

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

## Single Phase Residential Hybrid PCS



### High Return

- Max efficiency 96.6%, Battery efficiency 93%
- 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 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%	
Eur. Efficiency (PV to Grid)		95.1%	
Max. Efficiency (Battery to Load)		93.0%	
<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/120A	120A/120A	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	6.9kVA@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	
Insulation Detection		Support	
Leakage Current Protection		Support	
<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*485*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.

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

## Low Voltage Residential Battery



### 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	51.2V	51.2V	51.2V	51.2V
Operating Voltage Range	44.8~57.6V	44.8~57.6V	44.8~57.6V	44.8~57.6V
Max Charge/Discharge Current	50A	100A	120A	120A
Max Power	2.5kW	5.0kW	6.0kW	6.0kW
Rated Charge/Discharge Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Useable Battery Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh
DOD	100%	100%	100%	100%
Weight	60kg	104kg	148kg	192kg
Dimension (W*D*H)	670*178*650mm	670*178*1020mm	670*178*1390mm	670*178*1760mm
Product Parallel Extension	Up to 61.44kWh	Up to 61.44kWh	Up to 61.44kWh	Up to 61.44kWh
Operating Temperature	Charge: 0~50°C Discharge: -10~50°C			
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	≤3000m	≤3000m	≤3000m	≤3000m
<b>Battery Extension Module</b>				
Module	CPS EBM016100LF-L			
Rated Charge/Discharge Energy	5.12kWh			
Dimension (W*D*H)	670*178*370mm			
Weight	44kg			
EOL	70%			
<b>Power Control Module</b>				
Model	CPS ECD51			
Operating Voltage Range	44.8~57.6V			
Max Charge/Discharge Current	120A			
Dimension (W*D*H)	670*178*280mm			
Weight	8kg			

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