

# CPS SCE4.6~6KTL-120/EU

## Single Phase Residential Hybrid PCS



Hybrid PCS

### High Return

- Max efficiency 96.6%, Battery efficiency 94%
- Convenient to retrofit existing grid-connected systems increase the proportion of spontaneous use

### High Protection

- With BMS system to ensure high battery life
- Natural cooling design

### High Flexibility

- Compatible with lead-acid batteries and lithium battery
- Compatible with 500W+ modules

Model	CPS SCE4.6KTL-120EU	CPS SCE5KTL-120EU	CPS SCE6KTL-120EU
<b>Efficiency</b>			
Max. Efficiency (PV to Grid)		96.6%	
Max. Efficiency (Battery to Load)		94.0%	
<b>PV</b>			
Rated Input Voltage		360V	
Max. Input Voltage		550V	
Max. Input Power	9.0kW	9.0kW	9.0kW
Max. Input Current per MPPT		15A/15A	
Max.Short Circuit Current per MPPT		20A/20A	
No. of MPPTs		2	
No. of Strings per MPPT		1	
Start Input Voltage		90V	
PV Operating Voltage Range		70-520V	
<b>Battery</b>			
Battery Type		Lithium-ion/Lead-Acid	
Battery Voltage Range		40-60V	
Max. Charge/Discharge Current	120A/89.8A	120A/97.7A	120A/120A
Max. Charge/Discharge Power	6.0kW/4.6kW	6.0kW/5.0kW	6.0kW/6.0kW
<b>Grid</b>			
Max. Input Current	41.0A	41.0A	41.0A
Rated Output Apparent Power	4.6kVA	5.0kVA	6.0kVA
Max. Output Apparent Power	4.6kVA	5.5kVA	6.0kVA
Rated Output Voltage		220V/230V	
Rated Grid Frequency		50Hz/60Hz	
THDI		<3%(Rated Power)	
Power Factor		> 0.99 Rated power (Adjustable 0.8 Leading - 0.8Lagging)	
<b>Backup</b>			
Max. Output Current (On Grid)	22.0A	23.9A	28.6A
Rated Output Apparent Power (Off Grid)	4.6kVA	5.0kVA	6.0kVA
Max. Output Apparent Power (Off Grid)	4.6kVA	5.0kVA	6.0kVA
Peak Output Apparent Power	6kVA@1s	7.5kVA@1s	9kVA@1s
Rated Output Voltage		220V/230V	
Rated Output Frequency		50Hz/60Hz	
Max. Output Single Phase Apparent Power		/	
THDV		<3%(Rated Power)	
Switching Time		10ms	
<b>Protection</b>			
DC Switch		Support	
Anti-islanding Protection		Support	
AC Overcurrent Protection		Support	
AC Short Circuit Protection		Support	
PV String Reverse Protection		Support	
Surge Arrester		AC Type III, DC Type III	
AFCI		Option	
RSD Function		Option	
<b>General</b>			
Topology		High Frequency Isolation (Battery)	
IP Rating		IP65	
Cooling		Natural cooling	
Operating Temperature Range		-25°C-60°C	
Relative Humidity Range		0-100%	
Max. Operating Altitude		4000m	
Noise (Typical)		<35dB	
Dimensions (W*H*D)		515*487*175mm	
Weight		25kg	
Display		LED&APP	
Communication		RS485,CAN, WIFI/4G(optional)	
<b>Certification</b>			
Safety		IEC/EN 62109-1/2, IEC/EN 61000-6-1/2/3/4, IEC 62477, IEC 62040-1	
Grid Code		VDE4105,EN 50549-1,CEI 0-21,NTS Version 2.1,UNE 217001:2020,UNE 217002:202,G99, AS4777.2,SAA,NRS 097-2-1	

\* The certificates are for reference only. Please consult the local sales staff for detailed certification.

# Wi-Fi Communication Module



WiFi Module is an internal data logger in the Chint Power Systems PV monitoring series.

By connecting with inverter through RS232/RS485 interface (DB9 port), the WiFi Module can collect information of PV systems from inverter. With the integrated WiFi function, the WiFi Module can connect to router and transmit data to the web server, realizing remote monitoring for users.

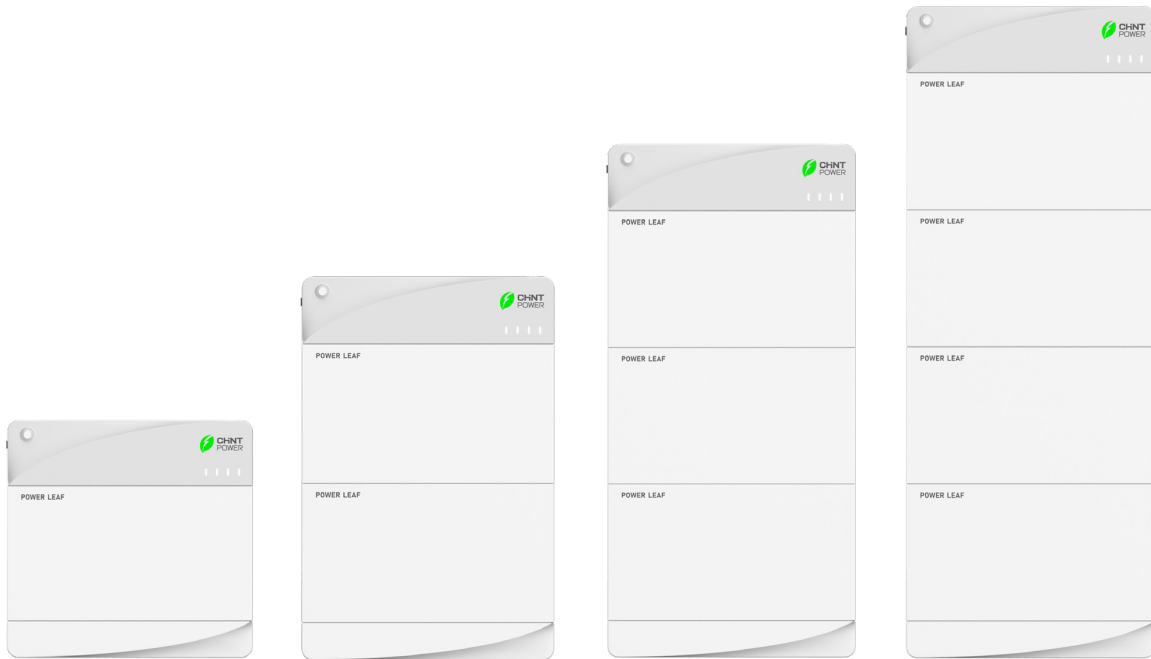
Users can check the runtime status of the device by checking the 3 LEDs on the module, Users can also upgrade the inverter firmware and setting parameters through web portal which connected by WiFi module.

- Supporting remote operation and maintenance functions including remote upgrading, parameter setting.
- Supporting direct connection configuration with APP, quickly and easily.
- Plug and play, quick installation.

Model Name	WiFi Module
<b>General</b>	
Supported device number	1
Display	LED*3
Configuration	APP
<b>Communication</b>	
RS485/RS232	1
WiFi	2.4GHz 802.11 b / g / n
<b>Power</b>	
Input Voltage	5Vdc
Power Consumption	2W
<b>Environmental</b>	
Operating Temperature	-20°C to +65°C
Working Humidity	≤95%
Protection class	IP65
<b>Mechanical Parameters</b>	
Dimensions ( W * H * D )	45mm * 80mm * 25mm
Installation	Plug-in type

# CPS ESSR-05/10/15/20KL1

## Low Voltage Residential Battery



Hybrid PCS

### Flexible

- Standard packs and control modules reduce inventory and design difficulties

### Safe

- Adapt to different installation environments with IP65 protection
- VDE 2510-50, IEC 63056

### Easy

- Reduce wiring work during pack install
- Automatically assign of BMS address

## Technical parameters



Model	CPS ESSR-05KL1	CPS ESSR-10KL1	CPS ESSR-15KL1	CPS ESSR-20KL1
<b>System Parameters</b>				
Power Control Module	CPS ECD51	CPS ECD51	CPS ECD51	CPS ECD51
Battery Extension Module	CPS EBM016100LF-L	CPS EBM016100LF-L	CPS EBM016100LF-L	CPS EBM016100LF-L
Rated Voltage(V)	51.2	51.2	51.2	51.2
Operating Voltage Range(V)	44.8~57.6	44.8~57.6	44.8~57.6	44.8~57.6
Max Charge/Discharge Current(A)	50	100	120	120
Max Power(kW)	2.5	5.0	6.0	6.0
Rated Charge/Discharge Energy(kWh)	5.12	10.24	15.36	20.48
Useable Battery Energy(kWh)	5.12	10.24	15.36	20.48
DOD	100%	100%	100%	100%
Weight(kg)	60	104	148	192
Dimension (W*D*H,mm)	670*178*650	670*178*1020	670*178*1390	670*178*1760
Product Parallel Extension(kWh)	Up to 61.44kWh	Up to 61.44kWh	Up to 61.44kWh	Up to 61.44kWh
Operating Temperature(°C)	Charge: 0~50 Discharge: -10~50			
Working Humidity	5~95%	5~95%	5~95%	5~95%
Protection	IP65	IP65	IP65	IP65
EOL	70%	70%	70%	70%
Communication	CAN	CAN	CAN	CAN
Certificates	IEC 62619, IEC 63056, IEC62040-1, VDE 2510-50, CE EMC, UKCA, UN 38.3			
Installation	Floor Mount & Wall Mount	Floor Mount & Wall Mount	Floor Mount & Wall Mount	Floor Mount & Wall Mount
Cooling	Natural	Natural	Natural	Natural
Altitude	≤3000	≤3000	≤3000	≤3000
<b>Battery Extension Module</b>				
Module	CPS EBM016100LF-L			
Rated Charge/Discharge Energy(kWh)	5.12			
Dimension (W*D*H,mm)	670*178*370			
Weight(kg)	44			
EOL(%)	70			
<b>Power Control Module</b>				
Model	CPS ECD51			
Operating Voltage Range(V)	44.8~57.6			
Max Charge/Discharge Current(A)	120			
Dimension (W*D*H,mm)	670*178*280			
Weight(kg)	8			

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# World Class Performance - GTM Award



The CPS performance is increasing year by year. 2013, Chint Power System Selected to be Top 10 of the Most Competitive PV Inverter Companies by GTM, the international well-known power and renewable energy research institute. GTM released the ranking list based on key qualitative metrics that measure each company's product quality, reliability, bankability, growth prospect alignment and integrated competitiveness. The ranking list shows a key assessment factor of the potential competitiveness in the future.

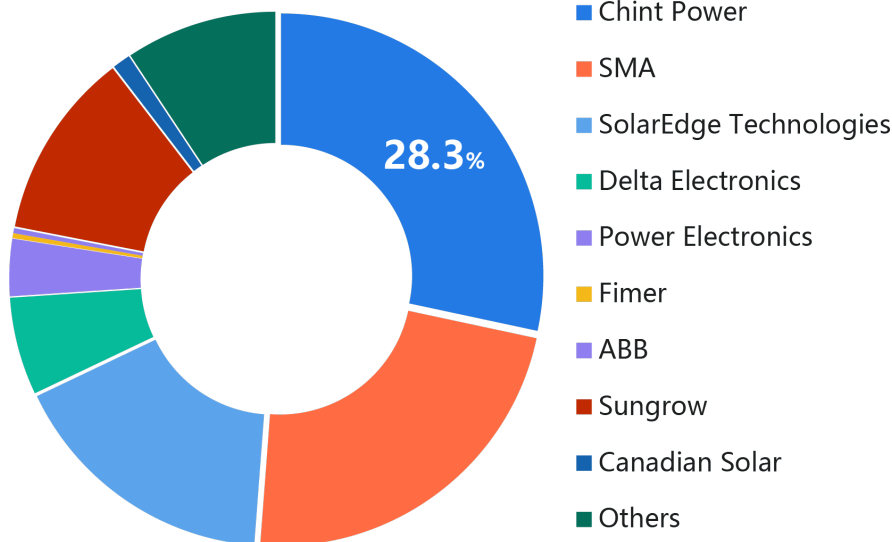
2014, According to the Total Shipment, Chint Power rank 13 of global PV Inverter market announced by GTM. Since 2015 to now, CPS three phase string inverter started dominate commercial segment of US market.

This year, Wood Mackenzie (GTM Research) released "Global solar PV and module-level power electronics inverter market share 2022". According to the report, CPS ranked 1st again in three phase string inverter shipments in the U.S.A with 28.3% of the market share 2022.

**GTM/ Wood Mackenzie:  
In 2022, CPS ranked 1st in three phase string inverter shipments in the U.S.A with 28.3% of the market share.**



## North America 2022 Inverter Shipment Rankings (MWac)



**North America Three Phase Inverter #1 Market Share 7 Consecutive Years**

Data source: Wood Mackenzie (GTM)

# Products Overview

## Hybrid PCS

Residential hybrid PCS



## Battery

Low/High voltage residential battery



## PV Inverters

Single-phase string inverters



Three-phase string inverters

