LIGHTING THE WORLD WITH GREEN/ENERGY

PRODUCT BROCHURE



CHNT POWER

CHINT POWER SYSTEMS

Introduction

ABOUT CHINT ·····
ABOUT Chint Power Systems
GTM Award & Bloomberg·····
Products Overview ·····

Hybrid System

ECH3~6K-SML-EU
ECH8~20K-TH-EU
CPS ESSR-05/10/15/20KL1
CPS ESSR-05/10/15/20KH1

Inverter

CPS SCA2~3.6KTL-PS1/EU·····
CPS SCA4.6~6KTL-PSM1/EU ·····
SCA5~25K-T-EU
SCA30~36K-T-EU
SCA50/60K-T-EU
SCA100/125K-T-EU
SCH333~350K-T-EU

System & Monitoring

CPS Remote Monitoring Platform ·····
CPS App
Wi-Fi Communication Module ·····
Chint Power Smart COMBOX ·····
CPS Flex Gateway

Contents

• •	 •	• •	•	•	• •	 •	• •	•	•	•	•	•	• •		•	•	•	• •		•	• •	 •	•	•	• •		•	•	•	• •	•	• •	•	•	• •		•	• •	 •		• •	•	0	1
					• •		• •	•			-	•	• •	 	•		•	• •		•					• •	• •		•	•	• •	•			•	• •				 •	•••		•	0	2
					• •		• •	•		•	•	•	• •	 	•		•	• •		•			•	•	• •	• •		•	•	• •	•			•	• •	• •		•••	 •	• •		•	0	3
• •					• •		•	•		•	•	•	• •	 			•			•			•	•	•••			•	•	• •	•			•	• •				 •	•••	• •	•	0	4

 05
 07
 09
 11

•	• •		• •	• •		• •		•	• •	•	•	• •	 •	•	•	•	•	•	• •	• •			•	•	•	• •	• •		•	•	• •	• •	•	•••	•	•	•••	• •	•	• •	•		• •		• 1	13	3
		•				•••		•			•				•			•		• •	 		•			• •				•	• •	• •		•••			• •	• •				•	• •		• 1	1	ō
		•			•									•	•						 		•			• •					• •		•	• •		•				 		•		•	·1	17	7
		•				•••		•																		• •					•			•••			•••	• •				•			• 1	19	9
		•												•	•						 					• •					•			• •								•			.2	2	1
		•												•	•						 					• •					•			• •		•						•			.2	2:	3
		•																			 					• •					• •											•			.2	2!	5

•		•	•••	•	•••		• •		• •		•	• •		•	• •		•			•••		•••			• •	• •	-	•••	-	 •	 	-2	27
•				•							•	•••			• •		•												-	 •	 -	-2	28
											•																		-			·2	29
																															 -	.3	30
																																.3	31

ABOUT CHINT

CHINT Today



Introduction to CHINT Group

Founded in 1984, CHINT Group Co., Ltd. (hereinafter referred to as "CHINT") is a global leading smart energy solutions provider. Over the past 40 years since its establishment, CHINT has always focused on industry and brand building, deeply implemented the strategy of "Industrialization. Technologization. Internationalization. Digitalization and Platformization", and formed three major segments of "Green Energy, Intelligent Electric and Smart Low-carbon" and two major platforms of "CHINT International Platform and Scitech Innovation Incubation Platform", and endeavored to build up "211X" Management Capabilities, including Intelligent Electric and New Energy Industry Cluster Capabilities, Regional Localization Capability, Middle and Backstage Integration Capability, and Innovation Incubation Capability. Its business covers more than 140 countries and regions, with 4 global R&D centers, 6 international marketing regions, over 25 domestic and international manufacturing bases, and a global workforce of over 50,000 employees. In 2023, CHINT's operating revenue reached USD 22.1 billion, and CHINT has been listed among the Top 500 Chinese Enterprises for more

than 20 consecutive years. CHINT Electrics (stock code: 601877) is the first A-share listed company in China with LV electrical appliances as its main business.

CHINT continuously strengthens its "One Cloud & Two Nets" strategy, with "CHINT Cloud" as the carrier of intelligent technology and data applications and takes the lead in building the Energy Internet of Things (EloT) and Industrial Internet of Things (IloT) platforms, striving to be the explorer, advocator, and practitioner in the world of low-carbon development. With the "Green Energy, Smart Network, Load Reduction, and New Storage" service systems, CHINT sets up a platform-based enterprise, and builds a regional smart energy industry ecosystem. It provides a total energy solutions package for public institutions, industrial, commercial, and end users to achieve energy conservation, carbon reduction, and accelerate the energy transition.

ABOUT Chint Power Systems

Founded in July 2009, Chint Power mainly provides products and solutions for the renewable energy and power industries. Chint Power focuses on international and domestic renewable energy (photovoltaics and energy storage) field, with two research and development centers and five manufacturing bases around the world. The company's products have obtained UL, IEC, GB and other developed country grid certifications, and are sold to 30 countries and regions around the world, such as the United States, Japan, Germany, South Korea, and Brazil. The main clients include international and domestic well-known enterprises such as Tesla, Hyundai, National Power Investment Corporation, Three Gorges Group, China Resources Power, China Power Construction Corporation, Shanghai Electric, etc.

The company is a national high-tech enterprise. It has been recognized by the Ministry of Industry and Information Technology as the champion of invisible manufacturing in the field of photovoltaic equipment in Shanghai. The three-phase string photovoltaic inverter products have had a top market share in the North American market for eight consecutive years since 2015, and have the #1 market share in the Korean market since 2021. Ranking first globally in the 2023 Bloomberg photovoltaic inverter financing value report.



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.



TOP1 Bankable Inverter Brand Bloomberg 2023



Products Overview

Hybrid PCS







PV Inverters





Three-phase string inverters







	-	
Ø 2000		
1.14/1-		
KVVII		



ECH3~6K-SML-EU Single Phase Residential Hybrid Inverter



High Return

- Max efficiency 97.4%, Battery efficiency 95.1%
- 5 basic modes to meet the needs of various scenarios
- Smart TOU mode, further increasing revenue

High Capability

- Up to 12kW output power in backup port with grid supply
- Save cost of separating loads, freedom of electricity in case of power failure
- Supports SG Ready heat pump and smart load control

High Protection

- Standard AFCI to protect your home
- Built-in Type II SPD on DC side
- IP66 protection for challenging environments

International and a state of the	Model	ECH3K-SML-EU	ECH3.6K-SML-EU	ECH4,6K-SML-EU	ECH5K-SML-EU	ECH6K-SML-EU
Max. Eleitanony (PV to Grid) 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 97 40% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 98 10% 90 00V 600V 60V 60V 60V 60V 60V 60V 60V 60V <th< td=""><td>Efficiency</td><td></td><td></td><td></td><td></td><td></td></th<>	Efficiency					
Bit Information (PV to Grief) 96.50% 96.50% 96.50% 96.50% 96.70% </td <td>Max. Efficiency (PV to Grid)</td> <td>97.40%</td> <td>97.40%</td> <td>97.40%</td> <td>97.40%</td> <td>97.40%</td>	Max. Efficiency (PV to Grid)	97.40%	97.40%	97.40%	97.40%	97.40%
Max. Engl Openation (Eastery to Load) 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.10% 95.00% 600V 60V 60V 60V 6	Eur.Efficiency (PV to Grid)	96.50%	96.50%	96.80%	96.80%	96.70%
PV Servi SERV SERV <th< td=""><td>Max. Efficiency (Battery to Load)</td><td>95.10%</td><td>95.10%</td><td>95.10%</td><td>95.10%</td><td>95.10%</td></th<>	Max. Efficiency (Battery to Load)	95.10%	95.10%	95.10%	95.10%	95.10%
Rate Input Voltage SB0V SB0V <td>PV</td> <td></td> <td></td> <td></td> <td></td> <td></td>	PV					
Max. Input Voltage 000V 1008W 1000V 100V 40-65V 80-550V 80-550	Rated Input Voltage	360V	360V	360V	360V	360V
Max. Input Driver 9.00W 9.88W 10.80W 10.80W 10.80W 10.80W Max. Input Current Per MPPT 20/20A	Max. Input Voltage	600V	600V	600V	600V	600V
Max. Reput Current per MPPT 19/16A 10/16A 10/16A <th10 16a<="" th=""> <th10 16a<="" th=""></th10></th10>	Max. Input Power	9.00kW	9.68kW	10.60kW	10.80kW	10.80kW
Max. Short Chruit Current per MPPT 2020A 20 2	Max. Input Current per MPPT	16/16A	16/16A	16/16A	16/16A	16/16A
No. del Shing per MPPT 2 2 2 2 2 Sol del Shing per MPPT 1 <td>Max.Short Circuit Current per MPPT</td> <td>20/20A</td> <td>20/20A</td> <td>20/20A</td> <td>20/20A</td> <td>20/20A</td>	Max.Short Circuit Current per MPPT	20/20A	20/20A	20/20A	20/20A	20/20A
No. d Strings per MFPT 1 1 1 1 1 1 1 Start Input Voltage Range 80-550V	No. of MPPTs	2	2	2	2	2
Start Input Voltage Range 100V 100V 100V 100V 100V Battery YP BV-550V B0-550V B0-550V <t< td=""><td>No. of Strings per MPPT</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></t<>	No. of Strings per MPPT	1	1	1	1	1
PV Opensing Voltage Range 80-550V 80-550V 80-550V 80-550V Battery Utilsum-onLaad-Add 5000 40-60V 4	Start Input Voltage	100V	100V	100V	100V	100V
Battery Type U Lithium-ion.fl.ead-Acid Battery Yorkinge Range 40-60V 40-60V 40-60V 40-60V 40-60V Max. Charge/Discharge Current 120/05A 120/15A 120/12A 120/12A Max. Charge/Discharge Power 6.03.0KW 6.04.6KW	PV Operating Voltage Range	80-550V	80-550V	80-550V	80-550V	80-550V
Battery Vilage RangeImage: Discharge CarrentUmbase: Discharge CarrentDischarge Carr	Battery					
Battery Voltage Range 40-60V 40-60V 40-60V 40-60V 40-60V 40-60V Max. Charge/Discharge Power 6.0/3.0kW 6.0/3.6kW 6.0/4.6kW 6.0/3.0kW 6.0/4.0kW	Battery Type			Lithium-ion/Lead-Acid		
Max. ChargeDischarge Current 120/80A 120/75A 120/85A 120/120A 120/120A Max. ChargeDischarge Power 6.0/3.0kW 6.0/3.0kW 6.0/3.0kW 6.0/4.6kW 6.0/5.0kW 6.0/6.0kW Max. Input Current S4.6A S6.0V/A E.00V/A E.00V/A <the.00v a<="" th=""> E.00V/A <the.00v <="" td=""><td>Battery Voltage Range</td><td>40-60V</td><td>40-60V</td><td>40-60V</td><td>40-60V</td><td>40-60V</td></the.00v></the.00v>	Battery Voltage Range	40-60V	40-60V	40-60V	40-60V	40-60V
Max. Charge/Discharge Power 6.0/3 KW 6.0/4 KW 6.0/4 KW 6.0/5 KW 7.0/5 KW <th7.0 5="" kw<="" th=""> 7.0/5 KW 7.0</th7.0>	Max. Charge/Discharge Current	120/60A	120/75A	120/95A	120/120A	120/120A
Grid S4.6A S4.6A <th< td=""><td>Max. Charge/Discharge Power</td><td>6.0/3.0kW</td><td>6.0/3.6kW</td><td>6.0/4.6kW</td><td>6.0/5.0kW</td><td>6.0/6.0kW</td></th<>	Max. Charge/Discharge Power	6.0/3.0kW	6.0/3.6kW	6.0/4.6kW	6.0/5.0kW	6.0/6.0kW
Max. Input Current 54.6A 64.0VA 6.0VA 6.0VA Max Output Apparent Power 3.3VA 4.0VA 4.6VA 5.5VA 6.0VA 6.0VA Rated Output Voitage Max.0va 5.8VA 6.0VA 6.0VA Power Factor > 0.9 Rated power (Adjustable 0.8 Lagging) Backap Port Sta.6A 54.6A 54.6A Max. Output Apparent Power Off Grid 3.0VA 3.8VA 4.6VA 5.6VA 6.0VA Rated Output Voitage 220/23V	Grid					
Max. Input Apparent Power 12.0kVA 12.0kVA 12.0kVA 12.0kVA Rated Output Apparent Power 3.00kVA 3.8kVA 4.6kVA 5.0kVA 6.0kVA Rated Output Votage Range	Max. Input Current	54.6A	54.6A	54.6A	54.6A	54.6A
Rated Output Apparent Power3.0kVA3.0kVA4.0kVA4.0kVA5.0kVA6.0kVAMax. Output Apparent Power3.3kVA4.0kVA4.6kVA5.5kVA6.0kVARated Output Voltage Range	Max. Input Apparent Power from Utility Grid	12.0kVA	12.0kVA	12.0kVA	12.0kVA	12.0kVA
Max. Output Aparent Power Rated Output Voltage Range3.8kVA4.0kVA4.6kVA5.6kVA6.0kVARated Output Voltage Range	Rated Output Apparent Power	3.00kVA	3.68kVA	4.60kVA	5.00kVA	6.00kVA
INVFE-20200VRated Gid FrequencyINVFE-2001/2Solt Action 1 Solt Solt Action 2 Soluport 1 Soluport 2 Soluport	Max. Output Apparent Power	3.3kVA	4.0kVA	4.6kVA	5.5kVA	6.0kVA
Rated Gird Frequency 176-276V(Algustable) Prover Factor <2%(Linear load)	Rated Output Voltage			L/N/PE~220/230V		
Rated Grid Frequency OHP EVELUE THDI SHE de Jower 32% (Linear load) Power Factor > 0.99 Rated Jower (Adjustable 0.8 Lagding) - 0.8 Lagding) Backup Port SHE de Jower (Adjustable 0.8 Lagding) - 0.8 Lagding) Backup Port SHE de Jower (Adjustable 0.8 Lagding) - 0.8 Lagding) Backup Port SHE de Jower (Adjustable 0.8 Lagding) - 0.8 Lagding) Backup Port SHE de Jower (Adjustable 0.8 Lagding) - 0.8 Lagding) Max. Output Apparent Power Off Grid 3.0 KVA 12.0 KVA 12.0 KVA 12.0 KVA 6.0 KVA Rated Output Voltage 220/230V 220/2	Rated Output Voltage Range			176-276V(Adjustable)		
THDI - 299 Rated power (Adjustable 0.8 Lawding) Power Factor > 0.99 Rated power (Adjustable 0.8 Lawding) Backup Port Max. Output Current On Grid 54.6A 54.6A 54.6A 54.6A 54.6A Max. Output Apparent Power Off Grid 3.00KVA 12.0KVA	Rated Grid Frequency			50Hz/60Hz		
Prover Factor > 0.99 Rated power (Adjustable 0.8 Leading - 0.8Lagging) Backup Port Max. Output Current On Grid 54.6A 54.6A 54.6A 54.6A 54.6A Max. Output Apparent Power Off Grid 12.0kVA 12.0kVA 12.0kVA 12.0kVA 12.0kVA 12.0kVA Max. Output Apparent Power Off Grid 3.3kVA 4.0kVA 4.6kVA 5.5kVA 6.0kVA Max. Output Voltage 220/230V 220/23	THDI			<2%(Linear load)		
Image: Second S	Power Factor		> 0.99 Rated pov	ver (Adjustable 0.8 Lead	ling - 0.8Lagging)	
Max. Output Current On Grid 54.6A 54.6A 54.6A 54.6A 54.6A 54.6A Max. Output Apparent Power Off Grid 12.0kVA	Backup Port					
Max. Output Apparent Power On Grid 12.0kVA 6.0kVA	Max. Output Current On Grid	54.6A	54.6A	54.6A	54.6A	54.6A
Rated Output Apparent Power Off Grid 3.00kVA 3.88kVA 4.60kVA 5.0kVA 6.00kVA Max. Output Apparent Power Off Grid 3.3kVA 4.0kVA 4.6kVA 5.5kVA 6.0kVA Rated Output Voltage 220/230V 220/230V </td <td>Max. Output Apparent Power On Grid</td> <td>12.0kVA</td> <td>12.0kVA</td> <td>12.0kVA</td> <td>12.0kVA</td> <td>12.0kVA</td>	Max. Output Apparent Power On Grid	12.0kVA	12.0kVA	12.0kVA	12.0kVA	12.0kVA
Max. Output Apparent Power Off Grid3.3kVA4.0kVA4.6kVA5.5kVA6.0kVARated Output Voltage220/230V220/230V220/230V220/230V220/230V220/230VRated Output Frequency50H2/EOHZ50H2/EOHZ50H2/EOHZTHDV	Rated Output Apparent Power Off Grid	3.00kVA	3.68kVA	4.60kVA	5.00kVA	6.00kVA
Rated Output Voltage220/230V220/230V220/230V220/230V220/230VRated Output Prequency50Hz/60HzTHDV	Max. Output Apparent Power Off Grid	3.3kVA	4.0kVA	4.6kVA	5.5kVA	6.0kVA
Rated Output Frequency50H2/60H2;THDVCProtectionCProtectionSupportSupportSupportSupportDC Switching ProtectionSupportSupportSupportSupportSupportAnti-islanding ProtectionSupportSupportSupportSupportSupportAC Overcourrent ProtectionSupportSupportSupportSupportSupportAC Overcourrent ProtectionSupportSupportSupportSupportSupportSurge Arrese ProtectionSupportSupportSupportSupportSupportInsulation DetectionSupportSupportSupportSupportSupportInsulation DetectionSupportSupportSupportSupportSupportRSD FunctionSupportSupportSupportSupportSupportRSD FunctionOptionOptionOptionOptionOptionGeneralH166IP66IP66IP66OrologyH166IP66IP66IP66IP66IP66OptionOptionOptionOptionOptionOptionOptionOptionNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingOpticalingCorecting Altitude </td <td>Rated Output Voltage</td> <td>220/230V</td> <td>220/230V</td> <td>220/230V</td> <td>220/230V</td> <td>220/230V</td>	Rated Output Voltage	220/230V	220/230V	220/230V	220/230V	220/230V
THDV Switching Time 10ms Protection 10ms DC Switch Support	Rated Output Frequency			50Hz/60Hz		
Switching Time 10ms Protection Support Support <td>THDV</td> <td></td> <td></td> <td><2%(Linear load)</td> <td></td> <td></td>	THDV			<2%(Linear load)		
ProtectionDC SwitchSupportSupportSupportSupportSupportSupportAC Overcurrent ProtectionSupportSupportSupportSupportSupportSupportAC Overcurrent ProtectionSupportSupportSupportSupportSupportSupportAC Overcurrent ProtectionSupportSupportSupportSupportSupportSupportV String Reverse ProtectionSupportSupportSupportSupportSupportSurge Arrester	Switching Time			10ms		
DC SwitchSupportSupportSupportSupportSupportSupportAnti-islanding ProtectionSupportSupportSupportSupportSupportSupportAC Overvoltage ProtectionSupportSupportSupportSupportSupportSupportPV String Reverse ProtectionSupportSupportSupportSupportSupportSupportSurge Arrester $$	Protection					
Anti-islanding Protection Support Supp	DC Switch	Support	Support	Support	Support	Support
AC Overcurrent ProtectionSupportSupportSupportSupportSupportSupportAC Overvoltage ProtectionSupportSupportSupportSupportSupportSupportSupportPV String Reverse ProtectionSupportSupportSupportSupportSupportSupportSupportInsulation DetectionSupportSupportSupportSupportSupportSupportSupportLeakage Current ProtectionSupportSupportSupportSupportSupportSupportAFCISupportSupportSupportSupportSupportSupportRSD FunctionOptionOptionOptionOptionOptionOptionGeneralTopologyIFe6IP66IP66IP66IP66CoolingNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingOperating Temperature Range-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°CMax. Operating Altitude	Anti-islanding Protection	Support	Support	Support	Support	Support
AC Overvoltage Protection Support Supp	AC Overcurrent Protection	Support	Support	Support	Support	Support
PV String Reverse ProtectionSupportSupportSupportSupportSupportSurge Arrester	AC Overvoltage Protection	Support	Support	Support	Support	Support
Surge ArresterAC Type II, DC Type IIInsulation DetectionSupportSupportSupportSupportSupportLeakage Current ProtectionSupportSupportSupportSupportSupportAFCISupportSupportSupportSupportSupportSupportAFCISupportSupportSupportSupportSupportSupportRSD FunctionOptionOptionOptionOptionOptionOptionGeneralHigh Frequency Isolation (Battery)IP RatingIP66IP66IP66IP66IP66CoolingNatural coolingNatural coolingNatural coolingNatural coolingOperating Temperature Range-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°CRelative Humidity Range0-100%0-100%0-100%0-100%Max. Operating Altitude460*460*203mm460*460*203mm460*460*203mmNoise (Typical)<35dB	PV String Reverse Protection	Support	Support	Support	Support	Support
Insulation DetectionSupportSupportSupportSupportSupportSupportLeakage Current ProtectionSupportSupportSupportSupportSupportSupportAFCISupportOptionOptionOptionOptionOptionOptionRSD FunctionOptionOptionOptionOptionOptionOptionGeneralTequeralTequeralHigh Frequency Isolation (Battery)IP66IP66IP66CoolingNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingOperating Temperature Range-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°CRelative Humidity Range0-100%0-100%0-100%0-100%0-100%Noise (Typical)<35dB	Surge Arrester		-	AC Type II, DC Type II	-	-
Leakage Current Protection Support Supp	Insulation Detection	Support	Support	Support	Support	Support
AFCISupportSupportSupportSupportSupportSupportRSD FunctionOptionOptionOptionOptionOptionOptionGeneralTopologyHigh Frequency Isolation (Battery)IP RatingIP66IP66IP66IP66IP66CoolingNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingOperating Temperature Range-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°CRelative Humidity Range0-100%0-100%0-100%0-100%0-100%Max. Operating Altitude	Leakage Current Protection	Support	Support	Support	Support	Support
RSD FunctionOptionOptionOptionOptionOptionGeneralTopologyHigh Frequency Isolation (Battery)IP RatingIP66IP66IP66IP66IP66CoolingNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingOperating Temperature Range-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°CRelative Humidity Range0-100%0-100%0-100%0-100%0-100%Max. Operating Altitude	AFCI	Support	Support	Support	Support	Support
General Topology High Frequency Isolation (Battery) IP Rating IP66 IP606 IP60'F60'C20'F60	RSD Function	Option	Option	Option	Option	Option
TopologyHigh Frequency Isolation (Battery)IP RatingIP 66IP 66IP 66IP 66IP 66IP 66CoolingNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingNatural coolingOperating Temperature Range-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°C-25°C-60°CRelative Humidity Range0-100%0-100%0-100%0-100%0-100%0-100%Max. Operating Altitude	General					
IP Rating IP66 Natural cooling Natur	lopology		High	Frequency Isolation (Ba	attery)	17.44
Cooling Natural cooling <td>IP Rating</td> <td>IP66</td> <td>IP66</td> <td>IP66</td> <td>IP66</td> <td>IP66</td>	IP Rating	IP66	IP66	IP66	IP66	IP66
Operating Temperature Range 25°C-60°C -25°C-60°C 25°C-60°C -25°C-6	Cooling	Natural cooling	Natural cooling	Natural cooling	Natural cooling	Natural cooling
Relative Humidity Range 0-100% 0-10% 0-10% 0-10% 0-10% 0-10% 0-10% 0-10% 0-10% <t< td=""><td>Operating Temperature Range</td><td>-25°C-60°C</td><td>-25°C-60°C</td><td>-25°C-60°C</td><td>-25°C-60°C</td><td>-25°C-60°C</td></t<>	Operating Temperature Range	-25°C-60°C	-25°C-60°C	-25°C-60°C	-25°C-60°C	-25°C-60°C
Max. Operating Altitude 4000m Noise (Typical) <35dB <35dB <td>Relative Humidity Range</td> <td>0-100%</td> <td>0-100%</td> <td>0-100%</td> <td>0-100%</td> <td>0-100%</td>	Relative Humidity Range	0-100%	0-100%	0-100%	0-100%	0-100%
Noise (Typical) <35dB	Max. Operating Altitude	0.5.15	0.5 IE	4000m	05.15	0.5 IE
Dimensions (WFH-D) 460*460*203mm 460		<35dB	<35dB	<35dB	<35dB	<35dB
weight 26kg <	Dimensions (W ⁺ H ⁺ D)	460*460*203mm	460°460*203mm	460°460°203mm	460°460°203mm	460*460*203mm
Display LED&APP LED&APP <t< td=""><td>vveight</td><td>26kg</td><td>26kg</td><td>26kg</td><td>26kg</td><td>26kg</td></t<>	vveight	26kg	26kg	26kg	26kg	26kg
Communication RS485,CAN, WIFI/4G(optional) Certification IEC/EN62109-1&2, IEC/EN61727 / 62116, IEC/EN61000-6-1/2/3		LED&APP	LED&APP		LED&APP	LED&APP
Safety IEC/EN62109-1&2, IEC/EN62477-1, IEC/EN61727 / 62116, IEC/EN61000-6-1/2/3	Communication		RS	485,CAN, WIFI/4G(optio	onal)	
Saretv IEC/EN62109-1&2, IEC/EN62477-1, IEC/EN61727762116, IEC/EN61000-6-1/2/3						4/0/0
	Salety	IEC/E	EN02109-1&2, IEC/EN6	24/7-1, IEC/EN61727/	02116, IEC/EN61000-6	-1/2/3
Gild Code VDE 4105, CEI 0-21, EN 50549-1, PTPIREE+NCRIG, NTS 2.1, 217001, 217002		VDE	4105, CEI 0-21, EN 50	549-1, PIPIREE+NCR	G, NTS 2.1, 21/001, 21	1002

Hybrid System

ECH8~20K-TH-EU Three Phase Residential Hybrid Inverter



High Return

- Max efficiency 98.3%, Battery efficiency 97.5%
- 5 basic modes to meet the needs of various scenarios
- Smart TOU mode, further increasing revenue

High Capability

Up to 40kW output power in backup port with grid supply **High Protection**

environments

home

Standard AFCI to protect your

Built-in Type II SPD on DC side

IP66 protection for challenging

- Save cost of separating loads, freedom of electricity in case of power failure
- Supports SG Ready heat pump and smart load control
- Three-phase unbalance capacity, single-phase up to 50% of rated power

Model						
Efficiency	ECHON-INFEU	ECHIOK-IH-EU	Lonizk-In-EU	Lonisk-In-EU	ECHION-TH-EU	EGHZOK-IH-EU
Max Efficiency (D) (to Crid)	09.000/	00.200/	00.200/	09.200/	08.200/	09.200/
	98.20%	98.30%	98.30%	98.30%	98.30%	98.30%
Eur.Efficiency (PV to Grid)	97.50%	97.60%	97.70%	97.70%	97.70%	97.70%
Max. Efficiency (Battery to Load)	97.50%	97.50%	97.80%	97.80%	97.80%	97.80%
PV						
Rated Input Voltage	600V	600V	600V	600V	600V	600V
Max. Input Voltage	1100V	1100V	1100V	1100V	1100V	1100V
Max. Input Power	12.80kW	16.00kW	19.20kW	24.00kW	28.80kW	30.00kW
Max. Input Current per MPPT	16A/16A/16A/16A	16A/16A/16A/16A	16A/16A/16A/16A	16A/16A/16A/16A	16A/16A/16A/16A	16A/16A/16A/16A
Max.Short Circuit Current per MPPT	24A/24A/24A/24A	24A/24A/24A/24A	24A/24A/24A/24A	24A/24A/24A/24A	24A/24A/24A/24A	24A/24A/24A/24A
No. of MPPTs	4	4	4	4	4	4
No. of Strings per MPPT	1	1	1	1	1	1
Start Input Voltage	160V	160V	160V	160V	160V	160V
PV Operating Voltage Range	160-1000V	160-1000V	160-1000V	160-1000V	160-1000V	160-1000V
Battery						
Battery Type			Lithium-ior	/Lead-Acid		
Battery Voltage Range	160-600V	160-600V	160-600V	160-600V	160-600V	160-600V
Max. Charge/Discharge Curren	50A/50A	50A/50A	50A/50A	50A/50A	50A/50A	50A/50A
Max. Charge/Discharge Power	20kW/8kW	20kW/10kW	20kW/12kW	20kW/15kW	20kW/18kW	20kW/20kW
Grid						
Max. Input Current	60.8A	60.8A	60.8A	60.8A	60.8A	60.8A
Rated Output Apparent Power	8.0kVA	10.0kVA	12.0kVA	15.0kVA	18.0kVA	20.0kVA
Max. Output Apparent Power	8.8kVA	11 0kVA	13.2kVA	16.5kVA	19.8kVA	20.0kVA
			3W / N / PE 3W / N / PE	E; 220 / 380	10101011	20101111
Rated Output Voltage			3W / N / PE	E; 240 / 415		
Rated Grid Frequency			50Hz	/60Hz		
ТНОІ			<2% (Rat	ed Power)		
Power Factor		> 0.99 Ra	ated power (Adjusta	ble 0.8 Leading - 0.8	8Lagging)	
Backup Port						
Max, Output Current (On Grid)	60.8A	60.8A	60.8A	60.8A	60.8A	60.8A
Max, Output Apparent Power (On Grid)	40.0kVA	40.0kVA	40.0kVA	40.0kVA	40.0kVA	40.0kVA
Max. Output Apparent Power (Off Grid)	8.8kVA	11.0kVA	13.2 kVA	16.5kVA	19.8kVA	22.0kVA
Peak Output Apparent Power	22 @60s kVA	22 @60s kVA	22 @60s kVA	22 @60s kVA	22 @60s kVA	22 @60s kVA
Rated Output Voltage		22 @000	380V/400V/41	5V 3W+N+PF	22 @000	222 @0000
Rated Output Frequency			50Hz	/60Hz		
Max Output Single Phase Apparent Power	4.0k\/A	5 0k\/A	6.0k\/Az	7 5k\/Az	9 Nk\/A	9 0k\/A
THDV	1.01(1)(0.01071	<2% @10	1.0kt// 2	0.01071	0.0007
Switching Time	10ms	10ms	10ms	10ms	10ms	10ms
Protection	101113	101113	101113	101115	101113	101115
DC Switch			Sur	port		
Anti islanding Protection			Sup	port		
			Sup	port		
			Sup	port		
DV String Poveres Protection			Sup	port		
			Sup			
			AC Type II,	Do Type II		
			Sup	tion		
			Op	uun		
General						
IOPOIOgy			Non-Is	solated		
			IP	66		
Cooling			Forced	airtlow		
Operating Temperature Range			-25°C	-60°C		
Relative Humidity Range			0-1	00%		
Max. Operating Altitude			400)0m		
Noise (Typical)			<4	ōdB		
Dimensions (W*H*D)			≈580/50	0/250mm		
Weight			≈3`	7kg		
Display			LED	SAPP		
Communication			RS485,CAN, W	IFI/4G(optional)		
Certification						
Safety			IEC62109-1	&2 IEC61000		
Grid Code	EN50549	9,VDE4105,Tor erze	uger typeA+R25 To	r erzeuger type B,E	IFS2018-2,CEI 021	,NC RfG,

* 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

Easy

- Adapt to different installation environments with IP65 protection
- VDE 2510-50, IEC 63056
- 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									
System Parameters													
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 D	ischarge: -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 62	619,IEC 63056,IEC62040-1,VE	DE 2510-50, CE EMC, UKCA, U	JN 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									
Battery Extension Module													
Module		CPS EBM0	016100LF-L										
Rated Charge/Discharge Energy		5.12	kWh										
Dimension (W*D*H)		670*178	*370mm										
Weight		44	kg										
EOL	70%												
Power Control Module													
Model	CPS ECD51												
Operating Voltage Range	44.8~57.6V												
Max Charge/Discharge Current	120A 670*179*290mm												
Dimension (W*D*H)	670*178*280mm												
Weight		81	kg										

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

CPS ESSR-05/10/15/20KH1

High Voltage Residential Battery



Flexible

- Standard packs and control modules reduce inventory and design difficulties
- Working below -10°C with self heating

Strong

- Easy
- C-rate up to 0.8
- 4kW for each pack. Get 10kW power from only 15kWh
- Reduce wiring work during pack install
- Automatically assign of BMS address



Model	CPS ESSR-05KH1	CPS ESSR-10KH1	CPS ESSR-15KH1	CPS ESSR-20KH1
System Parameters				
Power Control Module	CPS ECD500	CPS ECD500	CPS ECD500	CPS ECD500
Battery Extension Module	CPS EBM032050LF-H	CPS EBM032050LF-H	CPS EBM032050LF-H	CPS EBM032050LF-H
Rated Voltage	102.4V	204.8V	307.2V	409.6V
Operating Voltage Range	89.6~115.2V	179.2~230.4V	268.8~345.6V	358.4~460.8V
Max Charge/Discharge Current	40A	40A	40A	40A
Max Power	4.0kW	8.1kW	12.2kW	16.3kW
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	75kg	131kg	188kg	244kg
Dimension (W*D*H)	770*178*680mm	≈770*178*1040mm	≈770*178*1400mm	≈770*178*1760mm
Product Parallel Extension	Up to 61.44kWh	Up to 61.44kWh	Up to 61.44kWh	Up to 61.44kWh
Operating Temperature		Charge&Disch	arge: -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, IEC 62040-1, IEC 624	77-1, CE EMC, VDE 2510-50,	UKCA, UN38.3
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
Battery Extension Module				
Module		CPS EBM0	32050LF-H	
Rated Charge/Discharge Energy		5.12	kWh	
Dimension (W*D*H)		770*178	*410mm	
Weight		56	ikg	
EOL		70	0%	
Power Control Module				
Model		CPS E	CD500	
Operating Voltage Range		80~5	500V	
Max Charge/Discharge Current		40	A	
Dimension (W*D*H)		770*178	*220mm	
Weight		13	lkg	

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

6 1 1 1 1 1 1 1 1 1 1	

CPS SCA2~3.6KTL-PS1/EU

Single-Phase String Inverter 2-3.6kW • 1 MPPT • 500Vdc System



Smart

Pragmatic option

Communication interfaces [RS485/

Wi-Fi (Standard) & 4G (Optional)]

Built-in Bluetooth and App for local

and remote monitoring

Support zero export by meter

Efficient

Appealing yield

- 1 MPPT with Max. Efficiency 97.3%
- Easily compatible with various PV module based on max. input current 15A per MPPT
- 150% DC/AC ratio
- Lower startup & wider MPPT voltage

Safe

Solid quality

- Durable and robust component
- IP65 &C5 protection
- Type II SPD for both DC and AC

Model Name	CPS SCA2KTL-PS1/EU	CPS SCA3KTL-PS1/EU	CPS SCA3.6KTL-PS1/EU
DC Input			
Max. DC Voltage		500Vdc	
MPPT Operating Voltage Range		50-490Vdc	
Start Voltage		70Vdc	
Rated DC Voltage		360Vdc	
Number of MPPT		1	
Number of DC Connection Sets per MPPT		1	
Max input current per MPPT		15A	
Max_DC short-circuit current per MPPT		20A	
String Fuse		/	
		, Integrated Switch	
		mogratou owiton	
Rated AC Power	2k\\/	31/1/	3.6KW
	2 24//A	3.31/\/\	3.641/0
	2.2KVA	3.3KVA	3.0KVA
		220/2300	
	10.4		404
	1UA	15A	ΊbΑ
		50/60Hz	
Grid Frequency Range		45-55/55-65Hz	
Power Factor (cosφ)		>0.99(±0.8 adjustable)	
Current THD		< 3%	
AC Disconnection Type		/	
System Data			
Гороlоду		Transformerless	
Max. Efficiency	97.3%	97.3%	97.3%
Euro Efficiency	95.9%	96.3%	96.5%
Consumption at Night		< 1W	
Protection			
DC reverse connection protection		Yes	
AC short circuit protection		Yes	
_eakage current protection		Yes	
Grid monitoring		Yes	
Ground fault monitoring		Yes	
Surge Protection		DC Type II / AC Type II	
AFCI		Option	
Environment Data			
ngress Protection		IP65	
Cooling Method		Natural Convection	
Operating Temperature		-25°C to +60°C	
Ambient Humidity		0 - 100%	
Altitude		4000m	
Display and Communication			
Display		LED + APP(Bluetooth)	
Communication		RS485/Wi-Fi (Standard) & 4G (Optiona	l)
Mechanical Data			·
Dimensions (W*H*D)		320 * 344 * 137mm	
Weight		6.5ka	
DC Connection Type		MC4 (Max 6mm ²)	
AC Connection Type		Plug and play connector	
Safety		. Leg and play connector	
outory	EN 61000-6 EN/JEC 62109 JEC 61	727 IEC 62116 VDE 4105 CEL 0-21 EN	50549-1 VDE0126-1-1 NTS type 4
Certifications ²		47 LINE 247004 INMETRO DODTADI	A NO 440 A CAZZZ 0

*1 AC Power is different under different rated AC voltage. *2 The certificates are for reference only.Please consult the local sales staff for detailed certification

UNE 217002,RD 647, UNE 217001,INMETRO PORTARIA Nº 140,AS4777.2

CPS SCA4.6~6KTL-PSM1/EU

Single-Phase String Inverter 4.6~6kW • 2 MPPTs • 550Vdc System



Smart

Pragmatic option

Communication interfaces [RS485/

Wi-Fi (Standard) & 4G (Optional)]

Built-in Bluetooth and App for local

and remote monitoring

Support zero export by meter

Efficient

Appealing yield

- 2 MPPTs with Max. Efficiency 97.2%
- Easily compatible with various PV modules based on max. input current 15A per MPPT
- 150% DC/AC ratio
- Lower startup & wider MPPT voltage

Safe

Solid quality

- Durable and robust component
- IP65 &C5 protection
- Type II SPD for both DC and AC

Model Name	CPS SCA4.6KTL-PSM1/EU	CPS SCA5KTL-PSM1/EU	CPS SCA6KTL-PSM1/EU		
DC Input	· · · · · · · · · · · · · · · · · · ·		·		
Max. DC Voltage		550Vdc			
MPPT Operating Voltage Range		70-540Vdc			
Start Voltage		90Vdc			
Rated DC Voltage		360Vdc			
Number of MPPT		2			
Number of DC Connection Sets per MPPT		1			
Max input current per MPPT		15A			
Max_DC short-circuit current per MPPT		20A			
String Fuse		1			
DC Disconnection Type		Integrated Switch			
		integrated emion			
Rated AC Power	4.6kW	5kW	6kW		
Max AC Power	5.06k\/A	5.5k\/A	6k\/A		
Pated AC Voltage	0.00KVA	220/230\/	UKVA		
		160, 2001/			
		100 - 300V			
	024		07.04		
	23A	25A	21.3A		
		50/60HZ			
Grid Frequency Range		45-55/55-65Hz			
Power Factor (cos ϕ)		>0.99(±0.8 adjustable)			
Current THD		< 3%			
AC Disconnection Type		/			
System Data					
Topology		Transformerless			
Max. Efficiency	97.2%	97.2%	97.2%		
Euro Efficiency	96.0%	96.2%	96.3%		
Consumption at Night		< 1W			
Protection					
DC reverse connection protection		Yes			
AC short circuit protection		Yes			
Leakage current protection		Yes			
Grid monitoring		Yes			
Ground fault monitoring		Yes			
Surge Protection		DC Type II / AC Type II			
AFCI		Option			
Environment Data					
Ingress Protection		IP65			
Cooling Method		Natural Convection			
Operating Temperature		-25°C to +60°C			
Ambient Humidity		0 - 100%			
Altitude		4000m			
Display and Communication					
Display		LED + APP(Bluetooth)			
Communication	F	RS485/Wi-Fi (Standard) & 4G (Optional)		
Mechanical Data					
Dimensions (W*H*D)		350 * 347 * 137mm			
Weight		8.5kg			
DC Connection Type		MC4 (Max. 6mm ²)			
AC Connection Type		Plug and play connector			
Safety					
	EN 61000-6.EN/IEC 62109.IEC 61	727.IEC 62116.VDE 4105.CEI 0-21 FN	50549-1.VDE0126-1-1.NTS type A		
Certifications	LINE 217002 PD 6	47 LINE 217001 INIMETRO POPTADIA	Nº 140 A \$4777 2		

*1 AC Power is different under different rated AC voltage. *2 The certificates are for reference only.Please consult the local sales staff for detailed certificatio

NE 217002,RD 647, UNE 217001,INMETRO PORTARIA Nº 140,A

SCA5~25K-T-EU

Three-Phase String Inverter 5~25kW • 2 MPPTs • 1100Vdc System



Smart

Pragmatic option

and remote monitoring

Support zero export by meter

Communication interfaces [RS485/

Wi-Fi (Standard) & 4G (Optional)]

Built-in Bluetooth and App for local

Efficient

Appealing yield

- 2 MPPTs with Max. Efficiency 98.12%
- Easily compatible with various PV modules based on max. input current 15A per string
- 150% DC/AC ratio
- Lower startup & wider MPPT voltage

Safe

Solid quality

- Durable and robust component
- IP66 &C5 protection
- Type II SPD for both DC and AC

Model Name	SCA5K-T-EU	SCA6K-T-EU	SCA8K-T-EU	SCA10K-T-EU	SCA15K-T-EU	SCA20K-T-EU	SCA25K-T-EU
DC Input							
Max. DC Voltage				1100Vdc			
MPPT Operating Voltage Range				200 - 1000Vdc			
Start Voltage		250Vdc					
Rated DC Voltage				600Vdc			
Number of MPPT				2			
Number of DC Connection Sets per MPPT			1				2
Max. input current per MPPT			15A			30)A
Max. DC short-circuit current per MPPT			23A			4	5A
DC Disconnection Type				Integrated Switch			
AC Output		5					
Rated AC Power	5kW	6kW	8kW	10kW	15kW	20kW	25kW
Max. AC Power	5.5kVA	6.6kVA	8.8kVA	11kVA	16.5kVA	22kVA	27.5kVA
Rated AC Voltage				380 / 400V			
AC Voltage Range1				277 - 520V			
Grid Connection Type				30 / N / PE			
Max AC Current	8.44	104	13.44	16.74	254	33.44	<i>A</i> 1 7A
Grid Frequency	0.471	10/1	10.47	50 / 60 Hz	20/1	00.471	41.77
Grid Frequency Pango1				45 55 / 55 65Hz			
Dower Easter (2007)			~	40-00 / 00-00112			
			~		ne)		
System Data				< 570			
Topology				Transformariasa			
Max Efficiency	07.000/	07.070/	07 600/		07.070/	07.070/	00.100/
	97.02%	97.07%	97.09%	97.00%	97.0770	97.0770	90.1270
Protection	90.93%	90.90%	97.4170	97.4170	97.1370	97.4270	97.0770
Protection				¥			
DC reverse connection protection				Yes			
AC short circuit protection				Yes			
Leakage current protection				Yes			
24h Grid monitoring				Yes			
Ground fault monitoring				Yes			
Surge Protection			DC	C Type II / AC Type	e II		
AFCI				Yes			
Environment Data							
Ingress Protection				IP66			
Cooling Method				Cooling Fans			
Operating Temperature				-25°C to +60°C			
Ambient Humidity				0 - 100%			
Altitude				4000m			
Display and Communication							
Display			LE	ED + APP(Bluetoo	th)		
Communication			RS485 / Wi-	-Fi (Standard) & 4	G (Optional)		
Mechanical Data							
Dimensions (W*H*D)				416*526*205mm			
Weight				22kg			
DC Connection Type			n	MC4 (Max. 6 mm ²)		
AC Connection Type			OT/DT	Terminal (Max.3	5 mm²)		
Safety							
Certifications2 *1 "AC Voltage Range" and "Grid Frequency Range" may be d	IEC 61000, IEC NTS 2.1,	C 62109-1/2, IEC RD 647, RD 1699	61727, IEC 6211 9, RD 413, UNE	16, IEC 63027, IEC 217002, C15-712-	C 62920, C10/11, -1, VDE-AR-N 41	, CEI 0-21, EN50 05, TOR Erzeugo	549-1, NC RfG, er Typ A/B

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

SCA30~36K-T-EU

Three-Phase String Inverter 30~36kW • 3/4 MPPTs • 1100Vdc System



Efficient

Appealing yield

- 3/4 MPPTs with Max. Efficiency 98.73%
- Easily compatible with various PV modules based on max. input current 15A per string
- 150% DC/AC ratio
- Lower startup & wider MPPT voltage

Smart

Pragmatic option

- Communication interfaces [RS485/ Wi-Fi (Standard) & 4G (Optional)]
- Built-in Bluetooth and App for local and remote monitoring
- Support zero export by meter

Safe

Solid quality

- Durable and robust component
- IP66 &C5 protection
- Type II SPD for both DC and AC

del Name	SCA30K-T-EU	SCA36K-T-EU
Input		
x. DC Voltage		1100Vdc
PT Operating Voltage Range	200	0 - 1000Vdc
rt Voltage		250Vdc
red DC Voltage		615Vdc
mber of MPPT	3	4
mber of DC Connection Sets per MPPT	2	2
x input current per MPPT	_	
x DC short-circuit current per MPPT		45A
Disconnection Type	Inter	arated Switch
Output	intoş	
ed AC Power	30kW	36kW
	331///	30 64//
ed AC Voltage	2017	33.UKVA
Voltage Range1	ი ა	77 - 5201/
	ے م	Φ / N / PE
AC Current	50 A	₩/IN/FL 004
	AUG	
	45.7	
	45-5	
Ver Factor (cosφ)	>0.99(3	EU.8 adjustable)
rent IHD		< 3%
tem Data	-	· · ·
ology	Irar	nsformerless
	98.15%	98.73%
> Efficiency	97.92%	98.05%
tection		
reverse connection protection		Yes
short circuit protection		Yes
kage current protection		Yes
Grid monitoring		Yes
und fault monitoring		Yes
ge Protection	DC Тур	e II / AC Type II
1		Yes
ironment Data		
ess Protection		IP66
ling Method	Co	poling Fans
erating Temperature	-25	°C to +60°C
pient Humidity		0 - 100%
ude		4000m
play and Communication		
olay	LED +	APP(Bluetooth)
nmunication	RS485 / Wi-Fi (S	Standard) & 4G (Optional)
hanical Data		
ensions (W*H*D)	684	*488*270mm
ght	30kg	35kg
Connection Type	MC4	(Max. 6 mm ²)
Connection Type	OT/DT Terr	minal (Max.35 mm²)
ety		
tifications?	IEC 61000, IEC 62109-1/2, IEC 61727, IEC 62116, IE	C 63027, IEC 62920, C10/11, CEI 0-21, EN50549-1, NC F

SCA50/60K-T-EU

Three-Phase String Inverter 50/60kW • 4 MPPTs • 1100Vdc System



Efficient

Appealing yield

- 4 MPPTs with Max. Efficiency 98.49%
- Easily compatible with various PV modules based on max. input current 40A per MPPT
- 150% DC/AC ratio

Smart

Pragmatic option

- Communication interfaces [RS485/ Wi-Fi (Standard) & 4G (Optional)]
- Built-in Bluetooth and App for local and remote monitoring
- Smart fan cooling
- Support zero export by meter+CT

Safe

Solid quality

- Durable and robust component
- IP65 &C5 protection
- Type II SPD for both DC and AC

Model Name	SCA50K-T-EU
DC Input	
Max. DC Voltage	
MPPT Operating Voltage Range	
Start Voltage	
Rated DC Voltage	
Number of MPPT	
Number of DC Connection Sets per MPPT	
Max. input current per MPPT	
Max. DC short-circuit current per MPPT	
DC Disconnection Type	
AC Output	
Rated AC Power	50kW
Max. AC Power	55kVA
Rated AC Voltage	
Grid Connection Type	
Max. AC Current	83.6A
Grid Frequency	
Grid Frequency Range*	
Power Factor (cosφ)	
Current THD	
System Data	
Topology	
Max. Efficiency*	98.49%
Euro Efficiency*	98.44%
Protection	
DC reverse connection protection	
AC short circuit protection	
Leakage current protection	
24h Grid monitoring	
Ground fault monitoring	
Surge Protection	
AFCI	
PID Recovery	
Environment Data	
Ingress Protection	
Cooling Method	
Operating Temperature	
Ambient Humidity	
Altitude	
Display and Communication	
Display	
Communication	RS48
Mechanical Data	
Dimensions (W*H*D)	
Weight	
DC Connection Type	
AC Connection Type	
"1 "Grid Frequency Range" may be differ according to specific *2 The certificates are for reference only.Please consult the lo *3 The efficiency is for reference only.	grid codes. cal sales staff for detailed certification.

Inverter

SCA60K-T-EU 1100Vdc 200 - 1000Vdc 250Vdc 620Vdc 4 2 40A 50A Integrated Switch 60kW 66kVA 380 / 400V 3Φ / N / PE 100.3A 50 / 60Hz 45-55 / 55-65Hz >0.99(±0.8 adjustable) < 3% Transformerless 98.48% 98.43% Yes Yes Yes Yes Yes DC Type II / AC Type II Yes Yes IP66 Cooling Fans -30°C to +60°C 0 - 100% 4000m LED + APP(Bluetooth) 485 / Wi-Fi (Standard) & 4G / Ethernet (Optional) 713*609*306mm 50.5kg MC4 (Max. 6 mm²)

OT/DT Terminal (Max.70 mm²)

22

SCA100/125K-T-EU

Three-Phase String Inverter 100/125kW • 12 MPPTs • 1100Vdc System



Efficient

Appealing yield

- 12 MPPTs with Max. Efficiency 98.5%
- Easily compatible with various PV modules based on max. input current 30A per MPPT
- Superb temperature performance, full power at 50°C(SCA100K-T-EU)
- 150% DC/AC ratio

Smart

Pragmatic option

- Communication interfaces [RS485/ Wi-Fi (Standard) & 4G (Optional)]
- Built-in Bluetooth and App for local and remote monitoring
- Support zero export by meter+CT

Safe

Solid quality

- Durable and robust component
- IP66&C5 protection
- Type II SPD for both DC and AC

Model Name	SCA100K-T-EU
DC Input	
Max. DC Voltage	
MPPT Operating Voltage Range	
Start Voltage	
Rated DC Voltage	
Number of MPPT	
Number of DC Connection Sets per MPPT	
Max. input current per MPPT	
Max. DC short-circuit current per MPPT	
DC Disconnection Type	
AC Output	
Rated AC Power	100kW
Max. AC Power	110kVA
Rated AC Voltage	
AC Voltage Range ¹	
Grid Connection Type	
Max AC Current	167 2A
Grid Frequency	
Grid Frequency Range ¹	
Power Factor (cosm)	
Current THD	
System Data	
Topology	
Max Efficiency	08 11%
Euro Efficiency	98.00%
Protection	30.0070
Anti islanding Protection	
DC overvaltage protection	
Insulation resistance detection	
Posidual Current Monitoring Unit	
Ground fault monitoring	
AC short circuit protection	
PV string monitoring	
Surge Drotection	
Surge Protection	
Environment Data	
Cooling Method	
Ambient Humidity	
Autuae	
Dimensions (W"H"D)	
AC Connection Type	
Safety	
Certifications ²	NTS '
*4 AC Device is different under different estad AC	

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

SCA125K-T-EU 1100Vdc 200 - 950Vdc 300Vdc 615Vdc 12 2 30A 45A Integrated Switch 125kW 125kVA 380 / 400V 322 - 528V 3Φ / N / PE 190A 50 / 60Hz 45-55 / 55-65Hz >0.99(±0.8 adjustable) < 3% Transformerless 98.50% 98.10% Yes DC Type II / AC Type II IP66 Cooling Fans -30°C to +60°C 0 - 100% 4000m LED + APP(Bluetooth) RS485/Wi-Fi (Standard) & 4G (Optional) 1050 * 660 * 340mm 90kg MC4 (Max. 6mm²)

OT/DT Terminal(Max. 240mm²)

727/62116, EN50549, NC RFG, CEI 0-16, CEI 0-21, UNE217001, UNE 217002, _V2.1, VDE-AR-N 4110, VDE-AR-N 4105, UTE-C15

SCH333~350K-T-EU

Three-Phase String Inverter 333/350kW • 15 MPPTs • 1500Vdc System



Efficient

Higher power generation

- 15 MPPTs with Max. Efficiency 99%
- Max. input current 20A per string, compatible with 700Wp+ module
- Superb temperature performance, full power at 45°C
- 150% DC/AC ratio

Fully controllable

Smart

- Comprehensive range of communication interfaces [PLC / Wi-Fi / RS485(Standard) & 4G / Ethernet(Optional)]
- Q at night (SVG) function
- Smart string monitoring based on I-V curve scanning and diagnosis

Safe

Superb quality with rapid response

- Durable and robust component
- Artfully designed air forced cooling system
- IP66&C5 protection
- Type II SPD for both DC and AC
- Full range of grid monitoring and protection
- Built-in anti-PID and PID recovery function
- Smart DC controllable switch, fast and automatic fault breaking

Model Name	SCH333K-T-E
DC Input	
Max. DC Voltage	
MPPT Operating Voltage Range	
Start Voltage	
Rated DC Voltage	
Number of MPPT	15
Number of DC Connection Sets per MPPT	2
Max. input current per MPPT	
Max. DC short-circuit current per MPPT	
DC Disconnection Type	
AC Output	
Rated AC Power	333kW
Max AC Power	333kVA
Rated AC Voltage	
AC Voltage Range*	
Grid Connection Type	
	2414
	2417
Gild Frequency Range	
Power Factor (cosq)	
System Data	
lopology	
Max. Efficiency	
Euro Efficiency	
Protection	
Anti-islanding Protection	
DC reverse polarity protection	
DC overvoltage protection	
Insulation resistance detection	
Residual Current Monitoring Unit	
Ground fault monitoring	
Surge Protection	
AC short circuit protection	
AC overvoltage protection	
Overheat protection	
PV string monitoring	
I-V curve scan&diagnosis	
PID prevent&recovery	
Q at night	
24h gird monitoring	
Environment Data	
Ingress Protection	
Cooling Method	
Operating Temperature	
Ambient Humidity	
Altitude	
Display and Communication	
Display	
Communication	
Mechanical Data	
Do connection Type	
AC Composition Trues	

SCH350K-T-EU

1500Vdc		
500 - 1500Vdc		
550Vdc		
1190Vdc		
	15	
	2	
40A		
60A		
Integrated Switch		
	350kW	
	350kVA	
800V		
680 - 880V		
3Φ / PE		
	253A	
50 / 60Hz		
45-55 / 55-65Hz		
>0.99(±0.8 adjustable)		
< 3%		
Transformerless		
99.0%		
98.5%		
Yes		
Yes		
Yes		

Yes DC Type II / AC Type II

Yes Yes

Yes			
Yes			

IP66

Cooling Fans
-30°C to +60°C
0 - 100%
4000m

LED + APP(Bluetooth) RS485/Ethernet/PLC/CAN

1057 * 810 * 400mm

143kg

MC4 (Max. 6mm²)

OT/DT Terminal(Max. 400mm²)

CPS Remote Monitoring Platform





CPS Portal is a web-based platform for PV monitoring, enabling analysis and presentation of PV systems. Data collected from PV systems are transmitted to and analyzed by CPS portal, and then displayed in various formats that are easy to understand. Automatic alarms are available so that any malfunctions or abnormal conditions can be identified and reported immediately. Users can easily access CPS portal to monitor PV systems at anytime and from anywhere. This easy-to-use platform makes monitoring of PV systems simple and convenient, far reducing time and costs as well.

The portal can deal with data collected from CPS external data logger, embedded monitoring module, and weather station, etc. In addition, data from other devices can be analyzed and recorded as well if required by customers.

All data collected from devices are saved in multiple servers located all over the world, ensuring high-quality and stable service for our global users, and ensuring security of database as well to prevent loss of data.

- User-friendly and multilingual interface
- Web-based remote management
- Easy access via Internet by computer and smartphone
- Visualized real-time data and historical data for analysis and easy understanding

Data Display

- Daily, monthly, annual and total yield
- Historical data records
- Log records
- Malfunction records
- Daily, monthly and annual reports
- Display of weather information

- A variety of formats for better presentation
- Automatic alarms as customized by users
- Data and event reports sent via email regularly as specified
- Demonstration power stations for reference, system information available to share through the portal

Data Ananlysis

- Analysis on generating efficiency
- Analysis on performance of systems and devides
- Total earnings of systems
- Total reduction of CO2 emission
- Comparison of system performance

Model Name	
Language	
Supported device number	English,
System Requirements	
Supported Operating Systems	A
Software	
Recommended Browsers	FireFox
Other	
Access	
Access	
Smartphone	
Plant Management	
CPS Portal Account	One

CPS App---Mobile Monitoring at Anytime and Anywhere



CPS App is available on iPhones and smartphones with Android OS, enabling mobile monitoring of your PV systems easier and quicker. Both real-time and historical data can be displayed with transparent graphs and in daily, monthly, annual and overall format. Besides power and yield, data such as CO2 savings, weather condition and sensor information can be displayed as well.

CPS App can support both remote and local mode. With remote mode, you can view all data as same as CPS portal; and with local mode, you can get direct access to the web server of CPS monitoring device via WiFi and check the performance of your PV system.

- Real-time and historical data displayed via internet at any time
- Visualized data with transparent graphs
- Daily/monthly/annual/overall data

CPS Portal

Spanish, Thai, Czech, Portuguese, Chinese

II/optimized access for mobile devices

, Internet Explorer 7 or later, Safari, Chrome JavaScript and Cookies enabled

solar.chintpower.com CPS App for iPhone and Android

password for all your plants in CPS Portal

System & Monitoring

- CO2 savings, weather and sensor data displayed
- Local mode enables direct access to system data via WiFi

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

Chint Power Smart COMBOX



Chint Power communication box integrated multi-functional data collector and suitable for C&I and Power Station systems at different voltage levels. With the function of physical channel conversion, communication protocol conversion, it can meet the requirements of serial inverters data collector, such as Modbus acquisition, Modbus configuration visualization, inverter software batch upgrade and other services.

The data acquisition can support various protocol and it can connect various devices from different manufactures to the background monitoring management platform through Ethernet(IEC104, TCP), RS232 and RS485. Meanwhile it has DI, DO, AI, AO and PT100 connectors for multiple application.

Technical Data

Environment Data				
Operating Temperature	-30°C ~ 70°C			
Ambient Humidity	5%~95%,Non-condensing			
Storage Temperature	-40°C ~ 85°C			
Altitude	≤4000m			
Ingress Protection	IP65			
Product Parameters				
Product Description	Including: Data Collector, Converter, Air Circuit Breaker Support: Ethernet(Standard), 4G(Optional)			
Electric Parameters				
AC Input	100~240Vac, 50/60Hz			
AC-PLC Voltage	380V~800Vac, Three-phase			
Communication Interface				
RS232	2*50~115.2Kbps			
RS485	4*50~115.2Kbps			
Ethernet	2*10M/100M/1000Mbps			
Digital / Analog Input / Output	DI*8, DO*4, AI*4, AO*1			
PT100	2			
HPLC	Multi-core cables: 1000m; Single-core cables:300m (the three-phase cables must be bound at an interval of 1 m) ^[1]			
Communication Protocol				
Ethernet	Modbus-TCP, IEC 60870-5-104			
RS485	Modbus-RTU, IEC 60870-5-103 (standard), DL / T645			
Mechanical Parameters				
Dimensions (W*H*D)	550mm*620mm*260mm			
Weight	10Kg			
Note[1]: RS485 communication is recommended if the AC cab	le is longer than 300m.	30		

Features

- Comply with all Chint Power inverters
- Pre-configured for Plug & Play
- Capability with Chint Power O&M platform
- Hardware mounted and pre-wired
- IP65 rated enclosure
- Support local real-time monitoring

CPS Flex Gateway



The CPS Flex Gateway is a new monitoring and controls solution for the CPS 25 to 350kW inverter line.

The gateway acts as a Modbus master data logger and gateway solution for monitoring and controlling commercial and utility scale inverter applications. This flexible monitoring solution enables three parallel outbound communication potions: (1) local pass-through Modbus data to 3rd party solutions, (2) Ethernet based communications to the CPS portal and (3) a programmable Ethernet based connection to a location chosen by the customer.

The Flex Gateway enables remote F/W upload by the CPS Service team, enabling efficient field service solutions for our customers. The remote upload function is facilitated by the CPS Monitoring Portal.

Key Features

- Installed in a single inverter wire-box: no power or extra equipment required
- Modbus communications input (up to 32 inverters per card) Modbus TCP/IP or Modbus RTU
- Complete controls functionality via Modbus (per inverter or broadcast command)
- Flexible outbound communications
- Programmable IP address for customer direct data (json format)
- Remote F/W solution
- Pass-through data for local 3rd party solutions (Modbus RS485)
- Low cost

Model Name	Flex Gateway			
Communications				
Inverter interface	RS485			
User interface	Standard: RS485, Ethernet, USB			
Inverter connections per card	32			
Protocol	HTTPS, DHCP, DNS Resolution, Modbus TCP, Modbus RTU			
Monitoring				
Web connections	IP addresses: CPS + Programmable location			
Local monitoring	Wired connection to the Data logger (integrated web GUI)			
Remote monitoring	CPS platform or 3rd party platform			
Data logging Specifications				
Data sampling rate	Programmable data sampling (1 to 15 minute sample rate)			
Local data storage	Log data for 30 days based on 15 minute intervals			
Upgradeability	Remotely via CPS platform or 3rd party platform / locally via USB			
Data parameters	Modbus ID, Inverter S/N's, Model, TYield/DYield(kWh), RunT(min), Mode, Upv(V), Ipv(A), Pac(kW), PF, Freq(Hz), Uabc(V), Iabc(A)			
Advanced Functions				
Remote O&M operations	Inverter parameter settings / inverter firmware upgrade			
Controls Capability	Capable of control commands via Modbus (ie; PF control, Active power curtailment, Remote reset)			
Power Parameters				
Input Voltage	9 ~ 24 Vdc			
Power Consumption	2.5 W, Max. 5 W			
Environmental Parameters				
Ambient temperature range	-30 to +85°C			
Environmental protection	Installed in NEMA 4X wire-box			
Relative humidity	<85% Non-condensing			
Mechanical Parameters (per unit)				
Dimensions (H x W x D)	86mm * 69mm * 16mm			
Weight	50g			

System & Monitoring





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