CHINT

CHINT POWER

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CHINT

CHINT POWER

CHINT POWER | LIGHT IN ME

PV INVERTER

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Introduction & Honors

Introduction

CHINT ELECTRIC

Empower the World

CHINT

THE LEADING GLOBAL PROVIDER OF SMART ENERGY SOLUTIONS

CHINT Provides a Package of Energy Solutions for Public Institutions, Industrial & Commercial Users and End Users

Founded in 1984, CHINT Group is a world-renowned provider of smart energy solutions. It is actively deploying "4+1" industrial sectors including smart electrics, green energy, industrial control and automation, smart home and incubator, forming an integrated whole industry chain of "power generation, storage, transmission, substation, distribution, sales and consumption". And it boasts an extensive business network across over 140 countries and regions as well as more than 30,000 employees and an annual sales revenue of over USD 11.4 billion. CHINT Group has been ranking among China's Top 500 companies for 18 consecutive years. Its subsidiary, CHINT Electrics is the first company in China with low-voltage electrics as its main business getting listed on the A-share market as one of the Top 50 Asian listed companies.

To comply with the trend of integrated development of modern energy, intelligent manufacturing and digital technology, CHINT has adopted "One Cloud & Two Nets" as the business strategy. CHINT Cloud fulfills digital application and services in both internal and external as the platform of intelligent technology and data application. Based on the Industrial Internet of Things (IIoT), CHINT built an intelligent manufacturing system and realizes intelligent application in electrical industry. Relying on the Energy Internet of Things (EIoT), CHINT built its smart energy system and develops the regional EIoT mode.

Focusing on energy system of supply, storage, transmission, distribution and consumption, CHINT has core businesses of clean energy, energy distribution, big data and energy value-added services. Furthermore, CHINT pillar businesses include photovoltaic equipment, energy storage, power transmission & distribution, low-voltage apparatuses, intelligent terminals, software development and control automation. With developing into a platform-based enterprise, CHINT provides a package of energy solutions for public institutions, industrial & commercial users and end users, by building a regional smart energy operation ecosphere.

Businesses

- Clean Energy
- Low-voltage Apparatus
- Power Transmission and Distribution
- Instrument and Apparatus
- Smart Home
- Intelligent Building
- Home Electrical Apparatus
- Energy Efficiency Management
- Intelligent Manufacturing
- Industry Automation
- Smart Heating
- Smart Water

Advantages

Intelligent Manufacturing

- Building CHINT Intelligent Manufacturing System based on IIoT
- With digital workshop at its core, enabling digitalization of the entire value chain from design to sales and creating a thinking plant
- Digital Workshop for Customer Premises Electrical Equipment Based on IoT and Energy Efficiency Management project has been successfully listed in Ten Technological Milestones of China Intelligent Manufacturing
- CHINT PV Manufacturing + Internet Transparent Plant available to global users
- One of the first batch Sino-German Intelligent Manufacturing Cooperation Pilot Demonstration Projects announced by the Ministry of Industry and Information Technology

Industrial Leader

- Overall competitiveness in PV industry ranked No.1 in the world - rated by Photon Consulting
- A global leading electrical provider of whole industry chain integration
- A leader in sales volume of low-voltage electrics

Innovation and Research

- National R&D centers in North America, Europe, Asia Pacific and North Africa
- Exploring the Industry-University-Research Mode with Tsinghua University, Shanghai Jiao Tong University as well as some universities and institutions in US and Europe
- Building a R&D system around CHINT Group Research Institute
- The average annual R&D investment accounts for 4-12% of the revenue
- Participated in the development and amendments of over 240 industrial standards
- Obtained over 4,000 patents

Global Certification

- Our products are certified around the world

Global Presence

4 National R&D Centers **6** International Marketing Territories **12** Manufacturing Bases

20+ International Logistics Centers **2000+** Sales Companies

Chint Power Systems

Innovation

Heritage

Shanghai Chint Power Systems is a solar power system solution provider, designing, manufacturing, and supplying high reliability 1kW ~ 3.125 MW PV inverters and power solutions for customers. An international senior management team, experienced and solid research and development resources, advanced component control and design-for-reliability, strong financial support from Chint Group, and inheritance of Chint 35 years' manufacturing experiences and volume, have founded Chint Power System's brand in the field of renewable energy.

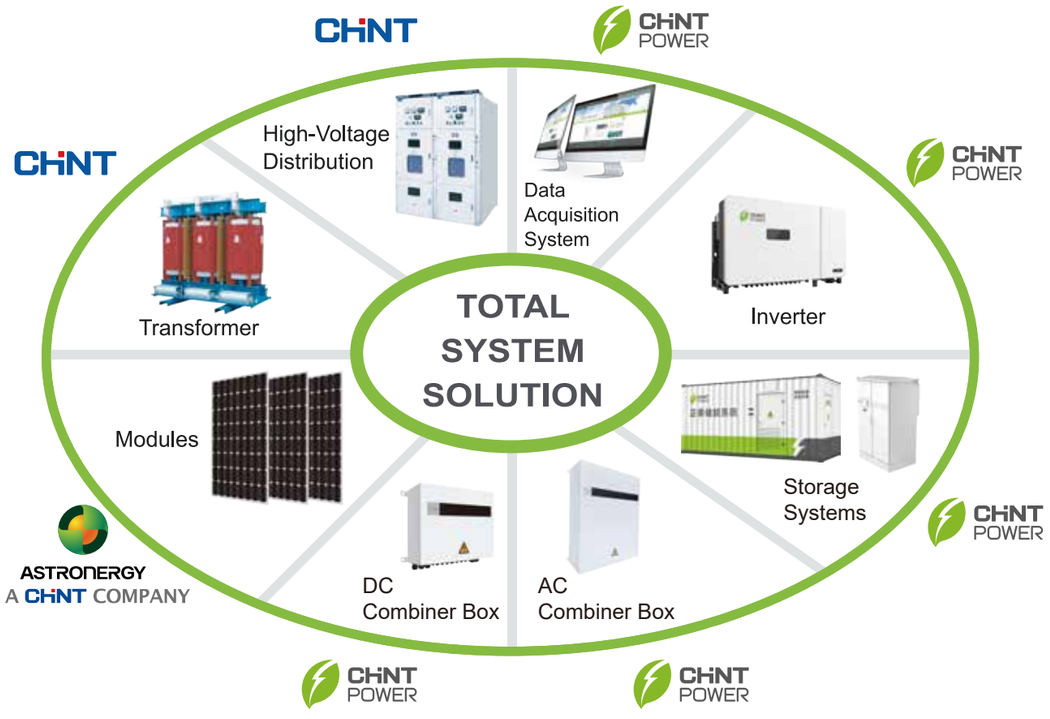
Our Business

The state-of-art newly designed CPS SCA/SCH family of Grid-tie PV Inverter featrures itself with full load high efficiency, high reliability and user-friendly interface. Patented 3-level NPC technology and control algorithm lead high efficiency. CPS provides comprehensive solutions for the development of solar power projects. For clients, who are keen about establishing a long-term sustainable solution through investment in solar power generation, CPS offers complete end-to-end solutions, right from site evaluation and construction to maintenance of solar farms.

Our Advantages

Offer full product line from PV module, cable, DC&AC panel, inverter, monitoring system and power T&D products Provide reliable, green and high efficiency power solutions

Equip with a number of patented technologies and is certified for VDE, G83, G59, ENEL, RD1663, UL/CSA, FCC part15, ETL, C10/11 and Golden Sun etc.



World Class Performance - GTM Award

GTM RESEARCH

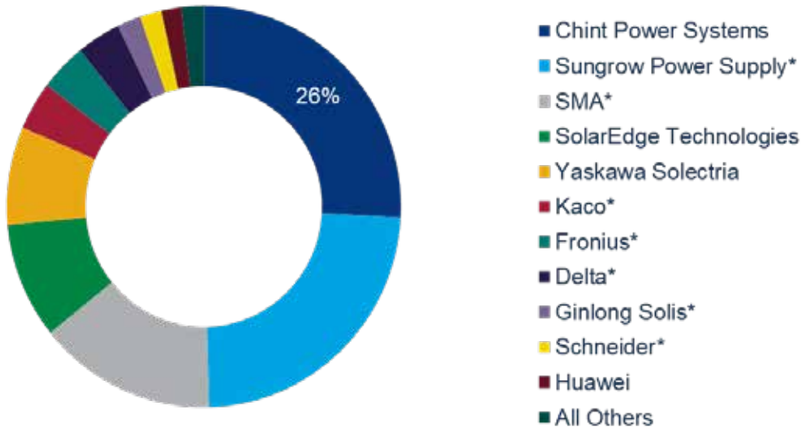
The CPS performance is increasing year by year. 2013, Chint Power System Selected to be Top 10 of the Most Competitive PV Inverter Companies by GTM, the international well-known power and renewable energy research institute. GTM released the ranking list based on key qualitative metrics that measure 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.

2020, Wood Mackenzie (GTM Research) released "Global solar PV and module-level power electronics inverter market share 2020". According to the report, CPS ranked 1st in three phase string inverter shipments in the U.S.A with 26% of the market share 2019. The report also showed that the shipment ranked 16th globally last year.

GTM/ Wood Mackenzie:
In 2019, CPS ranked 1st in three phase string inverter shipments in the U.S.A with 26% of the market share.

U.S. Three-Phase String Market Share by Shipments (MWac)



Source: Wood Mackenzie
Market Report; Global Solar PV and Module-level Power Electronics Inverter Market Share 2020

CHINT POWER

PV Inverter Overview

PV Inverters

Single phase string inverters


1~3kW


3.6kW


3~6kW

Three phase string inverters


6~15kW


17~30kW


50/60kW(400V)


110kW(400V)


275kW(800V)

Inverters for South America


16kW-SA


18kW-SA


30kW-SA


36kW-SA

Inverters for North America


25kW
/US-208


25kW
/US-480


36kW
/US-480


50/60kW
/US-480


100kW
/US-480


125kW
/US-600


275kW
/US-800

CPS SCA1~3.6KTL-S/EU

Chint Power Single-phase Inverter
High Return of the Whole Life Cycle

Low Investment

Single-phase string series inverters products providing standard configuration DC switch and optional GPRS/Wi-Fi/RS232 communication, which can match the requirements of different customers, support 10% rated overload and no-screen design, which can efficiently decrease initial investment of system.

High Profits

Single-phase string inverters can provide 97.6% maximum efficiency, 97.3% Euro efficiency, 99.5% MPPT efficiency, fan-less topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCA1KTL-S/EU	CPS SCA2KTL-S/EU▲	CPS SCA2.5KTL-S/EU	CPS SCA3KTL-S/EU▲	CPS SCA3.6KTL-S/EU
DC Input					
Max. DC Voltage	600Vdc				
MPPT Voltage Range (Full Load)	90-520Vdc	170-520Vdc	210V-520V	240V-520V	360V-520V
Start Voltage	90Vdc				
Rated DC Voltage	360Vdc				
Number of MPPT	1				
Number of DC Connection Sets per MPPT	1				
Max. DC Current	12.5A				11A
Max. Current for input connector	15A				
DC Disconnection Type	Integrated Switch				
AC Output					
Rated AC Power	1000W	2000W	2500W	3000W	3600W
Max. AC Power	1100VA	2200VA	2750VA	3300VA	3960VA
Rated AC Voltage	220V, 230V, 240Vac				
Rated AC Voltage Range	180 - 280Vac				
Grid Connection Type	L + N + PE				
Max. AC Current	4.8A	9.5A	11.9A	14.3A	17.2A
Grid Frequency	50/60Hz				
Grid Frequency Range	45-55/55-65Hz				
Power Factor (cosφ)	±0.8 (adjustable)				
Current THD	< 3%				
AC Disconnection Type	-				
System Data					
Topology	Transformerless				
Max. Efficiency	97.4%	97.4%	97.6%	97.6%	97.6%
Euro Efficiency	96.1%	96.8%	97.3%	97.3%	97.3%
Consumption at Standby/Night	< 6W/0.2W				
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	RS232(Standard) / Wi-Fi & GPRS(Optional)				
Mechanical Data					
Dimensions (W*H*D)	285 * 336 * 125mm				
Weight	8.8kg				
Safety					
Certifications	EN 61000-6,EN/IEC 62109,IEC 61727,IEC 62116,IEC 60068,IEC 61683 EN 50549,CEI 0-21,RD 1699				

▲This model is also available in EU market.

CPS SCA3~6KTL-SM/EU

Chint Power Single-phase Inverter
High Return of the Whole Life Cycle

Low Investment

Single-phase string series inverters products providing standard configuration DC switch and optional GPRS/Wi-Fi/RS232 communication, which can match the requirements of different customers, support 10% rated overload and no-screen design, which can efficiently decrease initial investment of system.

High Profits

Single-phase string inverters can provide 97.6% maximum efficiency, 97.3% Euro efficiency, 99.5% MPPT efficiency, fan-less topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCA3KTL-SM/EU▲	CPS SCA4KTL-SM/EU▲	CPS SCA5KTL-SM/EU▲	CPS SCA6KTL-SM/EU▲
DC Input				
Max. DC Voltage	600Vdc			
MPPT Voltage Range (Full Load)	170-520Vdc	190-520Vdc	240-520Vdc	300-520Vdc
Start Voltage	90Vdc			
Rated DC Voltage	360Vdc			
Number of MPPT	2			
Number of DC Connection Sets per MPPT	1			
Max. DC Current	11A/11A			
Max. Current for input connector	15A			
DC Disconnection Type	Integrated Switch			
AC Output				
Rated AC Power	3000W	4000W	5000W	6000W
Max. AC Power	3300VA	4400VA	5500VA	6600VA
Rated AC Voltage	220V, 230V, 240V			
Rated AC Voltage Range	180- 280V			
Grid Connection Type	L + N + PE			
Max. AC Current	14.3A	19.1A	23.8A	28.6A
Grid Frequency	50/60Hz			
Grid Frequency Range	45-55/55-65Hz			
Power Factor (cosφ)	±0.8 (adjustable)			
Current THD	< 3%			
AC Disconnection Type	-			
System Data				
Topology	Transformerless			
Max. Efficiency	97.6%	97.6%	97.8%	98.0%
Euro Efficiency	97.2%	97.3%	97.3%	97.4%
Consumption at Standby/Night	< 6W/0.2W			
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	RS232(Standard) / Wi-Fi & GPRS(Optional)			
Mechanical Data				
Dimensions (W*H*D)	335 * 426 * 125mm			
Weight	12.8kg			
Safety				
Certifications	EN 61000-6,EN/IEC 62109,IEC 61727,IEC 62116,IEC 60068,IEC 61683 EN 50549,CEI 0-21,RD 1699			

▲This model is also available in EU market.

CPS SCA6~15KTL-T/EU

Chint Power String Inverter
High Return of the Whole Life Cycle

Low Investment

Three-phase string series inverters products providing standard configuration DC switch,optional GPRS/Wi-Fi/ RS485 communication, which can match the requirements of different customers,support 10% rated overload which can efficiently decrease initial investment of system.

High Profits

Three-phase string inverters can provide 98.0% maximum efficiency, 97.4% Euro efficiency, 99.5% MPPT efficiency, fan-less topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCA6KTL-T/ EU▲	CPS SCA8KTL-T/ EU	CPSSCA10KTL-T/ EU▲	CPSSCA12KTL-T/ EU	CPS SCA15KTL-T/ EU▲
DC Input					
Max. DC Voltage	1000Vdc				
MPPT Voltage Range (Full Load)	300 - 800Vdc	380 - 800Vdc	470 - 800Vdc	380 - 800Vdc	470 - 800Vdc
Start Voltage	200Vdc				
Rated DC Voltage	620Vdc				
Number of MPPT	2				
Number of DC Connection Sets per MPPT	1 / 1			1 / 2	
Max. DC Current	11A /11A			11A / 22A	
Max. Current for input connector	15A				
DC Disconnection Type	Integrated Switch				
AC Output					
Rated AC Power	6000W	8000W	10000W	12000W	15000W
Max. AC Power	6600VA	8800VA	11000VA	13200VA	16500VA
Rated AC Voltage	380V,400V				
Rated AC Voltage Range	277- 510V				
Grid Connection Type	3Φ / N / PE				
Max. AC Current	10A	13A	16A	19A	23A
Grid Frequency	50/60Hz				
Grid Frequency Range	45-55/55-65Hz				
Power Factor (cosφ)	±0.8 (adjustable)				
Current THD	< 3%				
AC Disconnection Type	-				
System Data					
Topology	Transformerless				
Max. Efficiency	98.0%	98.0%	98.1%	98.2%	98.2%
Euro Efficiency	97.6%	97.7%	97.8%	97.8%	97.8%
Consumption at Standby/Night	<25W/1W				
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	RS485(Standard) / Wi-Fi & GPRS(Optional)				
Mechanical Data					
Dimensions (W*H*D)	380 * 480 * 176mm				
Weight	19.8kg			21.8kg	
Safety					
Certifications	EN 61000-6,EN/IEC 62109,IEC 61727,IEC 62116,IEC 60068,IEC 61683 EN 50549,CEI 0-21,RD 1699				
▲This model is also available in EU market.					

CPS SCA16/18KTL-T/SA (208/220/240V)

Chint Power String Inverter
High Return of the Whole Life Cycle

Low Investment

Three-phase string series inverters products providing standard configuration DC switch,integrated DC combiner box, optional GPRS/Wi-Fi/RS485 communication, which can match the requirements of different customers, support 10% rated overload which can efficiently decrease initial investment of system.

High Profits

Three-phase string inverters can provide 98.6% maximum efficiency, 98.3% Euro efficiency, 99.5% MPPT efficiency, fan-less topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCA16KTL-T/SA		CPS SCA18KTL-T/SA	
DC Input				
Max. DC Voltage	800Vdc			
MPPT Voltage Range (Full Load)	280-680Vdc		300-680Vdc	
Start Voltage	250Vdc			
Number of MPPT	3		3	
Number of DC Connection Sets per MPPT	2		2	
Max. DC Current	23A/23A/23A		23A/23A/23A	
Max. Current for input connector	15A			
DC Disconnection Type	Integrated Switch			
AC Output				
Rated AC Power	208Vac	15kW	208Vac	16.5kW
	220Vac	16kW	220Vac	17.5kW
	240Vac	17.5kW	240Vac	19kW
Max. AC Power	18kVA		20kVA	
Rated AC Voltage	208V, 220V, 240V			
Rated AC Voltage Range	150V-300V(adjustable)			
Grid Connection Type	3Φ / N / PE			
Max. AC Current	42A		48A	
Grid Frequency	50/60Hz			
Grid Frequency Range	45-55/55-65Hz			
Power Factor (cosφ)	±0.8 (adjustable)			
Current THD	< 3%			
AC Disconnection Type	-			
System Data				
Topology	Transformerless			
Max. Efficiency	98.6%		98.6%	
Euro Efficiency	98.3%		98.3%	
Consumption at Standby/Night	20W/<1W			
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	RS485(Standard) / Wi-Fi & GPRS(Optional)			
Mechanical Data				
Dimensions (W*H*D)	550 * 715 * 284mm			
Weight	53kg			
Safety				
Certifications	EN 61000-6,EN/IEC 62109,IEC 61727,IEC 62116,IEC 61683,IEEE 1547 EN 50549,CEI 0-21,RD 1699			

CPS SCA17~30KTL-T/EU

Chint Power String Inverter
High Return of the Whole Life Cycle

Low Investment

Three-phase string series inverters products providing standard configuration DC switch, integrated DC combiner box, optional GPRS/Wi-Fi/ RS485 communication, which can match the requirements of differentcustomers, support 10% rated overload which can efficiently decrease initial investment of system.

High Profits

Three-phase string inverters can provide 98.6% maximum efficiency, 98.3% Euro efficiency, 99.5% MPPT efficiency, fan-less topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCA17KTL-T/ EU	CPS SCA20KTL-T/ EU▲	CPS SCA22KTL-T/ EU	CPS SCA25KTL-T/ EU▲	CPS SCA30KTL-T1/ EU▲
DC Input					
Max. DC Voltage	1000Vdc				
MPPT Voltage Range (Full Load)	480 - 800Vdc				
Start Voltage	250Vdc				
Rated DC Voltage	620Vdc				
Number of MPPT	2			2	
Number of DC Connection Sets per MPPT	2			3	
Max. DC Current	25A/25A			37.5A/37.5A	
Max. Current for input connector	15A				
DC Disconnection Type	Integrated Switch				
AC Output					
Rated AC Power	17kW	20kW	22kW	25kW	30kW
Max. AC Power	18.7kVA	22kVA	24.2kVA	27.5kVA	33kVA
Rated AC Voltage	380V , 400V				
Rated AC Voltage Range	277 - 520V				
Grid Connection Type	3Φ / N / PE				
Max. AC Current	28.3A	33.5A	35A	40A	48A
Grid Frequency	50/60Hz				
Grid Frequency Range	45-55/55-65Hz				
Power Factor (cosφ)	±0.8（adjustable）				
Current THD	< 3%				
AC Disconnection Type	-				
System Data					
Topology	Transformerless				
Max. Efficiency	98.3%	98.3%	98.3%	98.6%	98.6%
Euro Efficiency	98.0%	98.0%	98.0%	98.3%	98.3%
Consumption at Standby/Night	<25W/1W				
Environment Data					
Ingress Protection	IP65				
Cooling Method	Natural Convection			Cooling Fans	
Operating Temperature	-25°C to +60°C				
Ambient Humidity	0 - 100%				
Altitude	4000m				
Display and Communication					
Display	LED + APP (Bluetooth)				
Communication	RS485(Standard) / Wi-Fi & GPRS(Optional)				
Mechanical Data					
Dimensions (W*H*D)	555 * 446 * 270mm				
Weight	35kg			40kg	
Safety					
Certifications	EN 61000-6,EN/IEC 62109,IEC 61727,IEC 62116,IEC 60068,IEC 61683,CEI 0-21, UNE 217001 IN:2015,EN 50549,CEI 0-21,RD 1699				

▲This model is also available in EU market.

CPS SCA30/36KTL-T/SA (208/220/240V)

Chint Power String Inverter
High Return of the Whole Life Cycle

Low Investment

Three-phase string series inverters products providing standard configuration DC switch, integrated DC combiner box, optional GPRS/Wi-Fi/RS485 communication, which can match the requirements of different customers, support 10% rated overload which can efficiently decrease initial investment of system.

High Profits

Three-phase string inverters can provide 98.8% maximum efficiency, 98.4% Euro efficiency, 99.5% MPPT efficiency, fan-less topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCA30KTL-T/SA		CPS SCA36KTL-T/SA	
DC Input				
Max. DC Voltage	800Vdc			
MPPT Voltage Range (Full Load)	300-680Vdc		300-680Vdc	
Start Voltage	250Vdc			
Number of MPPT	4		4	
Number of DC Connection Sets per MPPT	3/3/2/2		3/3/3/3	
Max. DC Current	33A/33A/22A/22A		33A/33A/33A/33A	
Max. Current for input connector	15A			
DC Disconnection Type	Integrated Switch			
AC Output				
Rated AC Power	208Vac	27.5kW	208Vac	32.5kW
	220Vac	29kW	220Vac	34.5kW
	240Vac	31.5kW	240Vac	37.5kW
Max. AC Power	33kVA		40kVA	
Rated AC Voltage	208V, 220V, 240V			
Rated AC Voltage Range	150V-300V(adjustable)			
Grid Connection Type	3Φ / N / PE			
Max. AC Current	83A		92A	
Grid Frequency	50/60Hz			
Grid Frequency Range	45-55/55-65Hz			
Power Factor (cosφ)	±0.8(adjustable)			
Current THD	< 3%			
AC Disconnection Type	-			
System Data				
Topology	Transformerless			
Max. Efficiency	98.8%		98.8%	
Euro Efficiency	98.4%		98.4%	
Consumption at Standby/Night	20W/<1W			
Environment Data				
Ingress Protection	IP65			
Cooling Method	Cooling Fans			
Operating Temperature	-25°C to +60°C			
Ambient Humidity	0 - 100%			
Altitude	4000m			
Display and Communication				
Display	LED + APP（Bluetooth）			
Communication	RS485(Standard) / Wi-Fi & GPRS(Optional)			
Mechanical Data				
Dimensions (W*H*D)	855 * 565 * 275mm			
Weight	67kg			
Safety				
Certifications	EN 61000-6,EN/IEC 62109,IEEE 1547			

CPS SCA50/60KTL-T/EU

Chint Power String Inverter
High Return of the Whole Life Cycle

Low Investment

Three-phase string series inverters products providing standard configuration DC switch, integrated DC combiner box, optional Wi-Fi/GPRS/RS485 communication, which can match the requirements of different customers, support 10% rated overload which can efficiently decrease initial investment of system.

High Profits

Three-phase string inverters can provide 98.8% maximum efficiency, 98.4% Euro efficiency, 99.5% MPPT efficiency, fan-less topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCA50KTL-T/EU	CPS SCA60KTL-T/EU
DC Input		
Max. DC Voltage	1100Vdc	
MPPT Voltage Range (Full Load)	540-850Vdc	
Start Voltage	250Vdc	
Rated DC Voltage	620Vdc	
Number of MPPT	4	4
Number of DC Connection Sets per MPPT	3/3/2/2	3/3/3/3
Max. DC Current	33A/33A/22A/22A	33A/33A/33A/33A
Max. Current for input connector	15A	
DC Disconnection Type	Integrated Switch	
AC Output		
Rated AC Power	50kW	60kW
Max. AC Power	55kVA	66kVA
Rated AC Voltage	380V, 400V	
Rated AC Voltage Range	277V-520V	
Grid Connection Type	3Φ / N / PE	
Max. AC Current	76A	92A
Grid Frequency	50/60Hz	
Grid Frequency Range	45-55/55-65Hz	
Power Factor (cosφ)	±0.8（adjustable）	
Current THD	< 3%	
AC Disconnection Type	-	
System Data		
Topology	Transformerless	
Max. Efficiency	98.8%	98.8%
Euro Efficiency	98.4%	98.4%
Consumption at Standby/Night	< 25W/1W	
Environment Data		
Ingress Protection	IP65	
Cooling Method	Cooling Fans	
Operating Temperature	-25°C to +60°C	
Ambient Humidity	0 - 100%	
Altitude	4000m	
Display and Communication		
Display	LED + APP (Bluetooth)	
Communication	RS485(Standard) / Wi-Fi & GPRS(Optional)	
Mechanical Data		
Dimensions (W*H*D)	855 * 555 * 275mm	
Weight	65kg	67kg
Safety		
Certifications	EN/IEC 62109,IEC 61727,IEC 62116,IEC 60068,IEC 61683,EN 50530	

CPS SCA110KTL-DO/EU

Chint Power String Inverter
High Return of the Whole Life Cycle

Low Investment

Three-phase string series inverters products providing standard configuration DC switch, integrated DC combiner box, optional PLC/RS485 communication, which can match the requirements of different customers, support 10% rated overload which can efficiently decrease initial investment of system.

High Profits

Three-phase string inverters can provide 99.8% maximum efficiency, 98.4% Euro efficiency, 99.5% MPPT efficiency, advanced topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCA110KTL-DO/EU	CPS SCA110KTL-DO/EU2
DC Input		
Max. DC Voltage	1100Vdc	
MPPT Voltage Range (Full Load)	500-870Vdc	
Start Voltage/Power	300Vdc/100W	
Rated DC Voltage	600Vdc	
Number of MPPT	9	12
Number of DC Connection Sets per MPPT	2	1
Max. DC Current	9*26A	12*26A
Max. Current for input connector	30A	
DC Disconnection Type	Integrated Switch	
AC Output		
Rated AC Power	100kW	
Max. AC Power	110kVA	
Rated AC Voltage	400Vac	
AC Voltage Range*	322~528Vac	
Grid Connection Type	3Φ / PE	
Max. AC Current	160A	
Rated Frequency	50/60Hz	
Grid Frequency Range*	45-55/55-65Hz	
Power Factor (cosφ)	±0.8 (adjustable)	
Current THD	< 3%	
AC Disconnection Type	-	
System Data		
Topology	Transformerless	
Max. Efficiency	98.80%	
Euro Efficiency	98.40%	
Consumption at Standby/Night	< 30W / < 6W	
Environment Data		
Ingress Protection	IP66	
Cooling Method	Cooling Fans	
Operating Temperature Range	-30°C - +60°C	
Ambient Humidity	0 - 100%	
Altitude	4000m	
Display and Communication		
Display	LED+APP(Bluetooth+Wi-Fi)	
Communication	RS485 (Standard) / PLC (Optional)	
Mechanical Data		
Dimensions (W*H*D)	1050 * 660* 340mm	
Weight	86kg	
Safety		
Certifications	LVD,IEC61727&IEC62116，EN50549	

* "Output Voltage Range" and "Output Frequency Range" may be differ according to specific grid codes.

CPS SCH275KTL-DO/EU

Chint Power 1500V String Inverter
High Return of the Whole Life Cycle

Low Investment

Three-phase string series inverters products providing standard configuration DC switch, integrated DC combiner box, standard class II lightning protection, optional PLC/RS485 communication, which can match the requirements of different customers.

High Profits

Three-phase string inverters can provide 99.0% maximum efficiency, 98.5% Euro efficiency, 99.5% MPPT efficiency, advanced topology design and international known device options, which can guarantee the profits of the Whole Life Cycle.

Maintenance Warranty

String inverter can support remote monitoring, fault diagnosis and software upgrade, 7*24H after-sales service can guarantee the maintenance of the Whole Life Cycle.

Model Name	CPS SCH275KTL-DO/EU	CPS SCH275KTL-DO/EU2
DC Input		
Max. DC Voltage	1500Vdc	
MPPT Voltage Range (Full Load)	900-1300Vdc	
Start Voltage/Power	550Vdc / 300W	
Rated DC Voltage	1190Vdc	
Number of MPPT	12	6
Number of DC Connection Sets per MPPT	2	3
Max. DC Current	12 * 30A	6 * 60A
Max. Current for input connector	30A	
DC Disconnection Type	Integrated Switch	
AC Output		
Rated AC Power	275kW	
Max. AC Power	275kVA	
Rated AC Voltage	800V	
Rated AC Voltage Range	680 - 880V	
Grid Connection Type	3Φ / PE	
Max. AC Current	198.5A	
Grid Frequency	50/60Hz	
Grid Frequency Range	45-55/55-65Hz	
Power Factor (cosφ)	±0.8 (adjustablE)	
Current THD	< 3%	
AC Disconnection Type	-	
System Data		
Topology	Transformerless	
Max. Efficiency	99.00%	
Euro Efficiency	98.50%	
Consumption at Standby/Night	<30W / <6W	
Environment Data		
Ingress Protection	IP66	
Cooling Method	Cooling Fans	
Operating Temperature	-30°C - +60°C	
Ambient Humidity	0 - 100%	
Altitude	4000m	
Display and Communication		
Display	LED+APP(Bluetooth+Wi-Fi)	
Communication	RS485 (Standard) / PLC (Optional)	
Mechanical Data		
Dimensions (W*H*D)	1100 * 680 * 337mm	
Weight	105kg	
Safety		
Certifications	EN 61000-6,EN/IEC 62109,IEC 61727,IEC 62116,IEC 60068,IEC 61683	

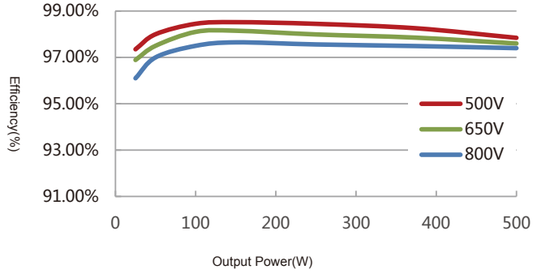
* "Output Voltage Range" and "Output Frequency Range" may be differ according to specific grid codes.

175/350/500/630kW
Energy Storage Inverter

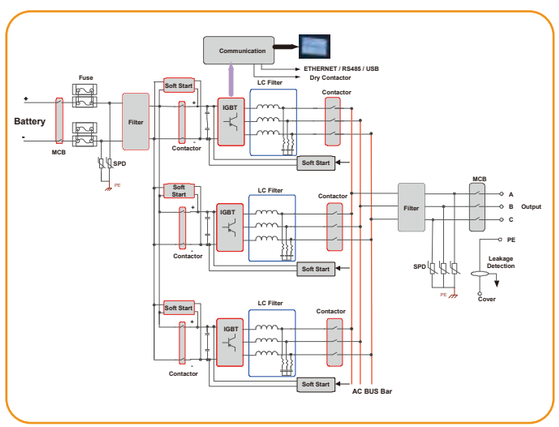
CPS energy storage inverter is mainly applicable to energy storage systems accounting for a major part in the smart grid. The battery in the energy storage system is used to recycle, convert and discharge the electricity power while the energy storage inverter can adjust the frequency and power during peak and trough hours in order to strengthen the regional grid adaptability lower the grid investment and further raise the safety, stability and electricity quality of the public grid. Besides, the energy storage system, together with the new energy power generation, composes the micro-grid, which can effectively resolve the power shortage in distant countryside and islands to raise the people’s living standard.

Efficiency Curve

CPS ECB500KTL-CN



Schematic Diagram



Efficiency Curve

- Max. efficiency of 98.8%, Euro efficiency of 98.5%
- Bi-directional energy flow, four quadrant inverter

High Reliability

- Short response time less than 20ms
- Support over-loading capacity, front-side service access
- Dual DSP and MCU design, double backups and multi-monitoring availabilities strengthen system reliability
- Support ZVRT, single and three phase voltage dip

Broad Adaptability

- Seamless switch between on/off grid mode
- Reactive power control, -0.9 to +0.9 power factor
- Active power derating from 0-100%
- Extreme low output current THD (1.3%)
- 3 independent Ethernet ports for MODBUS TCP protocol
- Advanced thermal design, fan speed control
- Support various energy storage systems, including fluid, lithium, plumbic acid and super capacitor, etc.

Model Name	CPS ECB175KTL	CPS ECB350KTL	CPS ECB500KTL	CPS ECB630KTL
DC Input				
Max. Battery Voltage	900Vdc			
Battery Voltage Range	585-850Vdc			615~850Vdc
Rated Battery Voltage	680Vdc	680Vdc	680Vdc	700Vdc
Battery Ripple voltage	<2%			
Battery voltage Setpoint	<1%			
Max. Battery current	383A	768A	1150A	1250A
AC Grid-Tied MODE				
Rated AC Power	175kW	350kW	500kW	630kW
Max. AC Power	193KVA	385KVA	550KVA	660KVA
Rated Grid Voltage	380Vac			400Vac
Grid Voltage Range*	-15%,+15%			
Rated Grid Frequency *	50/60Hz			
Grid Frequency Range	47~51.5/57~63Hz			
Total Harmonic Distortion	<3%			
Power Factor	≥0.99（±0.9 adjustable）			
AC Off-Grid MODE				
Rated AC Power	175kW	350kW	500kW	630kW
Max. AC Power	193KW	385KW	550KW	660KW
Rated Output Voltage	380Vac			400Vac
Voltage Deviation	-15%,+15%			
Voltage unbalance facor	2%			
Voltage Total Harmonic Distortion	<3%			
Rated Output Frequency *	50/60Hz			
Operating Performance				
Max. Efficiency	98.80%			
Euro. Efficiency	98.50%			
Protection Degree	IP20			
Cooling	Forced air cooling			
Operating Temperature Range	-25°C to +60°C (derating from 50°C)			
Storage Temperature Range	-40°C to +70°C			
Operating Humidity	0-95%, non-condensing			
Operating Altitude	4000m (derating from 3000m)			
Display and Communication				
User Interface and Display	Touchscreen			
Communication	RS485,Ethernet			
Modbus Data Mapping	MODBUS RTU / MODBUS TCP			
Mechanical				
Dimensions (WxHxD)	1110x1967x800mm			
Weight	300kg	600kg	900kg	900kg
Safety				
Compliance	IEC 61727, IEC 62116, IEC 62477, GB/T 34120, GB/T 34133			

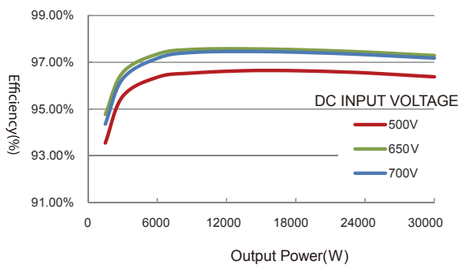
*The different of 'Range of Vout & Frequency , is due to the different National standards.

30kW
Energy Storage Inverter

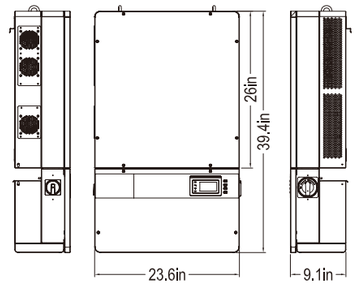
The CPS 30kW energy storage inverter is designed for use in commercial and industrial scale grid-tied energy storage systems. The inverter is optimized to meet the needs of the most demanding behind the meter energy storage applications including demand charge reduction, power quality, load shifting, and ancillary grid support services such as frequency response and voltage support. The CPS 30kW energy storage inverter is designed specifically for the North American environment and is based on the same platform as the >40,000 CPS commercial string inverters already operating on the US grid. High efficiency, parallel operation, wide operating voltages, broad temperature ranges and a NEMA 4X enclosure make this an ideal building block for any commercial or industrial energy storage application. The CPS 30kW energy storage inverters ship with touch safe fusing, monitoring, and load break AC and DC disconnect switches.

Efficiency Curve

CPS ECB 30KTL-O/US



Dimensions



High Efficiency

- Maximum efficiency of 98% Discharge; 97.6% Charge
- 3-level topology with advanced controls
- Transformerless design

High Reliability

- “Electrolyte-free design” for long-term reliability
- Standard warranty: 2 years, extension up to 10 or 25 years
- Advanced thermal design with variable speed fans
- Ground-fault detection and interruption circuit

Broad Adaptability

- NEMA 4X, suitable for indoor and outdoor applications
- Utility interactive controls: Active power derating,reactive power control
- Optional CPS Flex Gateway enables remote FW upgrades Separate wiring box design
- Integrated load break AC and DC disconnects
- Advanced Smart-Grid features (CA Rule 21)
- 150ms response to set point commands
- Compatible with high voltage Li-Ion battery racks

Model Name	CPS ECB30KTL-O/US
DC Input	
Nominal DC Input Power	31kW
Max. DC Input Voltage[1]	900Vdc
Operating DC Input Voltage Range[2]	250-900Vdc
Operating Current(Imp)	70A
DC Disconnection Type	Load rated DC switch
AC Output GRID	
Rated AC Output Power	29.99kW
Rated Output Voltage	480Vac
Output Voltage Range[3]	422-528Vac
Grid Connection Type	3Φ/PE (Neutral Optional)
Nominal AC Output Current @480Vac	36A
Rated Output Frequency	60 Hz ±5%
Power Factor	>0.99 (±0.8 adjustable)
Current THD	<3%
AC Disconnection Type	Load rated AC switch
DC Output	
Rated DC Output Power	20kW
Output Voltage Range	0~900V
OFF GRID	
Rated Output Voltage	480 Vac, 3P3W(In 3P4W case, an external Dyn Transformer is required)
AC voltage range	422-528Vac
Rated Output Power	29.99 kVA/29.99 kW with linear load 24 kVA with non-linear/RCD load
Rated Output Frequency	60 Hz ±5%
Output Voltage THD	<3% @ 12.5~100% liner load < 5% @ 12.5~100% non-liner load
Output Voltage Regulation	<10%, at dynamic; Recovering within tolerance in 100ms
Automatic switchover time	20ms
System	
Topology	Transformerless
Max. Efficiency	98.00%
Stand-by	<20W
Environment	
Protection Degree	NEMA 4X
Cooling	Variable speed cooling fans
Operating Temperature Range	-22°F to +140°F / - 30°C to +60°C (derating from +113°F / +45°C)
Operating Humidity	0-95%, non-condensing
Operating Altitude	13123.4ft / 4000m (derating from 6561.7ft / 2000m)
Display and Communication	
Display	LCD + LED
Communication	Standard: RS485 (Modbus) Ethernet CAN Optional: TCP/IP card
Mechanical Data	
Dimensions (WxHxD)	600×1000×230mm
Weight	Converter:122lbs/55kg; wirebox:20lbs/9kg
AC Termination	Screw Clamp Terminal Block(Wire range:#8~1AWG CU,#6~1AWG AL)
DC Termination	Screw Clamp Terminal Block(Wire range:#4~1AWG CU,#3~1AWG AL)
Safety	
Safety and EMC Standard	IEEE 1547, Rule 21; FCC PART15
Grid Standard	IEEE1547: 2003(R2008), IEEE1547.1-2005(R2011).CA Rule21

1) Exceeding the Max. DC Input Voltage may cause permanent damage to the equipment.
2) The "Output Voltage Range" and "Output Frequency Range" may differ according to the specific grid standard.

External Data Logger

S-G01

S-WE01S

By collecting information from inverters including status and performance, CPS external data loggers make the long-term monitoring of PV systems feasible and efficient.

By connecting with single or multiple inverters through RS485/422/232 interface, the data logger can collect information of PV systems from inverters. In addition, Portal can provide powerful data support for users.
Data collected by the data logger can be transmitted to the monitoring portal via Ethernet, WiFi and GPRS, etc. Both real-time and historical data can be displayed with transparent graphs. Customized alerts can notify users of any malfunction or defect immediately via SMS and emails.

CPS WiFi Kit is suitable for homes and office buildings where WiFi network is available. A WiFi module is integrated in the data logger, enabling data transmission via WiFi network. No additional wiring or software is required, far simplifying installation and reducing costs for users.Furthermore, an independent web server is integrated in the data logger, which enables users to directly connect to the WiFi Access Point of the data logger and to check the performance and yield of the inverter even without any outer network.
CPS GPRS Kit is suitable for standalone plants or buildings where no network connection is available. A GPRS module is integrated in the data logger, and with a valid SIM card, the data logger can transmit data via mobile network. CPS can provide users of GPRS data logger with the most cost-effective global roaming SIM cards which support GPRS data roaming in almost all countries around the world. We will provide the most favorable tariff and the best package for users to ensure the long-term and stable data acquisition from data loggers, therefore ensuring continuous monitoring of PV systems.

S-G01

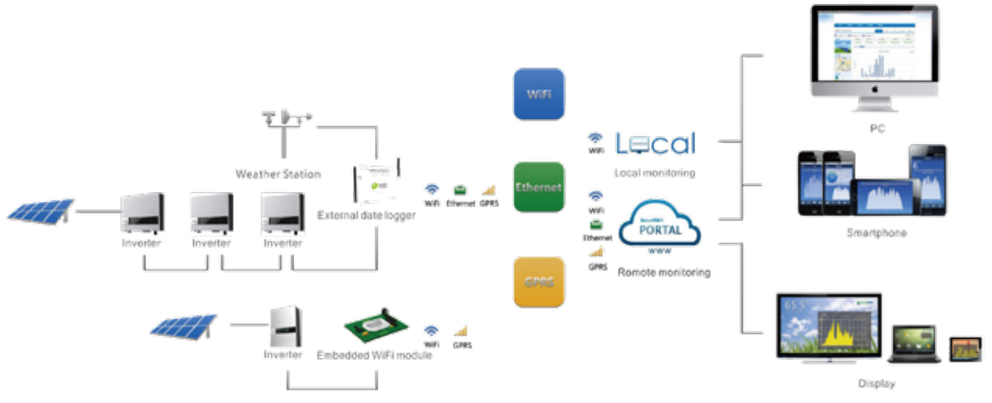
- Devices such as combiner box, electric meter and weather station, etc. can be connected
- Quick installation and easy operation with "Plug & Play" function
- Data storage of over 25 years
- Global roaming enables perfect operation for plant sites all over the world

S-WE01S

- Devices such as combiner box, electric meter and weather station, etc. can be connected
- Two communication methods available, including Ethernet and WiFi
- Data storage of over 25 years
- Check real-time data of data logger and inverter via embedded Web Server
- Dual mode of local monitoring and remote monitoring

Model Name	S-WE01	S-G01
General		
Max. Number of Inverters	1-10	1-10
Inverter Communication	RS485/422	RS485/422
Remote Communication	WiFi(802.11 b/g/n)/Ethernet	GPRS
Max. Communication Range	<1km	<1km
Communication Rate	1200-19200bps(Adjustable)	1200-19200bps(Adjustable)
WiFi Frequency	2.4GHz	800/900/1800/1900MHz
WiFi Communication Range	400m in outdoor open area without	-
WiFi Transmitting Power	802.11b/g/n: +20dBm/+18dBm/15dBm(Max)	Class 4(2W)/Class 1(1W)
Data Collection Intervals	5minutes(Default)/1-15minutes(Optional)	5minutes default/1-15minutes optional
Memory	SD Card/EEPROM(Optional)	SD Card/EEPROM(Optional)
Preferences Setting	Web Server/Serial port AT instruction	Serial port AT instruction
Firmware Updates	Serial port/Wireless	Serial port/Wireless
Data Access	Serial port/WiFi point-to-point/Remote server	Serial port/Remote server
Status Display	4 LEDs	4 LEDs
Electrical		
Input Voltage	DC 5V	DC 5V
Static Power Consumption	<1.6W	<2W
Max. Instantaneous Power Consumption	<2.5W	<3W
Environmental		
Operating Temperature	-10 to +65℃	-10 to +65℃
Operating Humidity	10%-90% Relative humidity, no condensation	10%-90% Relative humidity, no condensation
Storage Temperature	-40 to +85℃	-40 to +85℃
Storage Humidity	<40%	<40%
Protection Class	IP21	IP21
Physical		
Dimension(L×W×H)	110mm×80mm×26mm	110mm×80mm×26mm
Weight	108g	102g
Other		
Installation Method	Wall mounting, desktop device	Wall mounting, desktop device
Certificates	FCC, CE, RoHS	FCC, CE, RoHS

Monitoring System



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
- 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 Display

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

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	CPS Portal
Language	
Available Languages	English, Spanish, Thai, Czech, Portuguese, Chinese
System Requirements	
Supported Operating Systems	All/optimized access for mobile devices
Software	
Recommended Browsers	FireFox, Internet Explorer 7 or later, Safari, Chrome
Other	JavaScript and Cookies enabled
Access	
Website	solar.chintpower.com
Smartphone	CPS App for iPhone and Android
Plant Management	
CPS Portal Account	One password for all your plants in CPS Portal

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
- CO_2 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.

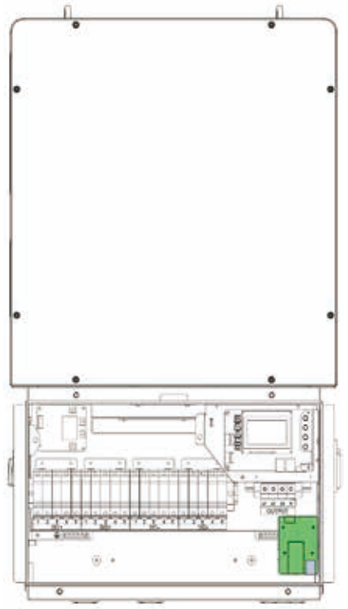
By connecting with inverter through RS232/RS485 interface (DB9 port), the WiFi Module can collect information of PV systems from inverter. With the integrated WiFi function, the WiFi Module can connect to router and transmit data to the web server, realizing remote monitoring for users.

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
WLAN	2.4GHz 802.11 b / g / n
Power	
Input Voltage	5Vdc
Power Consumption	2W
Environmental	
Operating Temperature	-20℃ to +65℃
Working Humidity	≤ 95%
Protection class	IP65
Mechanical Parameters	
Dimensions (W * H * D)	45mm * 80mm * 25mm
Installation	Plug-in type

CPS Flex Gateway



The CPS Flex Gateway is a new monitoring and controls solution for the CPS 25 to 125kW 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 RS485
- 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

System & Monitoring

Model Name	CPS GW-3PKTL-US
Communications	
Inverter interface	RS485
User interface	Standard: RS485, Ethernet, USB
Inverter connections per card	32
Protocol	HTTPS, DHCP, DNS Resolution, Modbus TCP
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 Supply	
DC power supply output	~ 2W
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