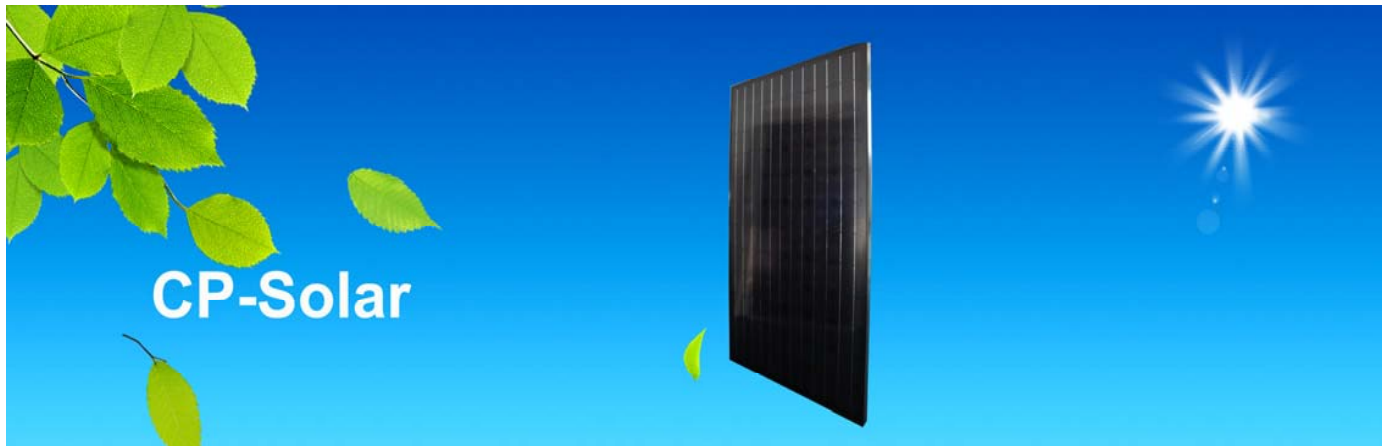




CP-Solar

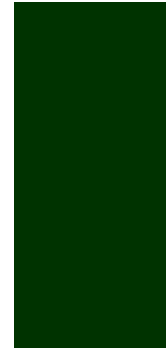
Your project: the solution for you



The solution for you

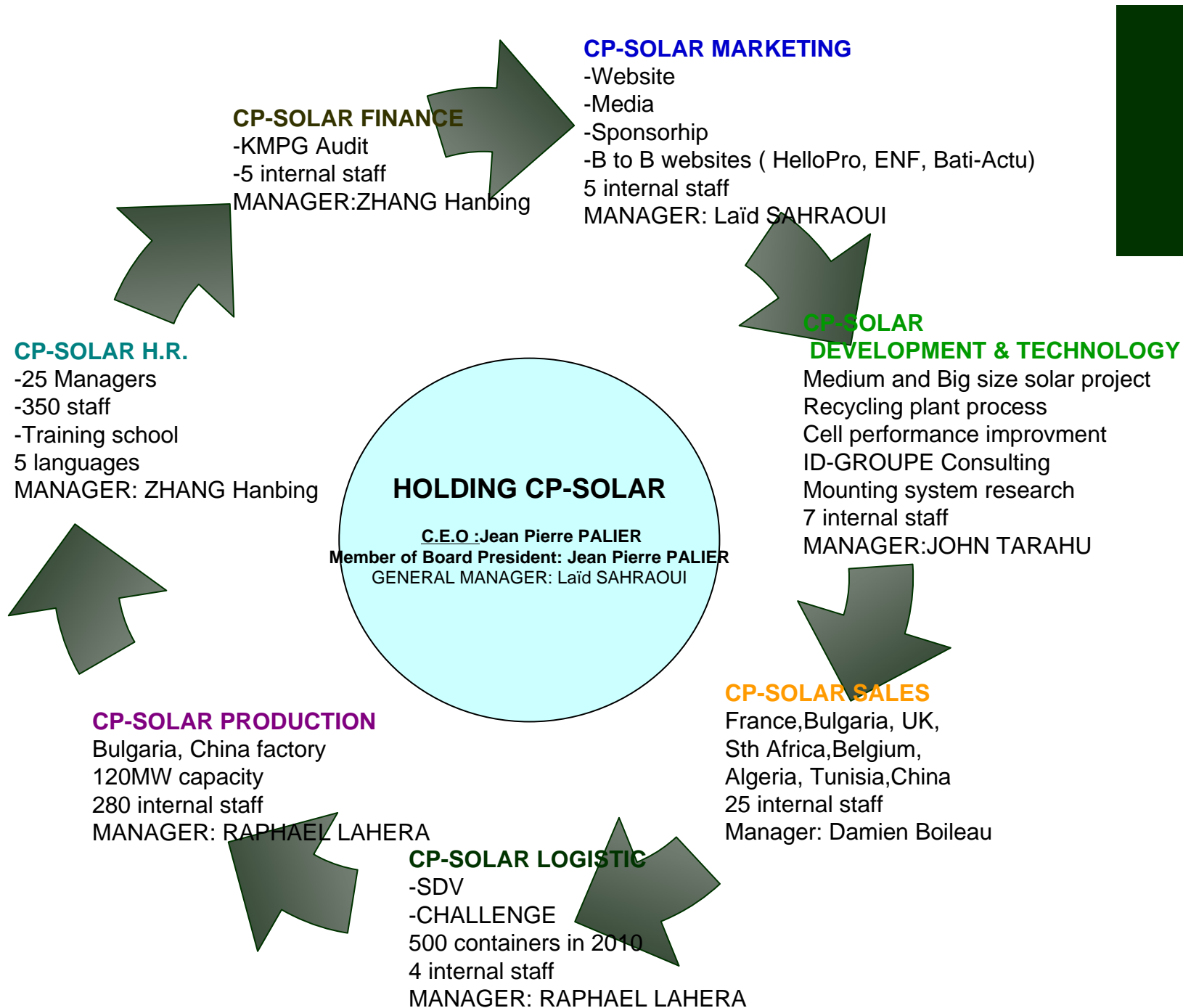
CP-Solar, company profile

- CP-Solar established in 2006 by Mr Palier, (former accounting expert).
- Head office, factories and representatives office located in China, France and Bulgaria.
- French-owned company
- Mono and Polycrystalline Modules Producer
- Location: Zhejiang Province, Wenzhou, China



HUMAN RESOURCES

- Head office (Wenzhou): **60** employees managed by 5 French people.
- Office in France : **8** people
- Factory in China: **150** people.
- Factory in Bulgaria : **50** people.
- Employments created in 2010 → **350**.
- SPONSORING : **4** students, PARISTECH, Master School in Renewable energy, recycling.



Production site

In 2009

- Production capacity : 30 MW

In 2010

- China: 120MW
- Bulgaria: 10MW (end of 2010)
- Tunisia: 5MW (end of 2010)

Recycling factory in 2014



Worldwide presence

- Office opening in 2010 :

Italy, Czech Republic, **Bulgaria**, Reunion Island, **Tunisia**, **South Africa**, **Turkey**, **UK**.

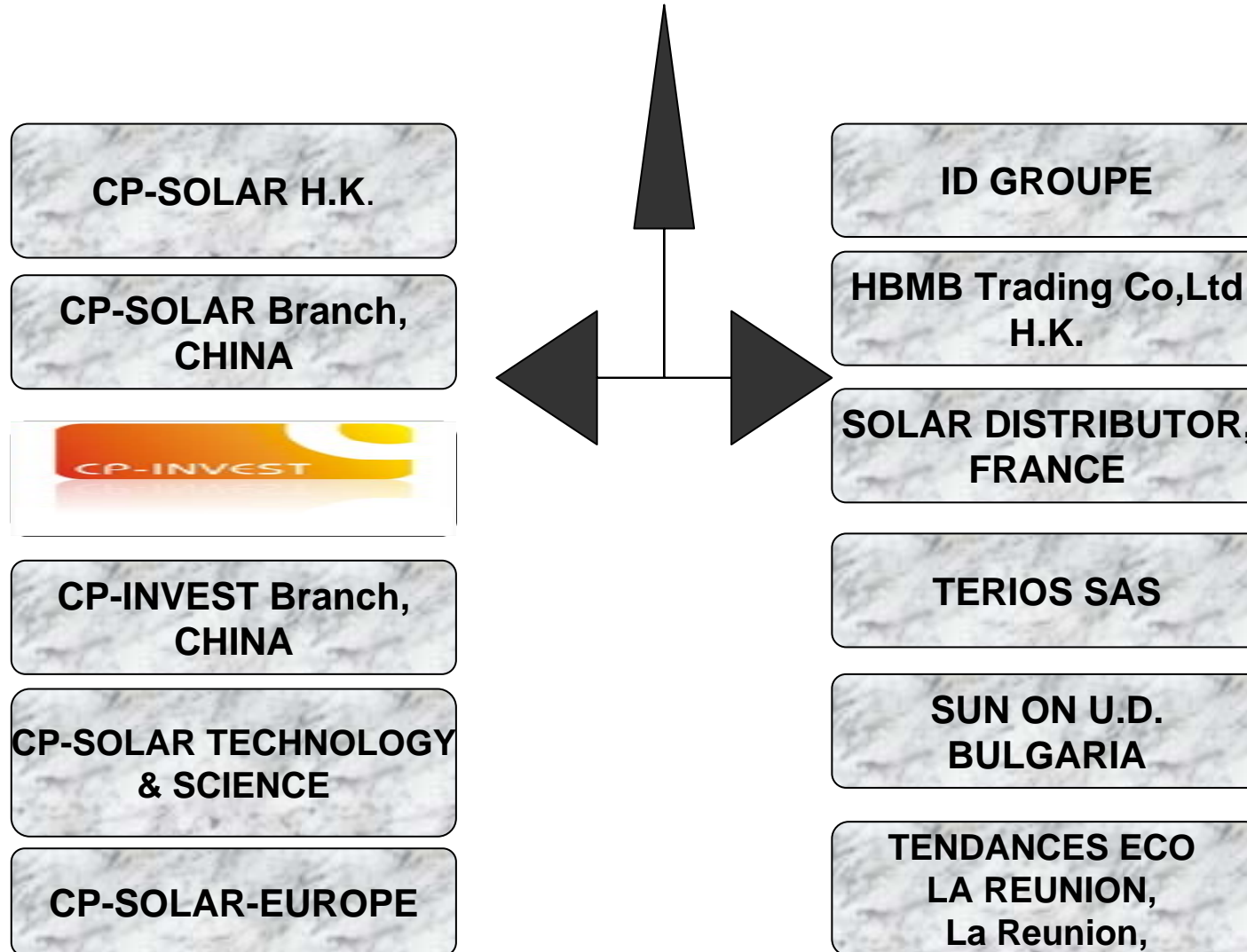
- Distributors all over the 5 continents.

- Attending 17 Solar Exhibition in 2010:

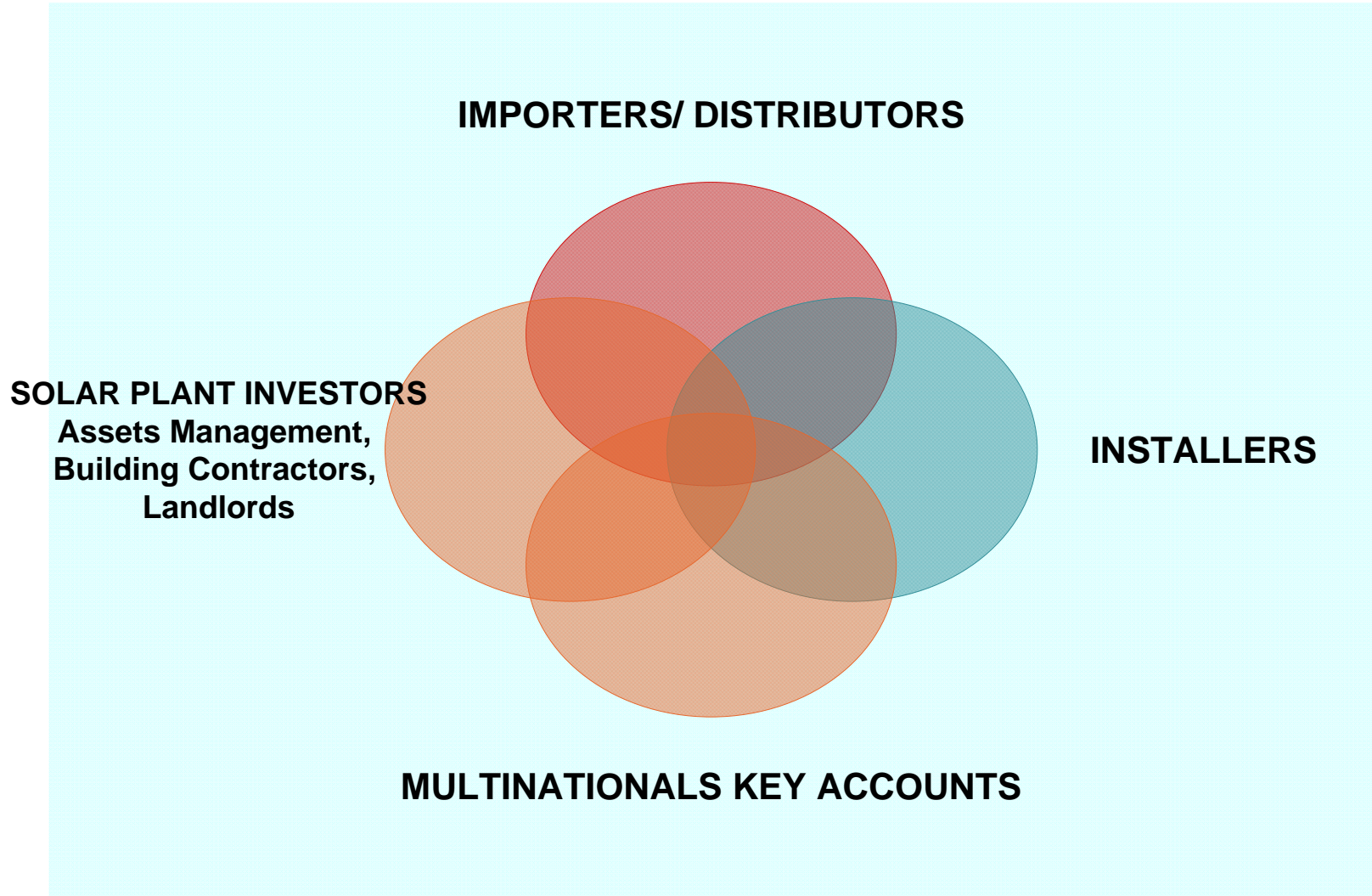
France, Bulgaria, South Africa, USA, Spain, Italy, Turkey, Greece, United Kingdom, Tunisia...



CP-SOLAR GROUP: TOTAL CAPITAL AND ASSETS



Who are our customers?



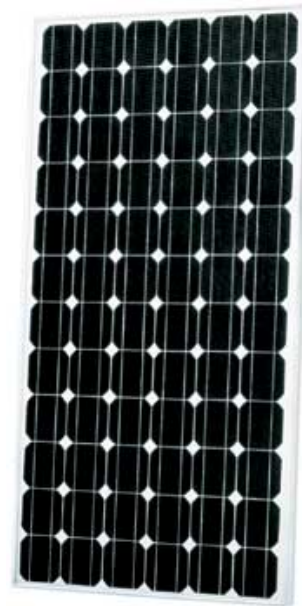


Products range



Photovoltaic modules

- SOME CHARACTERISTICS:
- Mono and poly crystalline panels.
- 5 to 290 Watts.
- 190Wc Mono = 148,9Wc/M²
- 240Wc Poly = 148,1Wc/M²
- Cell efficiency up to 18,6%.
- C.E. Certified Bill Of Materials.



190 Wc Mono – 290 Wc Poly

Photovoltaic Module polycristallin

CPS290W



CPS 290 Watts series is manufactured from high quality materials, selected for their durability and performance. Our solar panels are certified CE, TUV and IEC, for on-grid systems, residential and solar power plants use.

Electrical specifications	
Rated power (Wp)	290Wp
Tolerance	+/-3%
Maximum power voltage (Vpm)	36V
Maximum power current (Ipm)	8.06A
Open circuit voltage (Voc)	44.6V
Short circuit current (Isc)	8.40A
Cell efficiency	16.6%

Standard test conditions: Irradiation 1000W/m², spectra AM 1.5 and temperature at 23°C

Mechanical specifications	
Dimensions	1960*990*45mm
Cells configuration	72
Size of cells	156*156mm
Weight	22.5Kg
Cells type	Polycrystallin
Frame	Aluminum
Junction box	Certified TUV
Encapsulation	EVA
Back side	TPT
Front side	Tempered glass
Cable length	900mm

Temperature Coefficient	
Power rating (Pm)	-(-0.5±0.05)%°C
Temperature coefficient (Vpm)	-0.38%/°C
Temperature coefficient (Ipm)	+0.1%/°C
Temperature coefficient (Voc)	-(-0.3±0.05)%°C
Temperature coefficient (Isc)	(0.065±0.015)%°C

Limits	
Maximum system voltage	1000V
Operating temperature	-40°C to +85°C
Maximum load	2400 Pa

Guaranties and certificates

- ⇒ Manufacture guaranty 10 years
- ⇒ 90% of power during 20 years
- ⇒ 80% of power during 25 years
- ⇒ Third party inspection before shipment on request.
- ⇒ CE, TUV & IEC Certified
- ⇒ European Liability Insurance:
 1. Operating Liability Insurance
 2. Liability Products supplied

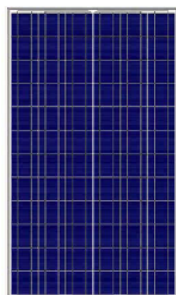
CP-SOLAR, THE PERFORMANCE FIRST

Cell efficiency up to 16.6%. Selection of best cells raw material in order to improve the efficiency per square meters.

Diodes by-pass to avoid falls due to the shadow.

Limitation of reflection of light rays through the EVA material.

Not deformable aluminum frame with its unique casing system.



www.cp-solar.com
info@cp-solar.com

Photovoltaic Module monocristallin

CPS190W



CPS 190 Watts series is manufactured from high quality materials, selected for their durability and performance. Our solar panels are certified CE TUV and IEC, for on-grid systems, residential and solar power plants use.

Electrical specifications	
Rated power (Wp)	190Wp
Tolerance	+/-3%
Maximum power voltage (Vpm)	37.30V
Maximum power current (Ipm)	5.09A
Open circuit voltage (Voc)	44.50V
Short circuit current (Isc)	5.48A
Cell efficiency	17.7%

Standard test conditions: Irradiation 1000W/m², spectra AM 1.5 and temperature at 23°C

Mechanical specifications	
Dimensions	1580*808*40mm
Cells configuration	72
Size of cells	125*125mm
Weight	14.8kg
Cells type	Monocrystallin
Frame	Aluminum
Junction box	Certified TUV
Encapsulation	EVA
Back side	TPT
Front side	Tempered glass
Cable length	900mm

Temperature Coefficient	
Power rating (Pm)	-(-0.5±0.05)%°C
Temperature coefficient (Vpm)	-0.38%/°C
Temperature coefficient (Ipm)	+0.1%/°C
Temperature coefficient (Voc)	-(-0.3±0.05)%°C
Temperature coefficient (Isc)	(0.065±0.015)%°C

Limits	
Maximum system voltage	1000V
Operating temperature	-40°C to +85°C
Maximum load	2400 Pa

Guaranties and certificates

- ⇒ Manufacture guaranty 10 years
- ⇒ 90% of power during 20 years
- ⇒ 80% of power during 25 years
- ⇒ Third party inspection before shipment on request.
- ⇒ CE TUV & IEC Certified
- ⇒ European Liability Insurance:
 1. Operating Liability Insurance
 2. Liability Products supplied

CP-SOLAR, THE PERFORMANCE FIRST

Cell efficiency 17.7%. Selection of best cells raw material in order to improve the efficiency per square meters.

Diodes by-pass to avoid falls due to the shadow.

Limitation of reflection of light rays through the EVA material.

Not deformable aluminum frame with its unique casing system.



www.cp-solar.com
info@cp-solar.com



Solar systems

- On-grid or stand-alone systems.
- Up to 250kW.
- Design on request according to your project.
- INVERTERS
- CABLES/ CONNECTORS (MC4 type)
- AC/DC Protection Device
- Mounting system

On grid kit CPS-FR Power 3 kW
(AEROSHARP)

The CPS-FR kit 3kW is designed for residential use. Composed of photovoltaic panels and a solar inverter, the CPS-FR 3kW suited to the production and sale of electricity to the national grid. All of the components are certified IEC and CE.

Composition of the system	
Photovoltaic panels (CP-solar)	16
Solar inverter (Aerosharp)	1
Support (Solo-In)	1
Solar cable	100 m
Converter assembly/terminal (CPS-FR kit)	4 pairs
DC Selector	2

Transport	
Total weight	4200kg
Total volume/kit	1.54m ³
Container capacity	20GP-40HQ

GUARANTEED 10 YEARS

European Liability Insurance:
1. Operating Liability Insurance
2. Liability Products supplied



The CPS-FR kit 3kW includes a fastening system and the integration of the roof panels is easier to mount: 8 steps are sufficient. CP-Solar guarantees a perfect seal with insulating aluminum plates.

Photovoltaic panel		Solar inverter		Support	
Nominal power	185W -4-3%	Reference	Aerosharp 185-DNY-201-428	Reference	Solo-In
Cell type (Number)	Mono (72)	Nominal power	2.8kW	Structure type	Aluminum roof structure
Min. voltage at max. power (V _{mp})	36.80V	Min. DC input power	3270W	Fast-tying	Flat-roof or landscape
Max. current at max. power (I _{mp})	5.01A	Nominal AC output voltage	220V/230V	Angle installing	From 3° up to 90°
Open circuit voltage (V _{oc})	44.50V	Max. efficiency	94.5%	Wind resistance	B10 Rank
Short circuit current (I _{sc})	5.31A	Protection rating	IP65	Isolation	Alu plate, water tightness by covering
Cells efficiency	17.3%	Weight	43.8kg	Alu plate dimensions	Flat-roof mono : 1680*1034 Landscape poly : 1740*1016 Landscape mono : 900*1606 Landscape poly : 800*1606
Dimensions	1580*808*40mm	Dimensions	470*575*225mm	Roofs dimensions	4.30 m
Weight	14.8kg	Communication cable	1000-BB-485 4-core cable (optional)	Total weight	881.53kg

The on grid kit CPS-FR is also available in 750W, 1.2kW, 2.3kW, 3kW, 3.5kW, 4.6kW, 10kW, 12kW, 18kW and 34kW


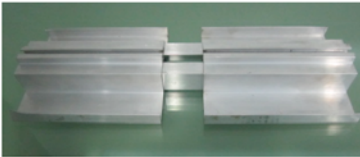
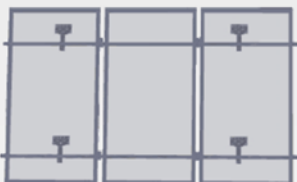
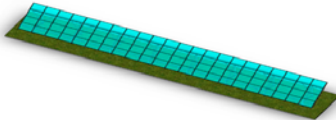
www.cp-solar.com
info@cp-solar.com

*Subject to change without notice.



Mounting systems



Les solutions supports de fixation CP-Solar			
Référence	Images	Applications	Avantages
Sole-In Home		Support spécialement conçu et optimisé pour l'intégration au bâti 3kW en France	Adapté a marché français. Solide et fiable. Facile à monter. Prix très compétitif
Sole-In Factory		Version mise à jour de Sole-In Home avec une adaptation pour les grandes surfaces de toit.	Inspiré et modifié en fonction des retours terrain des installateurs.
Sole-In Roof		Système pour la surimposition.	S'adapte à tous les types de toits et tuiles.
Sole-In Field		Système de fixation pour les centrales au sol.	Adapté a tous types de sol. Dimension de forage selon conditions climatiques : béton ou vis krinner

Inverters

- Aerosharp,



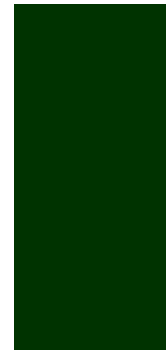
exclusive distributor in France.

- Aurora

Schneider



- Fully certified for Europe



CERTIFICATE C.E. INVERTERS AERO SHARP

Intertek Intertek Testing Services Shanghai, Building No.86, 1198 Qinzhou Road (North), Caohejing Development Zone, Shanghai 200233, China. Tel:86 21 6127 5200 Fax:86 21 6495 6263


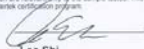
Test Verification of Conformity

On the basis of the referenced test report(s), the sample(s) of the below product has been found to comply with the relevant harmonized standard(s) to the directive(s) listed on this verification at the time the tests were carried out. The manufacturer may indicate compliance to said directive(s) by signing a DoC himself and applying the CE-marking to products identical to the tested sample(s). In addition, the manufacturer shall file and keep the documentation according to the rules of the applicable directive(s) and shall consider changes of the standard(s) if relevant. Additional requirements may be applicable such as additional directives or local laws.

Applicant Name & Address	: Shanghai Aero-Sharp Electric Technologies Co., Ltd.		
Manufacturer Name & Address	: 6629, Zhongchun Road, Shanghai, China		
Product(s) Tested	: Grid-connected PV inverter		
Ratings and principal characteristics	: Class I, IP65		
	Input	Output	
	HR-INV-X01-006A	280VDC 4.5A	230V 50Hz 3.0A
	HR-INV-X01-010A	280VDC 6A	230V 50Hz 5.0A
	HR-INV-X01-015A	280VDC 10A	230V 50Hz 6.5A
Model(s)	: HR-INV-X01-006A, HR-INV-X01-010A, HR-INV-X01-015A.		
Brand name	: Aero-Sharp		
Relevant Standard(s) /	: IEC 62103: 2003 (1st Edition); EN 50178: 1997 DIN VDE 0126-1-1: 2006		
Specification(s) / Directive(s)	: the Low Voltage Directive 2006/95/EC		
Verification Issuing Office Name & Address	: Intertek Testing Services Shanghai Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China		
Verification Number	: SH09080089-V1		
Report Number(s)	: SH09080089-001 SH09080089-003		

NOTE 1: This verification is part of the full test report(s) and should be read in conjunction with it.

This Verification is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to copy or distribute this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results referenced from this Verification are relevant only to the sample tested. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

 
Leo Shi
Manager
Sep 23, 2009
www.intertek.com

Intertek Intertek Testing Services Shanghai, Building No.86, 1198 Qinzhou Road (North), Caohejing Development Zone, Shanghai 200233, China. Tel:86 21 6127 5200 Fax:86 21 6495 6263



Test Verification of Conformity

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Applicant Name & Address	: Shanghai Aero-Sharp Electric Technologies Co., Ltd.		
Manufacturer Name & Address	: 6629, Zhongchun Road, Shanghai, China		
Product(s) Tested	: Grid-connected PV inverter		
Ratings and principal characteristics	: Class I, IP65		
	Input	Output	
	HR-INV-X01-020A	280VDC 6A+6A	230V 50Hz 10A
	HR-INV-X01-028A	280VDC 10A+10A	230V 50Hz 14A
	HR-INV-X01-030A	280VDC 10A+10A	230V 50Hz 15A
Model(s)	: HR-INV-X01-020A, HR-INV-X01-028A, HR-INV-X01-030A.		
Brand name	: Aero-Sharp		
Relevant Standard(s) /	: IEC 62103: 2003 (1st Edition); EN 50178: 1997 DIN VDE 0126-1-1: 2006		
Specification(s) / Directive(s)	: the Low Voltage Directive 2006/95/EC		
Verification Issuing Office Name & Address	: Intertek Testing Services Shanghai Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China		
Verification Number	: SH09080089-V2		
Report Number(s)	: SH09080089-002 SH09080089-004		

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Leo Shi
Manager
Sep 23, 2009
www.intertek.com

NEW RELEASE AERO SHARP INVERTERS

1 to 3 KW

4 to 8 KW

- *NEW DESIGN*
- *IP67*
- *HIGH EFFICIENCY*
- *PRODUCT AVAILABLE THIS SUMMER*



AC/DC Protection Device

New products CP-Solar / June 2010

- ✓ DC protection device
- ✓ AC protection device



What Is DC and AC protection device?

This electrical terminal which help to protect the PV solar systems and the people who need to work on the installation from overload, lightning, short-circuits and so on.

Any PV solar installation must be equipped with DC (Direct Current) and AC (Alternative Current) protection device. On the electrical scheme, the DC protection is located before the inverter and the AC protection after the inverter.

Why it will be an advantage for CP-Solar?

The CP-Solar on-grid kits are composed of solar modules, inverters, mounting system, cable, connectors and previously the DC switch from Santon. So far, we don't provide the AC protection device and the DC switch wasn't mounted with surge arrester.

We have decided to work with CITELE which is a French manufacturer of low voltage electrical devices. CITELE has a production plant in Shanghai.

From now, we provide the full solution to our customers and we still are the only one PV manufacture in China which does it!



DC protection device



AC protection device

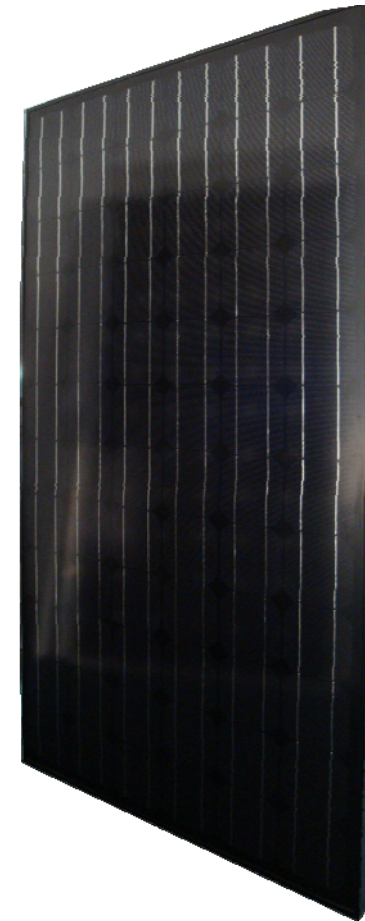
For on-grid kits	All kits sold in Europe, mainly 3kW for French market and 1kW to 6kW for UK
Delivery time	4 weeks for standard offers
Warranty	5 years (we are currently negotiating to get 10 years warranty)
OEM	Yes, on request
Place of delivery	China
Availability	AC box in July 2010, DC box when we will sold out the Santon in stock.

Technical date sheets of the on-grid kits will be updated soon.

Eric Delplanque

New products released in 2010

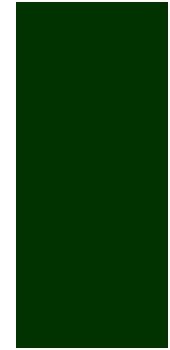
- Full Black module 185 Watts mono.
- Transparent module 135 Watts mono, transparency rate 35 %
- Module 190 Watts mono (dimension as 185 watts mono)
- Module 240 Watts poly (dimension as 230 watts poly) and **290 Watts Poly**.
- **185 watts mono** and **230 watts poly frameless**.



Certifications and quality

- CE and IEC certificates (TUV and Bureau Veritas)
- Manufacture warranty: 10 years on modules.
- European liability insurance.
- Efficiency guaranty:
 - 20 years at 90%
 - 25 years at 80%
- Third party inspection (BVQI).
- Check your production by yourself.





**Partnership
Development of Projects
You & CP-Solar**

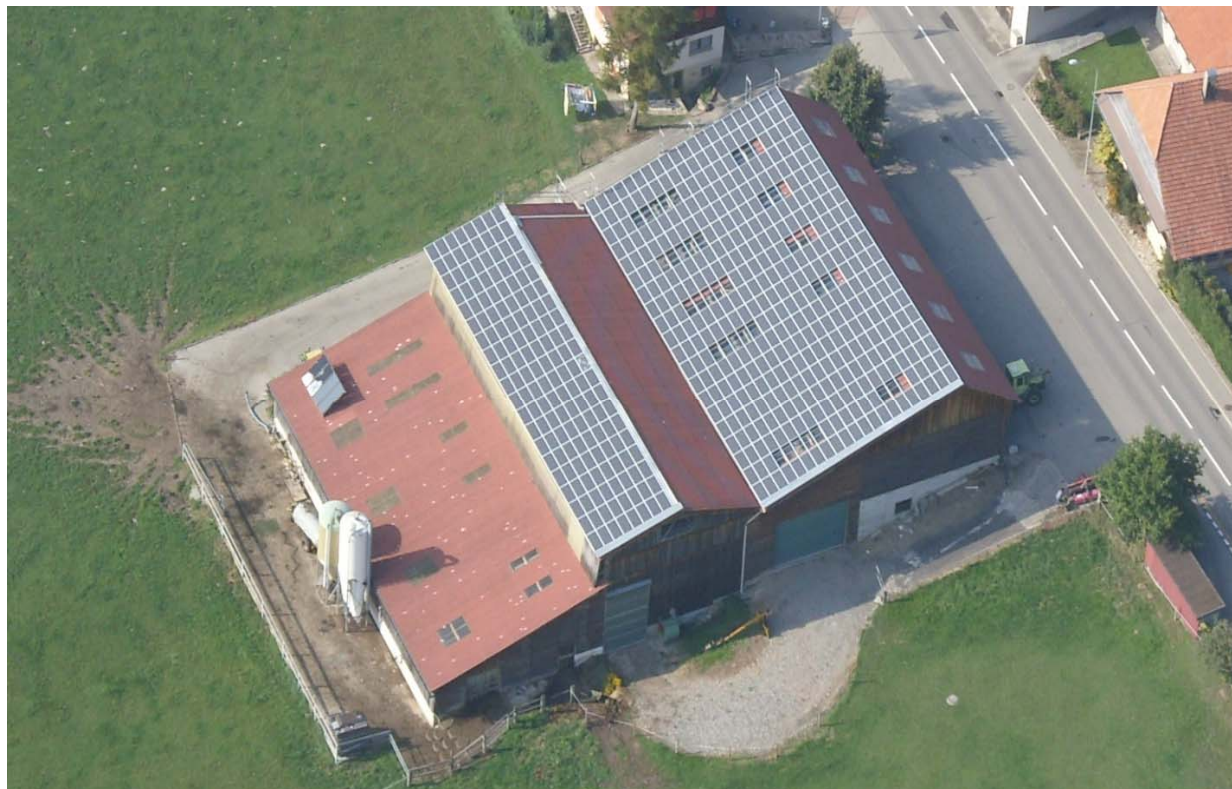
Projects management

INTERNAL ASSESSMENT AND ENGINEERING

Step	Tool	In charge
1/ Project description	Project presentation	You
2/ Technical information	Project Inquiry Form (link)	You
3/ Information validation	Check List	CP-Solar
4/ System design	Solar system software design	CP-Solar
5/ Prices	Quotation	CP-Solar
6/ Project validation	Validation decision	You

Some references

- Project of 100,8kW in Switzerland (canton of Neufchâtel):



Some references:

- KIT BIPV 3KW On Grid (black color possible)

2230 KITS INSTALLED IN 2009/2010



Other references: Kit On Grid 3 Kw

Country	France,
Module type	185Wc Mono Black +/- 3%
Output	2,96Kw



Country	France, Sarthe
Module type	185Wc Mono Black +/- 3%
Output	2,96Kw

Other references



Country	Czech Republic
Module type	185Wc Mono
Output	8,88Kw



Country	Czech Republic
Module type	190Wc Mono
Output	12KW

BANKS: CP-SOLAR BANKABLE*!!!



Your projects get financed with our modules

■ OUR ADVANTAGES +++++

- *0 \$ Bank Loan*
- Private Equity
- Own investment in Solar projects
- TUV, VERITAS Certifications
- European Liability Insurance
- BV Quality Inspections

■ LIST OF BANKS:

■ NATIXIS



■ OSEO



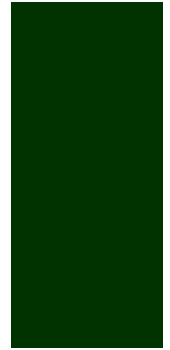
■ CREDIT AGRICOLE



■ BNP PARIBAS



* Those listed banks accept to the use of CP SOLAR Modules for Photovoltaic Credit Loan.



Thank you
for your attention