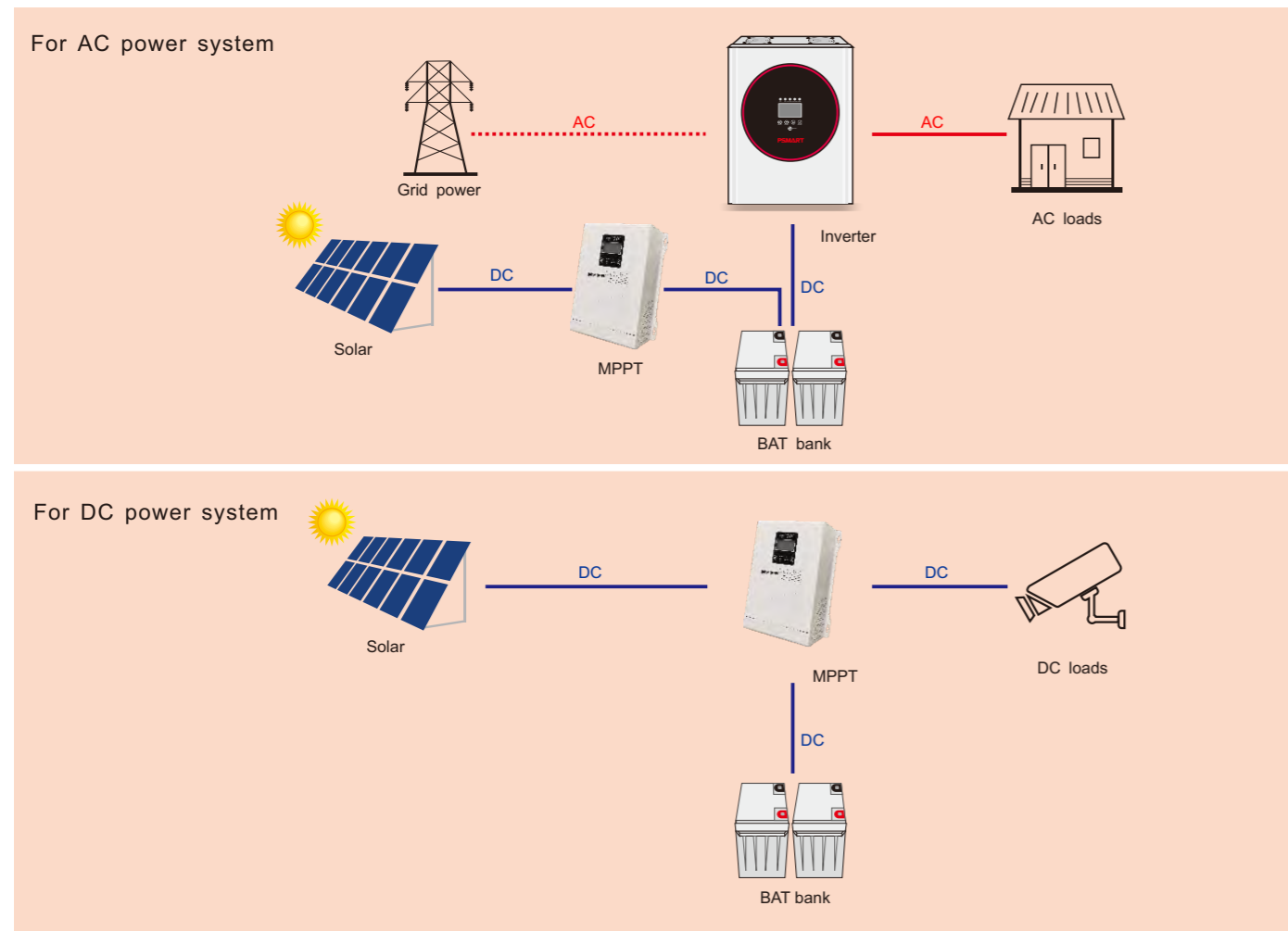
- Wide voltage range of PV input
- Three-stage charging technology
- Floating charge voltage settings
- Auto recognition 12Vdc/24Vdc/48Vdc
- DSP control technology with high efficiency
- Intelligent max power point tracking technology
- Protection
 - Short circuit protection
 - Over-current protection
 - Anti-reverse connection for PV and batteries



Application



Application diagram



Technical Parameters

Mode	LVC40A	LVC50A	LVC60A	LVC100A	LVC120A	LVC II 48V100A	LVC II 96V100A
Rated current	40A	50A	60A	100A	120A	100A	100A
Max current	41A	51A	61A	101A	121A	101A	101A
System voltage	12V/24V/48V (自动识别)					48V	96V
Size:(L*W*Hmm)	225*290*95			270*365*120		270*365*120	
package size (L*W*Hmm)	345*255*160			315*420*170		315*420*170	
N.W. (KG)	2.6			6.8		6.8	
G.W.(KG)	3			8.5		8.5	

Charge mode	MPPT Automatic maximum power point tracking		
Charge method	Three stage:Boost,Equalize,Float		
Start up time	≤10s		
Dynamic response time to recover	≤500us		
Quiescent dissipation	≤2W		
Efficiency	≥96.5%		
Identify range of battery voltage	12V: DC9V-15V 24V: DC18V-30V 48V: DC36V-60V		48V: DC36V-60V 96V: DC72V-120V
MPPT working Range	12V: DC20V-100V 24V: DC38V-150V 48V: DC65V-150V		48V: DC65V-250V 96V: DC145V-300V
Max PV input	12V: 360W/480W/600W/720W/1200W/1440W		48V:4800W 96V:9600W
	24V: 720W/960W/1200W/1440W/2400W/2880W		
	48V: 1440W/1920W/2400W/2880W/4800W/5760W		

Display	LCD+LED
Input polarity reverse connection protection	Yes
Output polarity reverse connection protection	Yes
Low voltage protection	Yes
High voltage protection	Yes
Short circuit protection	Yes
Over temperature protection	+85°C
Cooling method	air cooling, fan speed is regulated by temperature, when internal temperature is low; when the controller stops working, the fan stops working
Noisy	≤50dB
humidity	<95% (without condensing)
Height	0~3000M
Temperature	-20°C~+40°C
Storage temperature	-40°C~+70°C

*The specifications, dimensions and materials are subject to change without further notice.

MVC Series IGBT MPPT SCC

Features

- Lithium battery activation
 - Wide voltage range of PV input
 - Three-stage charging technology
 - Floating charge voltage settings
 - Auto recognition 12Vdc/24Vdc/48Vdc
 - DSP control technology with high efficiency
 - Intelligent max power point tracking technology
- Protection
- Short circuit protection
 - Over-current protection
 - Anti-reverse connection for PV and batteries

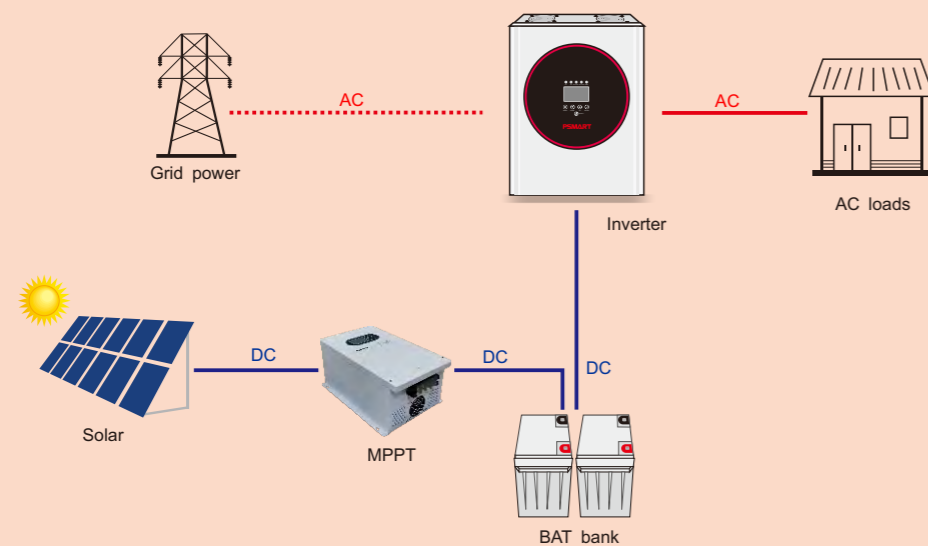


Application



Application diagram

For AC power system



Technical Parameters

Mode	MVC48150	MVC48180	MVC48200	MVC96150	MVC96180	MVC96200
Rated current	150A	180A	200A	150A	180A	200A
Max current	151A	181A	201A	151A	181A	201A
System voltage	48V			96V		
Size:(L*W*Hmm)	515*346*225			515*346*225		
package size (L*W*Hmm)	650*400*280			650*400*280		
N.W. (KG)	17			17.5		
G.W.(KG)	19.5			20		

Charge mode MPPT Automatic maximum power point tracking

Charge method Three stage:Boost,Equalize,Float

Start up time $\leq 10s$

Dynamic response time to recover $\leq 500\mu s$

Quiescent dissipation $\leq 2W$

Efficiency $\geq 96.5\%$

Identify range of battery voltage 48V : DC36V-60V

96V : DC72V-120V

MPPT working Range 48V : DC65V-250V

96V : DC130V-300V

Max PV input	7200W	8640W	9600W	14400W	17280W	19200W
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Display LCD+LED

Input polarity reverse connection protection Yes

Output polarity reverse connection protection Yes

Low voltage protection Yes

High voltage protection Yes

Short circuit protection Yes

Over temperature protection $+85^{\circ}C$

Cooling method air cooling, fan speed is regulated by temperature, when internal temperature is low; when the controller stops working, the fan stops working

Noisy $\leq 50dB$

humidity $< 95\%$ (without condensing)

Height 0~3000M

Temperature $-20^{\circ}C \sim +40^{\circ}C$

Storage temperature $-40^{\circ}C \sim +70^{\circ}C$

*The specifications, dimensions and materials are subject to change without further notice.

HVC Series IGBT MPPT SCC

Featrues

- Lithium battery activation
 - Wide voltage range of PV input
 - Three-stage charging technology
 - Floating charge voltage settings
 - Auto recognition 12Vdc/24Vdc/48Vdc
 - DSP control technology with high efficiency
 - Intelligent max power point tracking technology
- Protection
- Short circuit protection
 - Over-current protection
 - Anti-reverse connection for PV and batteries

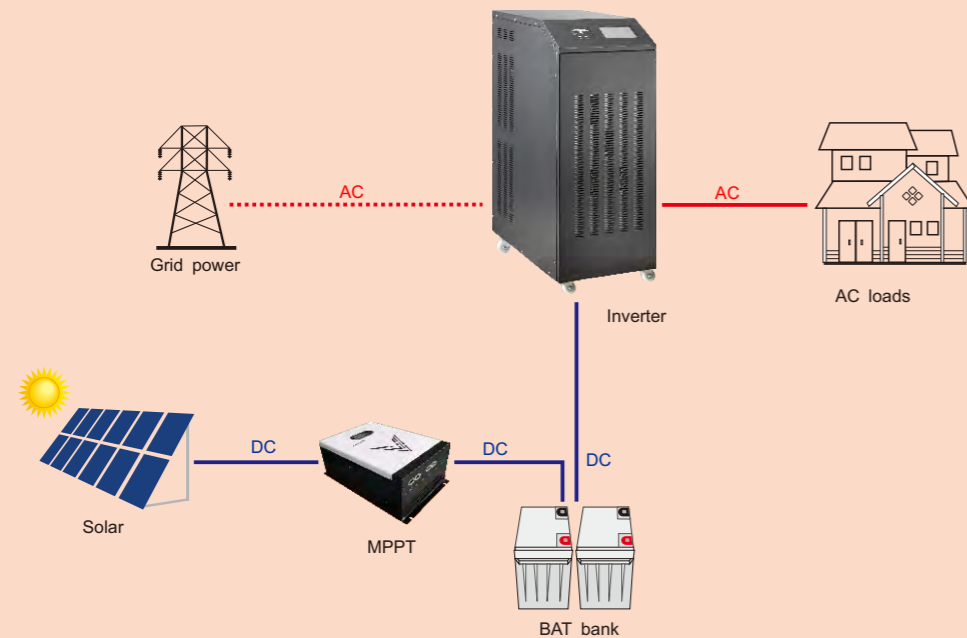


Application



Application diagram

For AC power system



Technical Parameters

Mode	HVC50A	HVC60A	HVC100A	HVC120A
Rated current	50A	60A	100A	120A
Max current	51A	61A	101A	121A
System voltage	192V/220V/240V/360V/384V			
Size:(L*W*Hmm)	700*490*185			
package size (L*W*Hmm)	790*580*325			
N.W. (KG)	37	37.5	38	38.5
G.W.(KG)	47	47.5	48	48.5

Charge mode MPPT Automatic maximum power point tracking

Charge method Three stage:Boost,Equalize,Float

Start up time ≤10s

Dynamic response time to recover ≤500us

Quiescent dissipation ≤2W

Efficiency ≥96.5%

Identify range of battery voltage
 192V: DC144V-240V 220V: DC160V-270V
 240V: DC180V-300V 360V: DC270V-450V
 384V: DC288V-480V

MPPT working Range
 192V: DC260V-450V 220V: DC260V-450V
 240V: DC280V-450V 360V: DC450V-750V
 384V: DC450V-750V

Max PV input
 192V: 10KW/12KW/20KW/24KW 220V: 11KW/13.2KW/22KW/26.4KW
 240V: 12KW/15KW/24KW/29KW 360V: 18KW/22KW/36KW/44KW
 384V: 20KW/23KW/39KW/46KW

Display LCD+LED

Input polarity reverse connection protection Yes

Output polarity reverse connection protection Yes

Low voltage protection Yes

High voltage protection Yes

Short circuit protection Yes

Over temperature protection +85°C

Cooling method air cooling, fan speed is regulated by temperature, when internal temperature is low; when the controller stops working, the fan stops working

Noisy ≤50dB

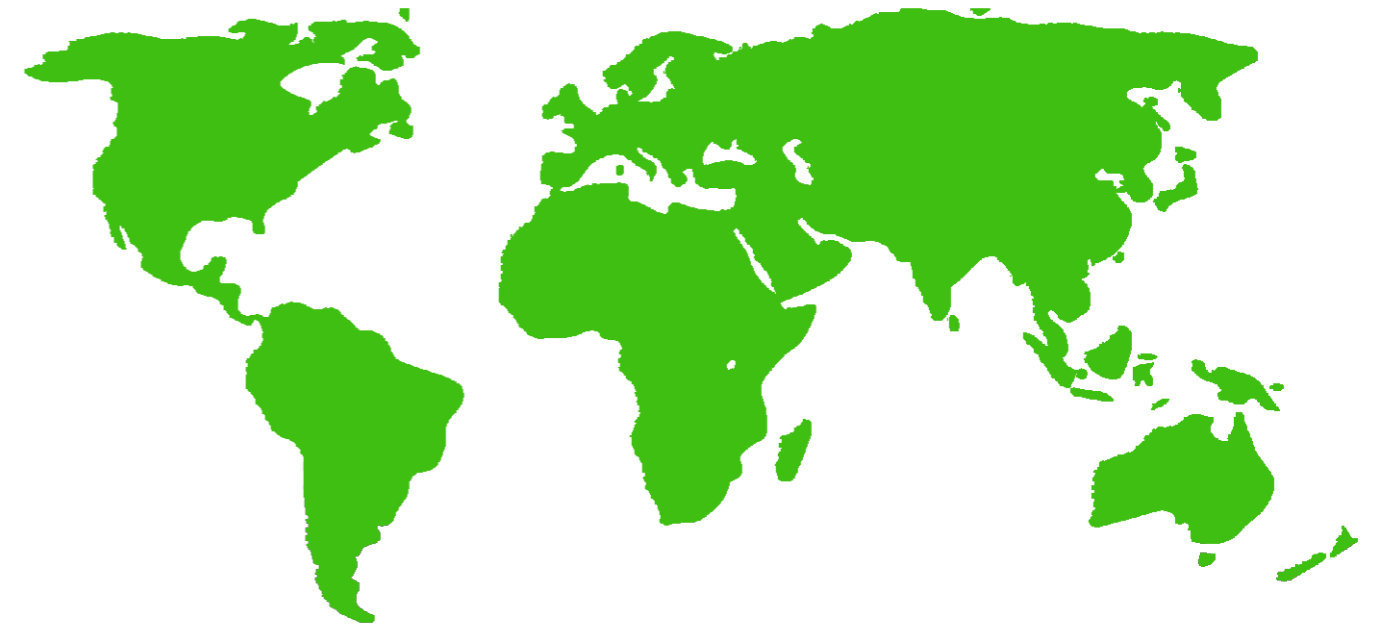
humidity <95% (without condensing)

Height 0~3000M

Temperature -20°C~+40°C

Storage temperature -40°C~+70°C

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