

MAKE IT HAPPEN



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Zhongli Group Overview



Zhongli Group founded in 1988, Awarded

China's top 10 independent innovation Enterprise, China's top 100 most potential competition of private enterprise brand. National Quality Service Credit AAA unit

Zhongli Group has successfully been listed on Shenzhen Stock market in 2009 (SZ:002309).

BACKGROUND

Zhongli Group

4216 million USD assets

abundant capital and reliable financial condition.

9,800 employees globally

diversified employees from all over the world

18 first-level subsidiary

Business covers <u>electric cable & new material</u>; <u>optical communication</u>; <u>Photovoltaic and high-end electronics</u>.

9 national high-tech enterprises

ZHONGLI GROUP

Milestones

1988

Foundation
Of Zhongli
Cable Factory

1994

Invented fire resistant cable, Got 14 patents

2000

MII entrusted Zhongli to drafted industry standard of fire resistant cable 2002

Foundation
of Zhongli
Optical Fiber &
Cable company



2009

Successfully listed on Shenzhen stock exchange (002309) 2010

Foundation of Talesun Solar with 850M USD

2010

Acquisition of Changzhou Marine Cable 2013

Foundation
of Zhongli
Electronics,
penetrate into
military electronics
industry

2015

Foundation of Talesun Solar Thailand factory

Talesun Solar Introduction



Established in 2010 with a total investment of 5B (850M USD

registered capital.

With annual capacity of 3GW cells and 5GW modules (BNEF 2017 Q4);

Fully automated production line from Italy, Germany, Japan;

The only Chinese company received VDE Quality-tested certificate;

Received '2015 china photovoltaic top runner award";

Leading role to launch "Diversified eco-agricultural PV" project from 2016 in china;

BACKGROUND

Talesun Solar

2,500 M USD assets

6,000 employees globally

oversea manufacture plants and global local sales office.

18 affiliates

Businesses covering cell, module, project development, EPC and turnkey solutions;

Branches in SE Asia, Europe, Americas, Australia, Middle East and Africa;

Talesun Solar Milestones



Foundation of Talesun Solar

2011

Access to project
Development
& EPC

2012

Completion of 100MW independent PV power plant in Jiayuguan, China. one of largest PV power plants in the world



2014

Accumulative project development reached 2GW, includes 700MW turnkey completed

2015

Establishment of Talesun Solar Thailand

2016

Global shipment reached 6 GW accumulatively

2017

Annual module capacity ramp up to 5GW (Top 5 globally)

COMPANY LOCATION & VIEW

China Factory

Changshu HQ













Cell capacity 5000MW Module capacity 3000MW

Suzhou Talesun Technologies Co., Ltd

Add: No.1 Talesun Road, Shajiabang, Changshu, Suzhou, Jiangsu,

P.R. China 215542

Website: www.talesun.com



COMPANY LOCATION & VIEW

Thailand Factory

Rayong Industrial Zone









Cell capacity 600MW Module capacity 800MW

Talesun Technologies (Thailand) Co. Ltd.
Add: 7/473 Moo.6 Mabyangporn, Pluakdaeng, Rayong, Thailand 21140



WAREHOUSE LOCATION & VIEW

Warehouses









Thailand

Factory Warehouse near to Bangkok

Max. 20MW/Month

India

Warehouse near to Mumbai

Max. 10mw/Month

Europe

Warehouse near to Rotterdam Port

Max. 20MW/ Month

USA

Warehouses in 3 locations

West: NorCa, SoCa,

East: New Jersey, Norfolk

Max. 60MW/Month

Best Equipments



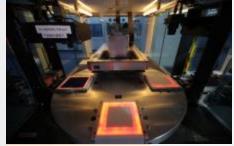


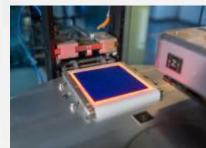














All Machine comes from Leading Equipment Manufacturers.

















team technik





Global Locations



Strong Bankability

Our financial partners are all over the world









Bank of Tokyo-Mitsubishi UFJ















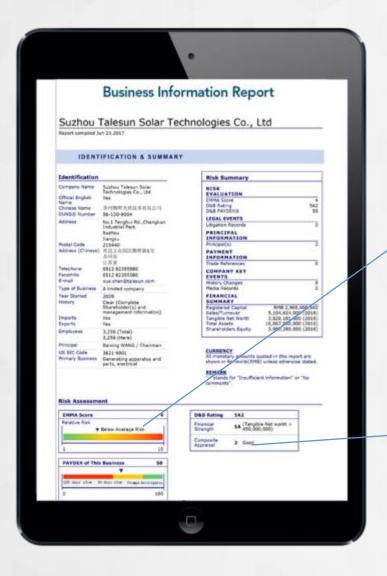




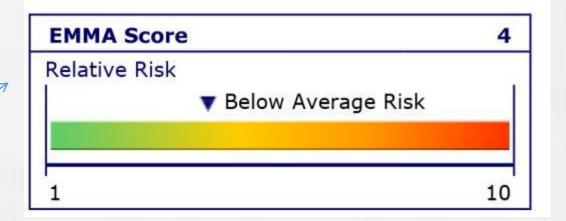




Credit Rate



Risk Assessment



D&B Rating	5A2		
Financial Strength	5A (Tangible Net worth > 450,000,000)		
Composite Appraisal	2 Good		

Customers









































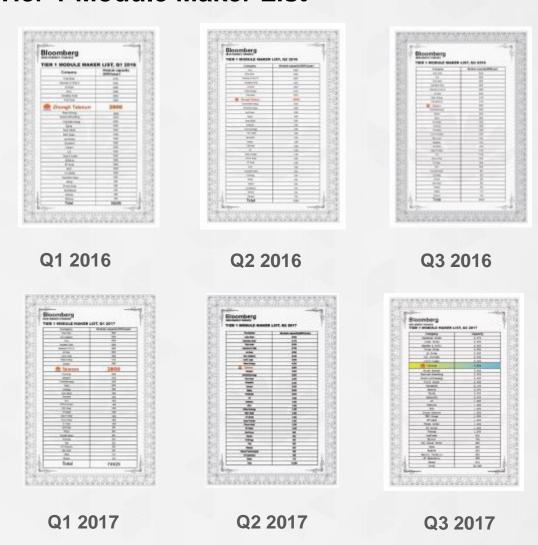
Third Party Ranking

Company	Capacity			
Trina Solar*	8,000			
Jinko Solar*	7,500			
JA Solar*	7,000			
Canadian Solar*	6,970			
Hanwha Q Cells*	6,400			
GCL Systems*	5,000			
Longi	5,000			
Talesun	5,000			
Suntech/ Shunfeng*	3,300			
Seraphim*	3,000			
First Solar*	2,200			
Hareon	2,000			
Renesola	2,000			
LG*	1,650			
ZNShine	1,600			

Talesun is now No. 5

Bloomberg New Energy Finance

Tier 1 Module Maker List



Main Products

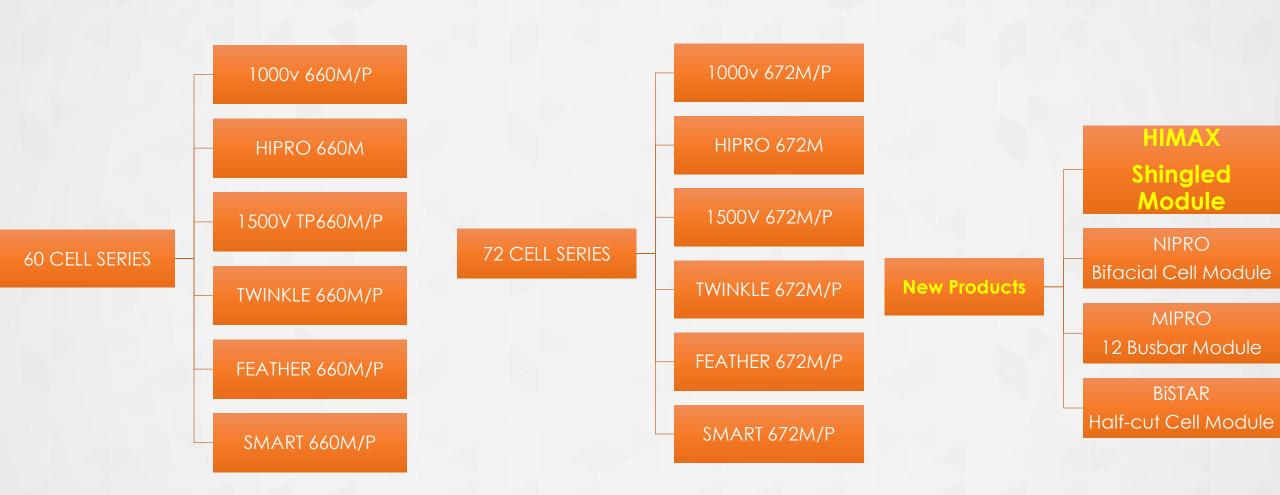
Industry Leading Cell Technology and Efficiency





Talesun Solar R&D talents continuously improve the cell efficiency through different cell technologies. 21.5% cell efficiency with PERC cell technology in mass production achieved.

Products series



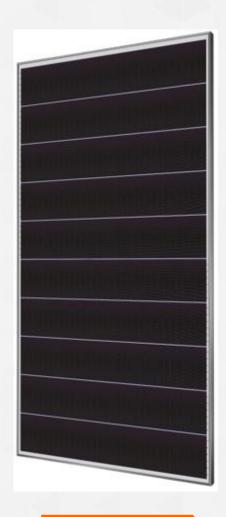
New Products Series



BiSTAR Series Half-cut Cell



MIPRO Series Multi Bus-bar Cell



HIMAX Series Shingled Cell



NIPRO Series Bifacial Cell

Innovative Module for Diversified Customers' Needs

MBB Module

MIPRO TP672P







- 12 Bus-Bar grid pattern technology: reduce 3% of shading area of cell
- Lower Rs, higher power output

High Reliability and Enhance Power Output of System

- Enhanced anti micro-cracking performance with balanced interior stress
- in shading
- · Higher power output with lower LCOE

. Beautiful appearance, ideal for applications that require architectural aesthetics

Robust Design

BiSTAR Module

BISTAR TP6H72P

Polycrystalline Solar Module 72 Cell Series with Half-cut Cell Technology



Complete System and Product Certificates

ISO 9001: 2008: ISO Quality Management System

ISO 14001: 2004: ISO Environment Mangement System

OHSAS 18001: 2007: Occupational Health and Safety

IEC 61215, IEC 61730, UL 1703

Management System

KEY FEATURES

340W

Highest power output

PID Free

Certified by TUV Rheinland

25 years

Linear power output warranty

Half-cut

Cell Technology

10 years

Material & workmanship warranty

Enhanced Module Efficiency up to 17.1%

- Innovative half-cut cell technology, excellent module circuit design
- Lower internal current, excellent anti hot spot performance
- . More internal reflection, better utilization of sunlight, more power output

High Reliability and Enhance Power Output of System

- . High reliability, low NOCT & low temperature coefficient
- . Excellent performance under shading, less power output loss with new circuit design

. Strong anodized aluminium alloy frame, certified to withstand up to 2400 Pa wind load and up to 5400 Pa snow load

Complete System and Product Certificates

- . IEC 61215, IEC 61730, UL 1703
- ISO 9001: 2008: ISO Quality Management System
- ISO 14001: 2004: ISO Environment Mangement System
- OHSAS 18001: 2007: Occupational Health and Safety Management System

KEY FEATURES

340W

Highest power output

Anti PID

Certified by TUV Rheinland

10 years Material & workmanship warranty

Enhanced Module Efficiency up to 17.5%

12 Bus-bar

Linear power output warranty

Cell Technology

25 years

- . Concentration effect of round photovoltaic solder strip

- . Significantly lower the risk of hot spot by lowering module temperature

Aesthetic Appearance

Strong anodized aluminium alloy frame, certified to withstand up

Innovative Module for Diversified Customers' Needs

FEATHER 2.0 Series

Lightweight modules

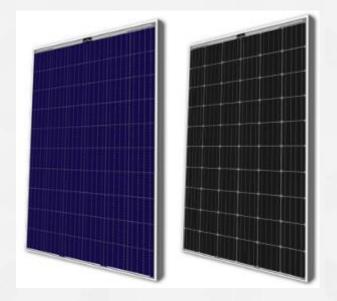
Adopt 2.0mm ultrathin tempered glass, with light frame, 14kg, 26% lighter (60 cell series based), but yet still certified to withstand 2400Pa wind load and 5400Pa snow load.



TWINKLE 2.0 Series

Glass-Glass module

TWINKLE 2.0 uses two 2.0mm tempered glasses with solar cells laminated in, and adopts high performance encapsulant, which ensures stable power output under extreme climate conditions.



SMART MODULE Series

Integrated with module optimizer

- 100% cloud monitoring
- Up to 20% more power output
- More flexible system design
- Work with any inverter



Conventional Mono/ Poly module series

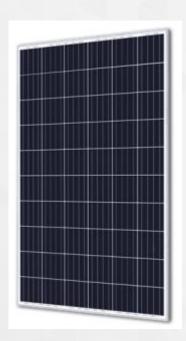
Α,							
	Mono-Crystalline Solar Module			Poly-Crystalline Solar Module			
	Туре	TP660M-300W	TP672M-360W		Туре	TP660P-275W	TP672P-325W
	Cell Dimensions	156*156mm (4BB)	156*156mm (4BB)		Cell Dimensions	156*156mm (4BB)	156*156mm (4BB)
	Cell Arrangement	60 (6*10)	72 (6*12)		Cell Arrangement	60 (6*10)	72 (6*12)
	Module Dimensions	1650*992*35mm	1960*992*40mm		Module Dimensions	1650*992*35mm	1960*992*40mm
	Power Tolerance 0-+3%		Power Tolerance	0-+3%			



All Talesun

Modules :

Anti PID









Product Warranty Backed by multi-reinsurances

Product Warranty

- √ 10-year product workmanship warranty
- √ 25-year linear power output performance guarantee
- ✓ Guarantee first year power degradation is no more than 2.5% from its nameplate power (1)
- ✓ From year 2 to year 25, the actual annual power decline will be no more than 0.7% (1)
- ✓ By the end of year 25, the actual power output will be no less than 80.7% of the nameplate power output ①
- 1 To poly-silicon modules



Backed by Investment Grade Insurance Policy

- ✓ Insurance policy matches Talesun Solar's standard warranty terms
- ✓ Coverage starts immediately and lasts for 25 years
- ✓ Covers worldwide modules sales to any countries
- ✓ The policy is non-cancelable and allows third party bankruptcy rights (satisfying investor/ banker requirements





Quality and Performance Certification

International Environmental & Quality Management Standards

ISO 9001:2008 Quality Management System

ISO 14001:2004 Environment Management System

OHSAS 18001:2007 Occupational Health and Safety Management System

International Testing Standards

IEC 61215 & IEC 61730, UL 1703 & UL 790 & CEC

CE conformity, MCS (EN45011)

REACH Compliance

Certificates



























Achievements

Domestic Shipment – 4000MW





Oversea Shipment – 2000MW









Oversea Shipment – 2000MW









Oversea Shipment – 2000MW









Thank you