

GLOSSARY OF TECHNICAL TERMS

This glossary contains certain technical terms used in this document in connection with us and our business. Such terms and their meaning may not correspond to standard industry definitions or usage.

“AC”	alternating current, an electric current that periodically reverses direction
“AGV”	automated guided vehicle, a driverless material-handling vehicle used to transport goods or components within a factory or warehouse
“AI”	artificial intelligence
“ampere” or “A”	the unit of electric current
“BESS”	battery energy storage system
“busbar”	a conductive metallic component used to transmit and distribute electrical current and, in battery systems, to connect cells or modules electrically
“China efficiency”	a weighted inverter efficiency metric commonly used in the PRC market to reflect inverter performance under a range of operating conditions
“circuit breaker”	a protective switching device designed to automatically interrupt electrical current under abnormal conditions such as overload or short circuit
“cell monitoring unit”	a device or module used to monitor the operating condition of battery cells or battery modules
“commercial and industrial” or “C&I”	commercial and industrial applications or projects
“commercial and industrial photovoltaic power station”	a distributed photovoltaic system installed on commercial or industrial premises, primarily used for on-site electricity consumption, with any surplus electricity fed into the grid where applicable
“DC”	direct current, an electric current flowing in one direction only
“DIN-rail meter”	an electricity meter designed for installation on a standard DIN rail, typically used in distribution boxes or control cabinets
“discrete manufacturing”	manufacturing activities that produce distinct and countable finished products by assembling separate parts or components, such as automobiles, smartphones, household appliances and furniture
“distribution board”	an electrical distribution assembly used to receive and distribute electrical power to multiple downstream circuits
“DPWM”	discontinuous pulse width modulation, a control or modulation technique commonly used in power electronics
“DSP”	digital signal processor, a processor designed for high-speed numerical computation and signal processing

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“EOL testing”	end-of-line testing, the final stage of production testing conducted before a product is released or delivered
“EPC”	engineering, procurement and construction
“FCT”	functional circuit testing, an automated testing process used to verify whether a printed circuit board assembly or related component performs in accordance with design requirements
“gigawatt” or “GW”	one billion watts, or 1,000 megawatts, a unit of power commonly used to measure electricity generation capacity
“gigawatt-hour” or “GWh”	one million kilowatt-hours, or 1,000 megawatt-hours, a unit of electrical energy commonly used to measure electricity generation, consumption or energy storage capacity
“grid connection”	the process of connecting a power generation system or equipment to the electricity grid for operation or power dispatch
“grid-connected electricity”	electricity generated by a photovoltaic power station and delivered to the grid
“ground-mounted photovoltaic power station”	a utility-scale photovoltaic system installed on open land, typically designed to generate electricity for supply to the grid
“high-breaking capacity”	the ability of a protective device, such as a circuit breaker, to safely interrupt a high fault current under rated conditions, and a core indicator for evaluating the performance of low-voltage protective electrical products
“HVAC”	heating, ventilation and air conditioning
“I-V curve scanning”	current-voltage curve scanning, a diagnostic function used to analyze the operating condition and performance of photovoltaic modules or strings
“Industrial Internet of Things”	the application of connected sensors, devices, software and data systems to industrial equipment, manufacturing processes and industrial operations
“inverter”	a power electronic device used to convert direct current into alternating current
“IP66”	an ingress protection rating indicating a high degree of protection against dust and strong water jets
“isolator”	a switching device used primarily to isolate a circuit or equipment from its power source
“kilovolt” or “kV”	1,000 volts
“kilovolt-ampere reactive” or “kvar”	a unit used to measure reactive power
“kilowatt” or “kW”	1,000 watts, a unit of power

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“levelized cost of energy” or “LCOE”	the average cost per unit of electricity generated over a project’s lifetime, calculated by dividing all relevant costs by the total electricity output generated during that period
“low-voltage electrical products”	electrical products used in low-voltage power distribution, control, protection, metering and building applications
“megawatt” or “MW”	1,000 kilowatts, a unit of power
“megawatt-hour” or “MWh”	a unit of electrical energy equal to one megawatt of power sustained for one hour
“MES”	manufacturing execution system, a digital system used to monitor, control and manage production processes in real time
“miniature circuit breaker”	a low-voltage circuit breaker typically used in terminal circuits to provide overload and short-circuit protection
“molded case circuit breaker”	a low-voltage circuit breaker typically used in distribution systems to provide overload, short-circuit and related protection functions
“motor protector”	a protection device used to protect motors against overload, phase loss, short circuit or other abnormal conditions
“MPPT”	maximum power point tracking, a control technique used to optimize the output of photovoltaic systems by tracking the operating point that delivers maximum power
“NPC/ANPC”	neutral-point-clamped/active neutral-point-clamped, power electronics topology structures commonly used in inverter design
“open-circuit voltage”	the voltage of a cell or battery measured when no load is connected
“OEM”	original equipment manufacturer
“PACK”	in the context of battery energy storage systems, the integrated assembly of multiple battery cells together with associated components such as battery management, thermal management and structural components
“panel builder”	a downstream customer that procures low-voltage electrical components as inputs and integrates them into electrical distribution and control panels or cabinets for delivery to end projects
“photovoltaic” or “PV”	the direct conversion of light into electricity using semiconductor materials; in this document, generally refers to solar photovoltaic technology or products
“photovoltaic power station” or “PV station”	a photovoltaic electricity generation installation or system
“power quality”	the quality of electrical power supplied to equipment or systems, including factors such as voltage stability, harmonics, reactive power and phase balance
“printed circuit board assembly” or “PCBA”	a printed circuit board on which electronic components have been mounted

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“residential photovoltaic power station”	a photovoltaic power station installed in connection with a residential rooftop or similar household setting
“residual current operated circuit breaker”	a protective device designed to disconnect a circuit when leakage current exceeds a specified threshold
“rooftop resources”	rooftops made available for the installation and operation of residential photovoltaic stations
“SCR”	short-circuit ratio, a metric used to assess grid strength, particularly in the context of inverter operation in weak-grid conditions
“self-recovering overvoltage and undervoltage protector”	a protection device designed to disconnect a circuit when voltage exceeds or falls below specified thresholds and to automatically reconnect the circuit once voltage returns to the normal range
“SiC”	silicon carbide, a wide-bandgap semiconductor material commonly used in high-performance power electronic devices
“smart manufacturing”	a manufacturing approach characterized by digitalization, automation, connectivity, data integration and intelligent process control
“source-grid-load-storage architecture (源網荷儲)”	an integrated energy system architecture that coordinates power generation resources, electricity grid infrastructure, power consumption loads and energy storage facilities
“surge protective device”	a device designed to protect electrical equipment from surge voltage or lightning-induced overvoltage
“SVG”	static var generator, a power electronics device used for dynamic reactive power compensation and voltage support
“SVPWM”	space vector pulse width modulation, a modulation method commonly used in inverter and motor control applications
“switchgear cabinet”	an assembly or cabinet housing switching, protection and control devices for power distribution systems
“thermal relay”	a protective device used to protect motors or circuits against overload and related thermal conditions
“transformer”	an electrical device used to transfer electrical energy between circuits, typically by changing voltage levels
“ultra-weak grid”	a grid environment with relatively low system strength, typically characterized by a low short-circuit ratio
“utility-scale”	large-scale projects or installations, typically for centralized electricity generation or infrastructure applications
“volt” or “V”	the unit of electric potential difference