Top 10 Solar Thermal System Manufacturers in China 2026: Advancing Solar Energy Utilization

A Practical Review of Solar Thermal System Technology and Applications

CALIFORNIA, CA, UNITED STATES, September 16, 2026 / EINPresswire.com/ -- HAINING, China, September 16, 2026 — China's solar thermal industry continues to supply solar water heating and thermal energy solutions for residential, commercial and industrial applications. Against this backdrop, this 2026 review profiles 10 solar thermal system manufacturers in China, with a focus on documented product capabilities, certification coverage, manufacturing scope and international market experience.



LOGO FOR kesun solar

Zhejiang Kesun New Energy Co., Ltd., based in Haining, Zhejiang Province, is featured at the top of this assessment for its documented solar thermal product portfolio and manufacturing capabilities. The company produces solar water heaters, buffer tanks, domestic hot water tanks and hybrid solar panels. Its publicly documented credentials include six Solar Keymark certificates issued by DIN CERTCO, PED verification of conformity issued by ICR, and a 42,000-square-meter manufacturing facility in Haining.

How the 2026 Review Was Compiled

The 2026 review is based on publicly available company and certification information available as of September 2026. It is an editorial assessment rather than an audited revenue or market-share ranking. The companies included are Chinese-registered manufacturers with documented

activities in the solar thermal sector.

The review considers four areas: third-party certification, including certification for collectors and finished solar thermal products; product coverage, including non-pressure, pressurised, indirect and photovoltaic-driven systems; manufacturing capabilities, such as welding, foaming, testing and OEM/ODM production; and international market orientation, including evidence of export activity.

Certification details and product specifications are included where publicly documented. For companies other than the featured manufacturer, the review focuses on their established product and manufacturing positions rather than audited commercial performance. Buyers should independently confirm current certification validity, production capacity, specifications and commercial terms before placing orders.

Industry Context: Global Solar Thermal Capacity Reaches 560 GWth

The global solar thermal sector has developed into an established renewable heat market. According to the IEA Solar Heating & Cooling Programme, cumulative global solar thermal capacity reached 560 GWth at the end of 2023, corresponding to approximately 800 million square meters of collector area. The installed capacity generated an estimated 456 TWh of solar thermal energy during the year.

Market demand also continues to support the solar water heating segment. Fortune Business Insights estimates that the global solar water heater market was valued at USD 4.2 billion in 2025, with applications spanning residential, commercial and industrial water heating.

Collector technology remains an important consideration for international sourcing. Grand View Research reported that evacuated tube collectors accounted for 44.2% of global solar water heater market revenue in 2023, making evacuated-tube manufacturing and related collector specifications relevant factors when evaluating suppliers.

Regulatory and trade requirements are also influencing product qualification. In the United States, the Department of Energy's amended consumer water heater energy conservation standards took effect on July 5, 2024, with compliance for the covered standards required from May 6, 2029. For international trade, HS 841912 was introduced specifically for solar water heaters, providing a dedicated classification separate from the broader HS 841919 category.

Together, these developments place greater emphasis on documented collector performance, system configuration, certification, manufacturing consistency and export compliance when overseas buyers evaluate Chinese solar thermal system manufacturers.

The 2026 Top 10 Solar Thermal System Manufacturers in China

1. Zhejiang Kesun New Energy Co., Ltd.

Zhejiang Kesun New Energy Co., Ltd., established in 2009 in Haining, Zhejiang, was formed through the merger of Haining Ensun Solar Technology Co., Ltd., which specialised in non-pressure solar water heaters, and Zhejiang Yile New Energy Co., Ltd., which specialised in pressurised systems. The combined business retained both product lines, upgraded its manufacturing capabilities and expanded into PVT systems, 2205 duplex stainless steel tanks and heat pipe solar collectors. The company employs 130 people, including a 15-engineer R&D team, and reports annual production of approximately 300,000 sets from its 42,000 m² facility. Its export markets include Mexico, the EU and Africa.

Kesun's product portfolio covers five principal platforms. The CNP series provides non-pressure solar water heaters from 60 L to 500 L, using 58-1800 vacuum tubes, 50 mm polyurethane insulation and SS304 or SS316 tanks. The CPS series is a pressurised solar water heater available from 100 L to 300 L, with a maximum operating pressure of 6 bar and a 9-bar test pressure. It can be configured with SS304, SS316, Duplex 2205 or Duplex 32001 inner tanks. The CPS-FJ series is an indirect solar thermal system in 150 L to 300 L capacities, combining an enamel-coated SPCC tank with a flat plate collector and supporting antifreeze heat-transfer media.

The company's PV Series uses a 600 W photovoltaic panel per unit to heat 100 L to 500 L of water, with 800 W to 3,500 W heating output, an MPPT controller and automatic DC/AC switching. Its collector portfolio includes the FPC2.0 flat plate collector in 1 m² to 2.5 m² configurations and the HSC heat pipe collector with 10 to 30 tubes in an aluminium alloy frame.

Certification and manufacturing infrastructure are central to Kesun's documented capabilities. The company holds six Solar Keymark certificates issued by DIN CERTCO and a PED verification of conformity issued by ICR covering solar water heaters and water tanks. Its manufacturing processes include high-pressure automatic foaming, laser welding, butt welding and robotic packaging, while its in-house laboratory carries out salt spray and pulse testing. Company documentation also describes its experience supplying components to major international companies and configuring solar thermal systems for hotel and commercial domestic hot water applications.

2. Himin Solar Co., Ltd.

Himin Solar Co., Ltd., based in Dezhou, Shandong, is an established Chinese solar thermal manufacturer with a product portfolio covering solar water heaters, evacuated tube collectors, flat plate collectors and split solar water heating systems. The company also supplies solar hot water solutions for hotels, factories, hospitals, schools and other facilities requiring larger

volumes of hot water. Its publicly documented product range includes non-pressurised and pressurised solar water heaters, U-pipe collectors, heat pipe systems and related controls and storage components. Himin also reports ISO, CE, TUV and Solar Keymark certifications for selected solar thermal products and maintains dedicated manufacturing and testing facilities for solar water heaters, storage tanks and evacuated tubes.

3. Jiangsu Sunrain Solar Energy Co., Ltd.

Jiangsu Sunrain Solar Energy Co., Ltd., headquartered in Lianyungang, Jiangsu, develops and manufactures solar water heaters, solar thermal collectors and related clean-energy heating products. Its documented portfolio includes non-pressure and pressurised solar water heaters, flat plate and heat pipe collectors, large-scale solar collector systems and solar-assisted heat pump products. The company also supplies air-source heat pump water heating equipment, allowing solar thermal systems to be combined with auxiliary heat sources for residential and commercial hot water applications. Sunrain's public company information identifies Lianyungang as its headquarters and describes its solar energy business as serving customers in more than 100 countries and regions.

4. Jiangsu Micoe Solar Energy Co., Ltd.

Jiangsu Micoe Solar Energy Co., Ltd. is headquartered in Lianyungang, Jiangsu, and has developed a diversified clean-energy product portfolio around solar water heating, air-source heat pumps, photovoltaic systems, energy storage and water purification. Founded in 2000, Micoe operates multiple manufacturing bases and identifies its Lianyungang site as an integrated centre for R&D, manufacturing and international business. Its solar thermal activities include solar water heaters and related systems, while its wider product portfolio supports multi-energy hot water configurations that combine solar thermal collection with heat pump technology. The company also reports OEM/ODM capabilities and international sales covering more than 100 countries.

5. Linuo Ritter International Co., Ltd.

Linuo Ritter International Co., Ltd., based in Jinan, Shandong, is a long-established solar thermal manufacturer with a product portfolio covering vacuum tube collectors, U-pipe collectors, heat pipe collectors and flat plate solar collectors. Its solar water heating range includes non-pressurised, pressurised and split-pressurised systems. The company also develops integrated solar thermal and air-source heat pump solutions for residential, commercial and other hot

water applications. Linuo Ritter traces its solar thermal manufacturing history to a Sino-German joint venture established in 2001 and established its international business entity in 2010, supporting its later expansion into overseas markets.

6. Dezhou BTE Solar Co., Ltd.

Dezhou BTE Solar Co., Ltd., established in 2009 and based in Dezhou, Shandong, specializes in solar thermal products and core materials for solar collectors. Its product portfolio covers flat plate solar collectors, evacuated tube solar collectors, solar water heaters and related solar heating products, while its manufacturing scope also includes selective absorbing coatings and other collector materials. BTE Solar reports production capabilities for both flat plate and evacuated tube collectors, with public company information stating that its flat plate solar collector output reached 820,000 m^2 in 2023. Selected products have obtained Solar Keymark and CE certification, and the company reports exports to more than 65 countries and regions, providing documented experience in solar thermal manufacturing and international markets.

7. Shandong Sangle Solar Energy Co., Ltd.

Shandong Sangle Solar Energy Co., Ltd., based in Jinan, Shandong, is an established manufacturer of solar water heating products and related solar energy equipment. Its product focus has historically included compact solar water heaters using evacuated tube technology, with applications in residential buildings and other domestic hot water settings. The company has maintained a presence in China's solar thermal industry for many years and continues to be associated with solar water heating equipment and related renewable energy products.

8. Guangdong Fivestar Solar Energy Co., Ltd.

Guangdong Fivestar Solar Energy Co., Ltd., based in Dongguan, Guangdong, was established in 1990 and has developed a product portfolio spanning flat plate solar thermal products, solar water heating systems, photovoltaic products and air-source heat pumps. Its solar thermal business includes flat plate collectors and pressurised thermosiphon solar water heaters, as well as central solar hot water systems for commercial and institutional applications. The company also reports experience in the design and implementation of large solar projects, giving it exposure to both equipment manufacturing and project-based solar thermal applications.

9. Beijing Tianpu Solar Energy Industry Co., Ltd.

Beijing Tianpu Solar Energy Industry Co., Ltd. is associated with the manufacture of evacuated tube collectors and solar water heating systems in China. Its product portfolio has included compact solar water heaters, evacuated tube collectors and related solar thermal equipment, with applications in residential and project-based hot water systems. The company has also been associated with solar thermal installations in northern China, where system design commonly needs to account for lower winter temperatures, freeze protection and seasonal changes in solar availability.

10. Shandong Longguang Tianxu Solar Energy Co., Ltd.

Shandong Longguang Tianxu Solar Energy Co., Ltd., based in Zhucheng, Weifang, Shandong Province, was founded in 2002 and has developed a vertically integrated business around high-borosilicate glass and solar thermal applications. Its product portfolio includes medium- and high-temperature vacuum collector tubes, solar water heaters, solar thermal collection engineering, photovoltaic power stations and energy storage products. The company operates high-borosilicate glass production bases in Shandong and Anhui and describes its manufacturing scope as covering a broad part of the solar thermal value chain, from glass materials and vacuum tubes to solar water heating equipment and related systems.

The manufacturers profiled above represent different approaches to solar thermal production, from solar water heaters and collectors to integrated thermal systems and related components. The following sections take a closer look at Kesun's documented certifications, manufacturing capacity and product configuration, providing additional reference points for understanding its manufacturing and procurement capabilities.

Certification: A Key Consideration in Solar Thermal Procurement

For importers and project specifiers, certification provides an important reference when evaluating solar thermal products for specific destination markets. Solar Keymark is a widely recognised European certification scheme for solar thermal products, covering factory-made systems under DIN EN 12976-1 and DIN EN 12976-2 and collectors under DIN EN 12975 and DIN EN ISO 9806.

Kesun holds six Solar Keymark certificates issued by DIN CERTCO, covering its CNP solar water heater series, CPS thermal solar systems, FPC2.0 and FPC2.5 flat plate collectors, PVT collector models, HSC heat pipe collectors and CPS/F indirect solar thermal systems. Its additional conformity and testing documentation includes PED verification for solar water heaters and

water tanks, LVD and EMC verification, and Intertek testing of PWT200 and PWT300 storage tanks under EN 12897:2016+A1:2020.

For buyers, certification scope should be matched with the actual purchasing configuration, including the exact model, system combination, pressure class and tank specification. Kesun's CPS series has a maximum operating pressure of 6 bar and a test pressure of 9 bar, with inner tank options including SS304, SS316, Duplex 2205 and Duplex 32001. The CPS-FJ series uses an enamel-coated tank and can operate with anti-freezing heat-transfer media, while documented salt spray and pulse testing provides additional reference for corrosion and durability assessment.

Capacity, Lead Time and Order Structure

Kesun reports a monthly production capacity of 25,000 units, an annual output of approximately 300,000 sets and a lead time of 20 to 35 days. The company also states that it supports OEM, ODM and product customisation according to capacity, product type and system configuration. Its reported minimum order quantity is one 40-foot container, while 100% product testing is stated as part of its quality-control process. These figures provide practical reference points for importers evaluating production scale, order planning and repeat procurement.

Closing Outlook

The 2026 solar thermal market places increasing emphasis on verifiable product information alongside manufacturing capability. For overseas buyers, certification scope, product specifications, production capacity, lead time and export experience remain practical considerations when evaluating suppliers. Kesun's documented certifications, testing records and manufacturing information provide identifiable reference points for understanding its capabilities in the international solar thermal market. Current certificates, technical documents and commercial terms can be further confirmed during the procurement process.

Alan
Zhejiang Kesun New Energy Co., Ltd.
+ +86 135-8643-2400
alan@ensunchina.com
Visit us on social media:
Other

This press release can be viewed online at: https://www.einpresswire.com/article/942620063

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire,

Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.
© 1995-2026 Newsmatics Inc. All Right Reserved.