

GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains explanations of certain technical terms used in this document in connection with our Company and our business. Such terminology and meanings may not correspond to standard industry meanings or usages. of those terms.

“A”	ampere, the standard unit of electric current, representing the rate of electron flow through a conductor
“AC”	alternating current, an electric current that reverses directions periodically, used by grids and home appliances, which inverters convert from solar DC
“AGV”	automated guided vehicles, a type of unmanned transport vehicle equipped with automatic guiding device
“arc fault circuit interrupter”	a safety device in inverters that detect and stops dangerous electrical arcs to prevent fires in solar installation
“automated test equipment”	computer-controlled systems used to test the functionality and performance of electronic devices and systems
“BMS”	battery management system, which monitors battery health, balances charge and protects energy storage batteries from overcharging or overheating
“BSB”	British standard brass, a type of brass material often used for robust mechanical fittings and connectors within industrial electrical equipment
“CE”	Conformité Européenne, a certification mark indicating that devices meet the European Union’s safety and performance standards
“CNAS”	China National Accreditation Service for Conformity Assessment, the national accreditation body of the PRC responsible for the accreditation of certification bodies, laboratories, ensuring that they meet quality and performance standards
“combined charging system”	a standardized charging protocol that allows for both AC and DC charging using a single connector
“DC”	direct current, an electric current that flows in one direction only, generated by solar panels and stored in batteries before conversion to AC
“DC/AC”	the process of converting direct current from solar panels or batteries into AC for grid or usage

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“dehumidifiers”	devices designed to reduce and maintain the level of humidity in the air, eliminate musty odors and prevent the growth of mildew by extracting water from the air
“EMS”	energy management system, which optimizes the efficiency of solar power generation, battery storage and energy consumption
“energy storage batteries”	rechargeable units that store solar energy for use during power outages
“energy storage inverters”	an electrical converter which convert DC to AC while supporting energy storage capabilities
“ETL certification”	a safety certification indicating that the product has been tested to North American safety and performance standards by Intertek, a global assurance, inspection, product testing and certification company
“GB/T 19411”	a Chinese national standard that outlining technical requirements for dehumidifiers
“GW”	gigawatt, a unit of power representing the rate at which electricity is used or generated, which is equal to 1,000,000,000 watts
“heat exchangers”	devices used to transfer heat from one medium to another, used for heating or cooling applications
“HVAC”	heating, ventilation and air conditioning, which are systems and technologies used to regulate the indoor environment comfort and air quality
“IGBT”	insulated-gate bipolar transistor, a high-efficiency power semiconductor switch used in inverters to convert DC electricity into AC electricity rapidly
“IoT”	the Internet of Things, a network of physical objects or “things” embedded with sensors, software and other technologies to connect and exchange data with other devices and systems over the internet
“IP65”	an international protection rating which indicates that a device is completely dust-tight and protected against water jets, making it suitable for outdoor installation
“ISO9001”	an international standard for quality management systems that provides a framework for a company to provide products and services that meet certain performance and regulatory requirements

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“ISO14001”	an international standard for environmental management systems that provides a framework for a company to identify, manage and minimize its environmental impact
“ISO 14001:2015”	an international standard that specifies the requirements for an effective environmental management system
“ISO/IEC 27701:2019”	an international standard for information security management systems that provides a framework for managing risks to the security of information and data
“ISO/IEC 27001:2022”	an international standard that specifies the requirements for establishing, implementing, maintaining and improving an information security management system
“ISO 45001:2018”	an international standard for occupational health and safety management systems that provides a framework for a company to prevent work-related injuries and ill health by providing safe and healthy workplace environment
“kW”	kilowatt, a unit of power representing the rate at which electricity is used or generated, which is equal to 1,000 watts
“kWh”	kilowatt-hour, a unit of energy representing the total amount of electricity consumed or generated over a period of one hour, which is equal to using 1kW of power for one hour
“LoRa”	a wireless communication technology designed for long-distance, low-power and low-data-rate applications
“microinverters”	small PV inverters primarily used in balcony and rooftop PV systems which support fast installation and commissioning
“MOSFET”	metal-oxide-semiconductor field-effect transistor, a type of transistor used for amplifying or switching electronic signals, crucial for the efficient operation of power conversion circuits
“MPPT”	maximum power point tracking, a technology used in solar power systems to continuously adjust the operating point of PV modules to maximize power output under varying sunlight and temperature conditions
“MW”	megawatt, a unit of power representing the rate at which electricity is used or generated, which is equal to 1,000,000 watts

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“ODM”	original design manufacturer, a company that designs and produces a product, which is then rebranded and sold by another company
“OECD”	the Organization for Economic Cooperation and Development
“OEM”	original equipment manufacturer, a company that produces a product based on the design specifications of another company, which then sells them under its own brand
“PCBA”	printed circuit board assembly, which is the process of mounting and soldering electronic components onto a printed circuit board to create a functional electronic circuit
“PLM”	product lifecycle management, the process of managing a product’s whole journey from initial design and manufacturing to service and eventual recycling
“potential induced degradation”	a phenomenon where voltage leaks reduce solar performance over time
“PV”	photovoltaic, a technology that converts sunlight into electricity using semiconductor materials, forming the basis of solar panels
“PV Inverters”	an electrical converter that transforms DC output of a solar panel into AC
“SGS”	a leading inspection and certification company that verifies the quality and compliance of solar products
“SiC”	silicon carbide, a semiconductor material that allows inverters to operate at higher voltages and temperatures with greater efficiency than silicon
“SMT”	surface mount technology, a method used in electronics manufacturing to mount electronic components directly onto the surface of a printed circuit board
“solar air conditioners”	air conditioning systems powered partially or entirely by solar energy to reduce electricity consumption from the grid
“SST”	solid-state transformer, a high-frequency coupling device based on the electromagnetic induction principle that realize electric energy transformation by integrating advanced power electronics conversion technology

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“string inverters”	devices that convert DC electricity from a “string” of connected solar panels into AC electricity for the grid or home use
“third-generation SiC semiconductor technology”	the latest iteration of SiC chips, offering superior efficiency and heat dissipation for high performance for PV inverters
“through-hole insertion”	a method used in electronics manufacturing where electronic components are mounted onto a printed circuit board by inserting their leads through pre-drilled holes on the board
“tons CO ₂ e”	tons of carbon dioxide equivalent
“UL”	UL Solutions, a safety certification company in North America
“VPP”	virtual power plant, a network of decentralized power generating units controlled centrally to act similarly to a single traditional power plant
“W”	watt, a unit of power equal to one joule per second