POWERING A SUSTAINABLE WORLD

QUDEOX

www.qudeox.com

2026

Company Brochure

QUDEOX

Qudeox (Zhejiang) ESS Co., Ltd. (formerly Hossoni (Zhejiang) ESS Co., Ltd.) originated from the HOSSONI Group, which has been a pioneer in power electronics for 40 years and has manufacturing bases in Shanghai and Zhejiang. Following an equity restructuring in 2025, the company leveraged its industry experience and automated production processes to specialise in residential and commercial and industrial (C&I) energy storage systems, featuring:

- R&D capabilities: A substantial dedicated team supported by a core group of engineers with over 5 years' experience in ESS development and over 10 years' experience in BMS design.
- IP Portfolio: Proprietary EMS and BMS technologies deployed in portable power, residential storage, and industrial applications;
- EU Service Infrastructure: Our warehousing hubs in the Netherlands and Spain enable us to supply equipment and respond to requests for spare parts across Europe in real time. Supported by local team technical engineers based in the EU, we provide rapid online response and prompt on-site support whenever needed.

With a forward-looking development philosophy, we never stop exploring and innovating. We hope to grow alongside you and build a sustainable world.

POWERING A SUSTAINABLE WORLD

INDEX

QH-S3~6K
Single-phase Hybrid Inverter

3kW / 3.6kW / 4kW / 5kW / 6kW

Efficient and reliable

Retrofit function: intelligent AC coupling solution for easy upgrade of existing grid-connected systems

Smart UPS, plug & play, seamless switching under 20 seconds to give sufficient backup power for emergency use

Up to 200% surge power backup overload capability in 10 seconds

User friendly

Color LED display with intuitive multilingual software

Online monitoring via app

Remote control and upgrade function

Easy to install

Compatible with lithium-ion, lead-acid and sodium batteries

Pre-wired communication cables for plug and play

Supports single-phase and three-phase flexible parallel installation

Technical Data	QH-S3K	QH-S3.6K	QH-S4K	QH-S5K	QH-S6K
Input DC (PV side)					
Maximum PV access power	6kW	7.2kW	8kW	10kW	12kW
Maximum PV input power	4.68kW	5.76kW	6.4kW	8kW	9.6kW
Maximum PV input voltage	500V				
Start-up voltage	100V				
MPPT voltage range	150V~425V				
Rated PV input voltage	370V				
Maximum operating PV input current	20A / 20A				
Maximum input short-circuit current	30A / 30A				
Number of MPPT / strings per MPPT	2 / 1+1				
Battery input data					
Battery type	Lithium / Lead-acid / Sodium				
Battery voltage range	40V~60V				
Maximum charge/discharge current	62.5A			100A	
Communication	CAN				
Number of battery input	1				
AC input/output data					
Rated AC input/output active power	3kW	3.6kW	4kW	5kW	6kW
Maximum AC input/output apparent power	3.3kVA	3.96kVA	4.4kVA	5.5kVA	6.6kVA
Rated AC input/output current	13.7A / 13.1A	16.4A / 15.7A	20.9A / 20A	22.8A / 21.7A	27.3A / 26.1A
Maximum AC input/output Current	15.1A / 14.4A	18A / 17.3A	23A / 22A	25.1A / 23.9A	30A / 28.7A
Maximum continuous AC passthrough (grid to load)	35A				40A
Peak power (off-grid)	2 times of rated power, 10s				
Power factor adjustment range	0.8 leading to 0.8 lagging				
Rated input/output voltage/range	220V/230V 0.85Un-1.1Un				
Rated input/output grid frequency/range	50Hz/45-55Hz, 60Hz/55-65Hz				
Grid connection form	L+N+PE				
Total current harmonic distortion THDi	<3% (of nominal power)				
DC injection current	<0.5% In				
Efficiency					
Maximum efficiency	97,10%				
Euro efficiency	96,50%				
MPPT efficiency	>99%				
Equipment protection					
Integrated	DC reverse-polarity protection, Short circuit protection, Output over current protection, Surge protection (DC Type II / AC Type II), Ground fault monitoring, Integrated AFCI (DC arc-fault circuit protection, Activation required), Protection class/Over voltage category (I/II)				
Surge protection level	Type II (DC), Type II (AC)				
Interface					
Communication interface	RS485/CAN				
Monitor mode	RS485, Wi-Fi, GPRS (optional)				
General data					
DC connection	MC4 connector				
AC connection	Quick connection plug				
Display	69.6x55 mm LCD screen display				
Operating temperature	-40ºC~60ºC (>45ºC derating)				
Operating relative humidity	0%~100%				
Maximum operating altitude	2000 m				
Ingress protection rating	IP65				
Inverter topology	Non-isolated				
Over voltage category	OVC II (DC), OVC III (AC)				
Cooling method	Natural cooling				
Weight	20 kg				
Dimensions (WxDxH)	418x340x231 mm				
Grid regulation	CEI 0-21, UNE 217002				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

QB-L5.12K
Wall Mounted LFP Battery System

Low Voltage | 5.12kWh

Efficient and reliable

High safety LiFePO4 battery chemistry

BMS complete protection

IP65 protection for indoor and outdoor use

User friendly

Color LED display, with easy to read battery status

Online monitoring via app

Remote upgrade via inverter

Easy to install

Pre-wired communication cables for plug and play

Horizontal and vertical wall mounting

Simple lifetime energy capacity expansion

Technical Data	QB-L5.12K
Battery type	LFP / LiFePO4 (Lithium Iron Phosphate)
Battery designation	IFpP/50/160/116[16S]M/-10+50/80
Nominal voltage	51.2V
Nominal capacity	100Ah
Nominal energy	5.12kWh
Terminal type	Plug-in
Terminal torque	8.5NM
Case material	SPCC
BMS build-in	Yes
AH Efficiency - round trip	>98%
Self discharge per month	<3%
Maximum in parallel	16 pcs.
Maximum in series	Not allowed
LCD screen	Optional
Operating voltage range	44.8V~57.6V
Recommended charge voltage	57V
Maximum charge voltage	59V
Recommended charge current	20A
Maximum continuous current	100A
Recommended discharge voltage	46V
Maximum discharging voltage	44.8V
Maximum continuous discharge current	100A
Peak discharge current	150A / 3s
Cycle life	6000 cycles (0.2C, 25ºC @80% DOD)
Ingress protection rating	IP65
Charge/Discharge protection temperature	0ºC~55ºC / -20ºC~55ºC
Operating temperature	-20ºC~35ºC
Bluetooth (App)	Optional
Heating function	Optional
Certifications and standards	CE, IEC62619, UN38.3
Weight	51 kg
Dimensions (WxDxH)	422x205x600 mm

QC-215K-O
Outdoor Cabinet Energy Storage System

215kWh | Oil Immersion Battery Safety System

Efficient and reliable

High safety LiFePO4 battery chemistry

Battery pack cooling by liquid coolant and oil immersion (unique system for maximum battery explosion-proof safety)

IP67 and IP54 ingress protection and C4 corrosion protection for indoor and outdoor installation

Easy installation and use

Supports multi-cabinet parallel connection for easy system expansion

Intelligent Energy Management System (EMS); local and remote monitoring via web and mobile application

It can provide instant backup power during power outages when used together with a Static Transfer Switch (STS) cabinet

Economical and profitable

High space utilization

Energy independence and cost-effectiveness for business use

Technical Data	QC-215K-O
Battery data	
Battery system model	CB02
Battery type	LFP / LiFePO4 (Lithium Iron Phosphate)
Battery designation	IFpP73/175/208[1P240S]E/-20+50/95
Rated battery cell capacity	3.2V / 280Ah
Rated battery current	140A
Battery pack capacity	43kWh
Rated battery energy	215kWh
Battery pack usage	5 pcs.
Rated battery voltage	768V
Battery voltage range	684V~852V
Continuous discharge/charge current rate	0.5C
Cycle life	8000 cycles
AC output data	
Rated output voltage	400V
Rated output voltage range	340V~460V
Rated output power	100kW
Maximum output current	159A
Rated output frequency	50Hz/60Hz ±2.5Hz
AC access mode	3L/N/PE
Power factor	>0.99 (1.0 lagging~1.0 leading)
On-grid and off-grid switching function	Yes
Photovoltaic data	
Maximum open circuit voltage	650V
Photovoltaic voltage	300V~650V
Maximum current	200A
Access channel	1
General data	
Ingress protection rating	IP67 (battery pack), IP54 (electrical compartment)
Protective class	Class I
Anti-corrosion protection	C4 (optional upgrade to C5)
Overvoltage category	III
Communication interface	RS485, CAN
Communication protocol	Modbus-RTU, CAN
Electrical supply system	TN-S
Cooling method	Battery pack: liquid coolant cooling (design pressure: 350kPa) and oil immersion (explosion-proof system); PCS: air cooling
Fire fighting system	Fire detector; Sound and light alarm; Active/passive activating aerosol fire extinguisher
Operating temperature	-20°C~50°C
Operating relative humidity	0%~95% (no condensation)
Maximum operating altitude	2000 m
Weight	2450 kg
Dimensions (WxDxH)	1370x1320x2100 mm
Certifications and standards	
CE	EN 62477-1, EN IEC 61000-6-1/2/3/4
Grid	CEI0-21:2022-03, CEI0-21:V1:2022-11, CEI0-21:V2:2024-01, CEI0-21:V2/EC:2024-03, CEI0-16:2022-03, CEI0-16:V1:2022-11, CEI0-16:V2:2023-05, CEI0-16:V3:2024-01, CEI0-16:V3/EC:2024-03
Transportation	UN38.3, MSDS, Reach Annex 17, RoHS

* An additional Static Transfer Switch (STS) cabinet is required when the system is in off-grid mode.

QCB-400V
Static Transfer Switch (STS) Cabinet

For off-grid function | 400V

Efficient and reliable

Uninterrupted power ensuring production continuity

True seamless transition without load power failure detection

Ultra-high load tolerance

10x rated making current

2x rated breaking current

Critical load protection assurance

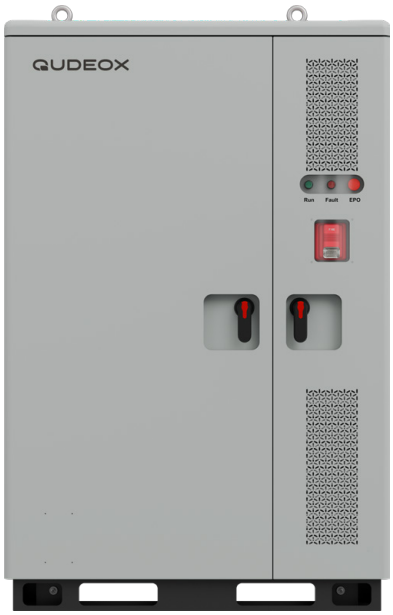
Ultra-low power loss

Minimal heat generation

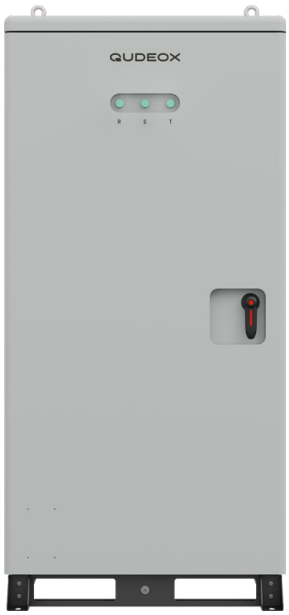
Eliminates cooling system costs

Reduces operational energy expenses

Technical Data	QCB-400V
Rated working voltage	AC400V
Rated working voltage frequency	50Hz/60Hz
Rated working current	500A
Rated insulation voltage	AC800V
Rated impact withstand voltage	6kV
Rated short-time withstand current (LCW)	≤10kA
ESS access	2x100kW
Load access	2x100kW
Operating temperature	-30°C~70°C
Maximum operating altitude	2000 m
Ingress protection rating	IP44
Weight	255±10 kg
Dimensions (WxDxH)	1000x900x2100 mm



Our Outdoor Cabinet Energy Storage System (QC-215K-O) with Static Transfer Switch (STS) Cabinet (QCB-400V) provide instant backup power during power outages, ensuring production continuity.

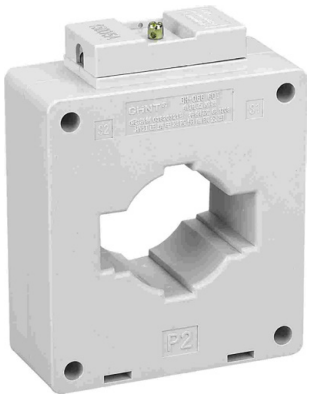


Chint DTSU666

Three-phase DIN-Rail Smart Meter

High accuracy and low consumption
Bi-direction measurement
DIN-Rail installation

Nominal voltage (Un): 3x220/380V, 3x57.7/100V
Operating range: 0.7Un~1.2Un
Power consumption: ≤1W, 5VA
CT / DC current: 1.5(6)A / 5(80)A
Frequency: 50Hz / 60Hz
Communication interface: RS485
Communication protocol: Modbus, DL/T
LCD display: 48x16 mm
Weight: 400 g
Dimensions (WxDxH): 72x65x98 mm



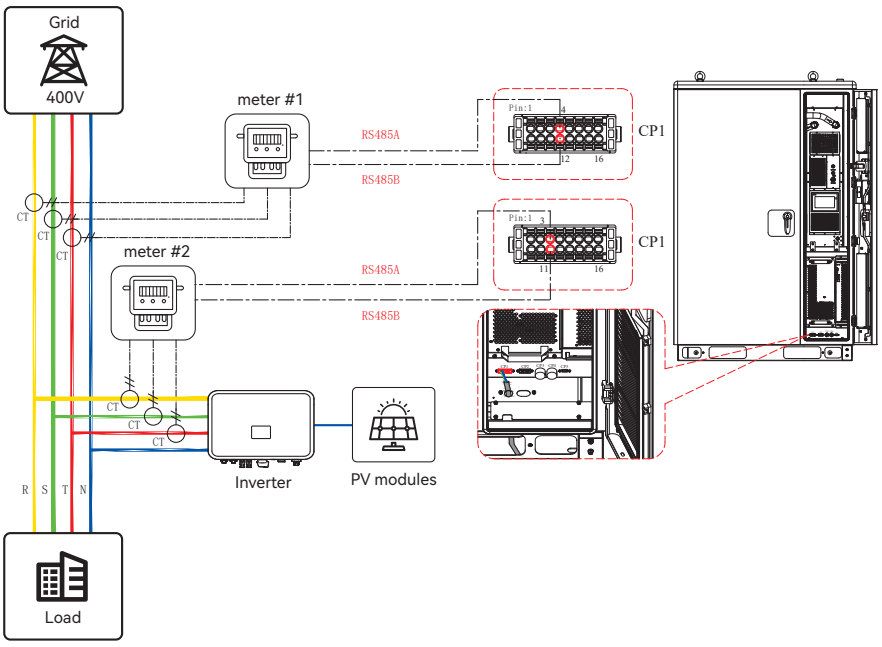
BH-0.66 60 I

Current Transformer (CT)

Uniform secondary winding, high consistency
Independent patented terminals, solid wiring

Rated Voltage: 0.66kV (660V)
Current Ratio: 1000/5A
Accuracy Class: 0.5
Rated Output: 10VA
Dimensions (WxDxH): 104x45x131 mm

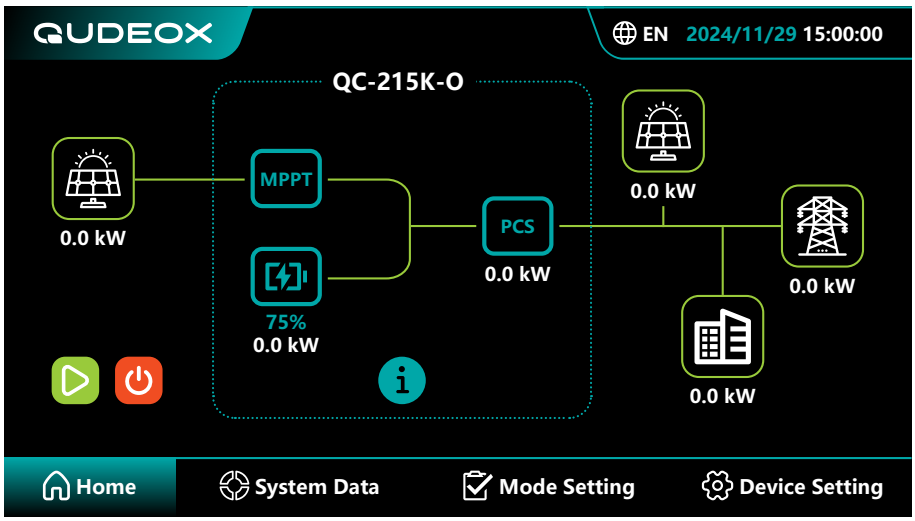
QC-215K-O
Single cabinet wiring diagram



Qudeox EMS

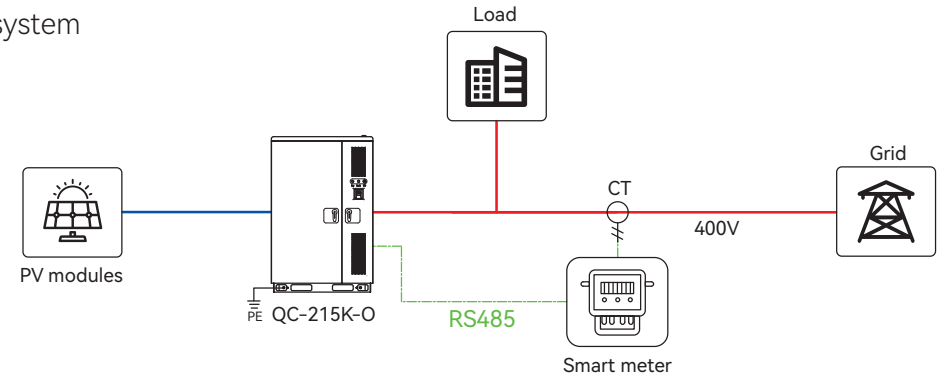
The intelligent "brain" of our energy storage systems

The EMS (Energy Management System) is the intelligent "brain" of Qudeox energy storage cabinets, designed specifically for industrial/commercial applications. With its outstanding performance, it carries out operations such as status monitoring, data acquisition, safety protection, and energy scheduling for each device in the energy storage system.

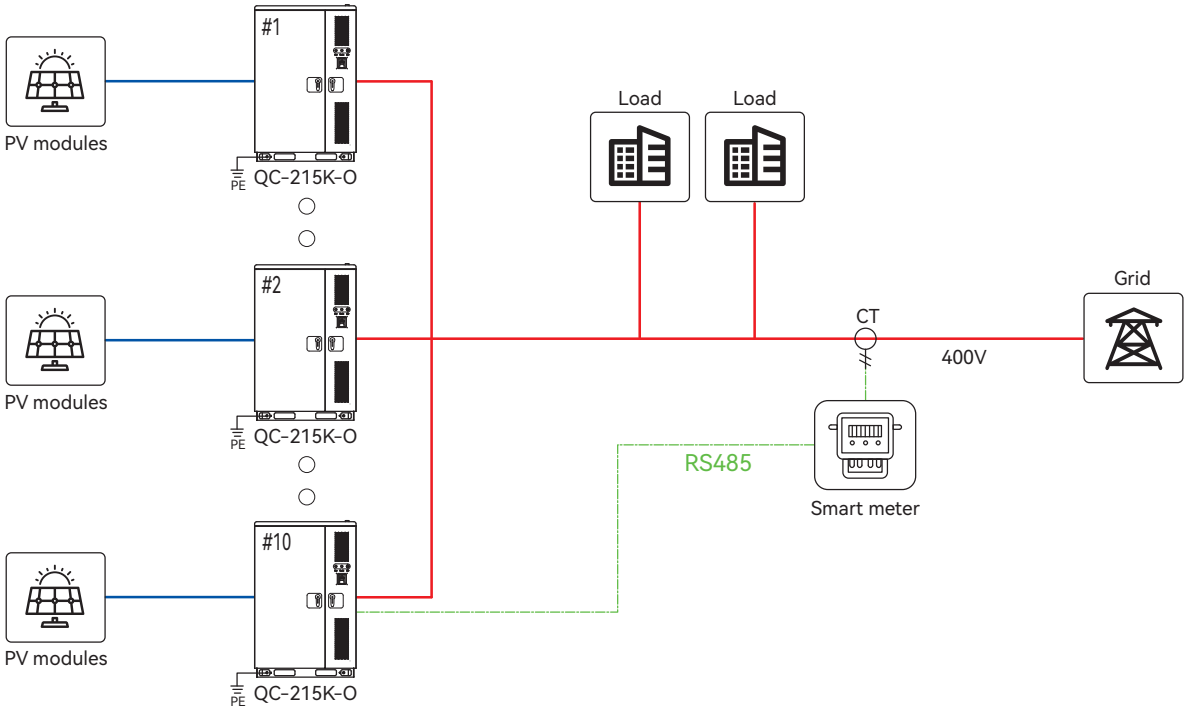


Local and remote control via web and mobile application

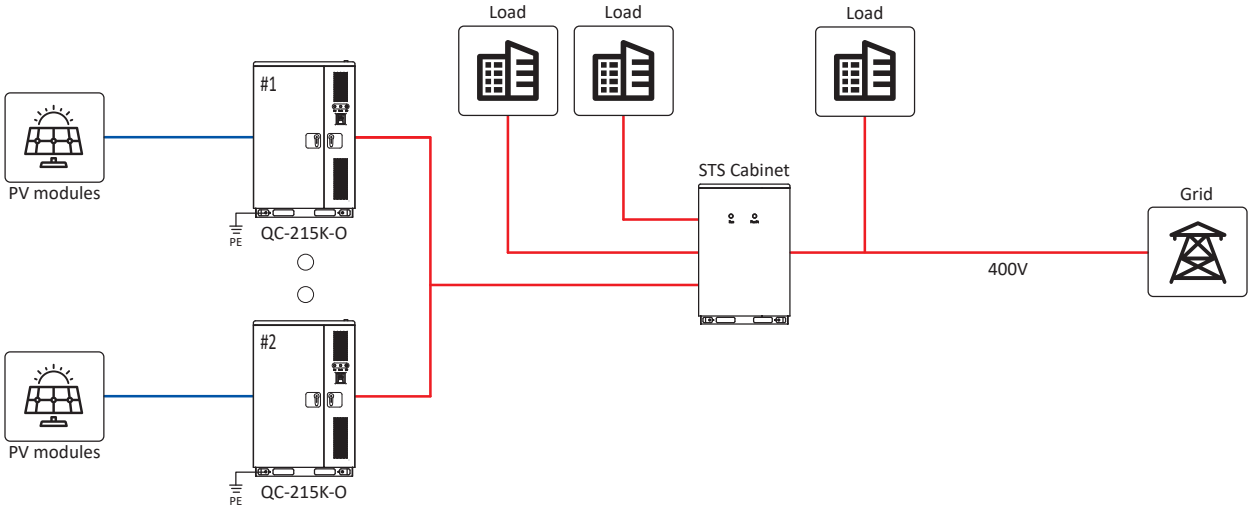
Single cabinet system



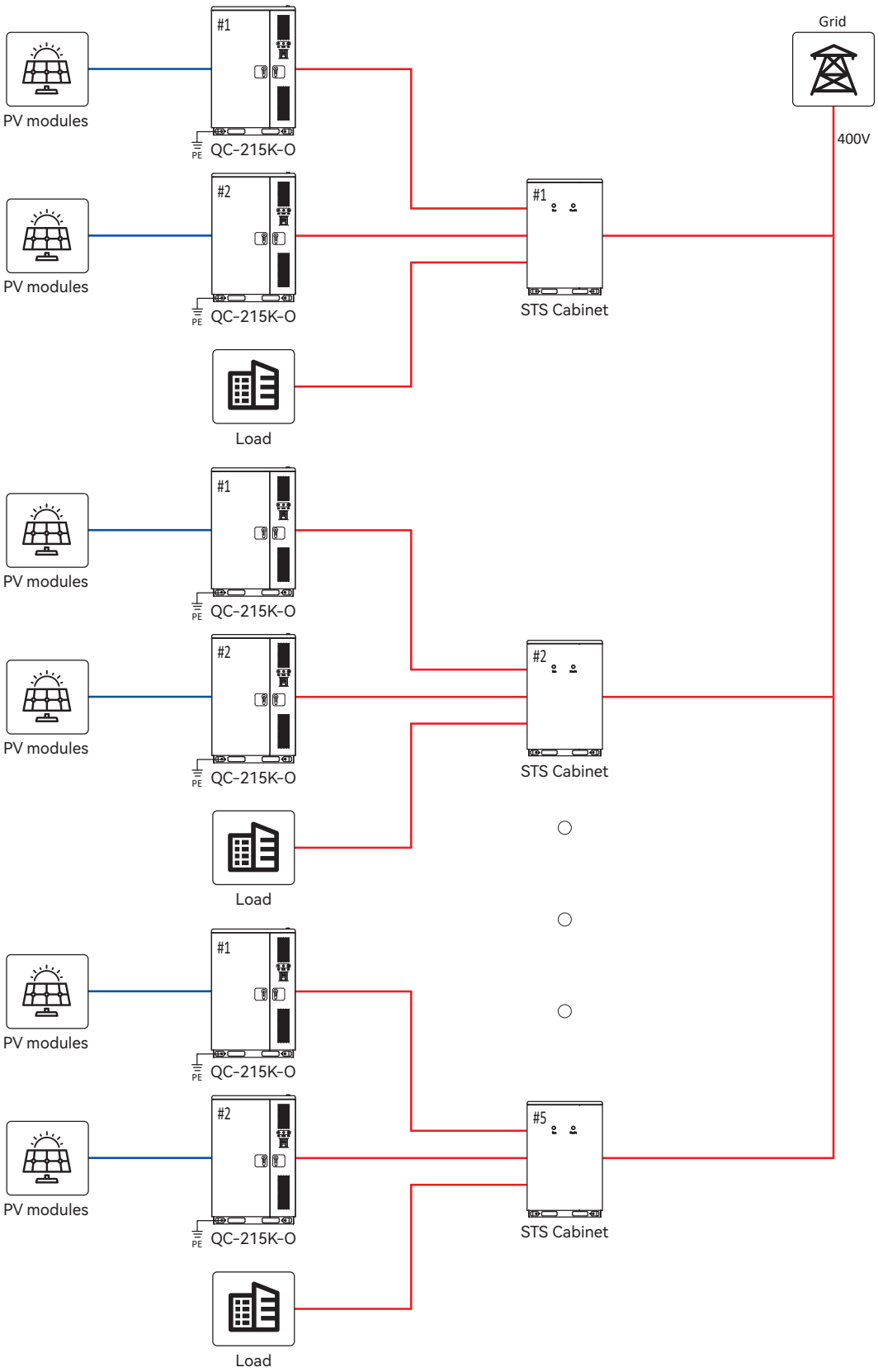
Parallel cabinet system



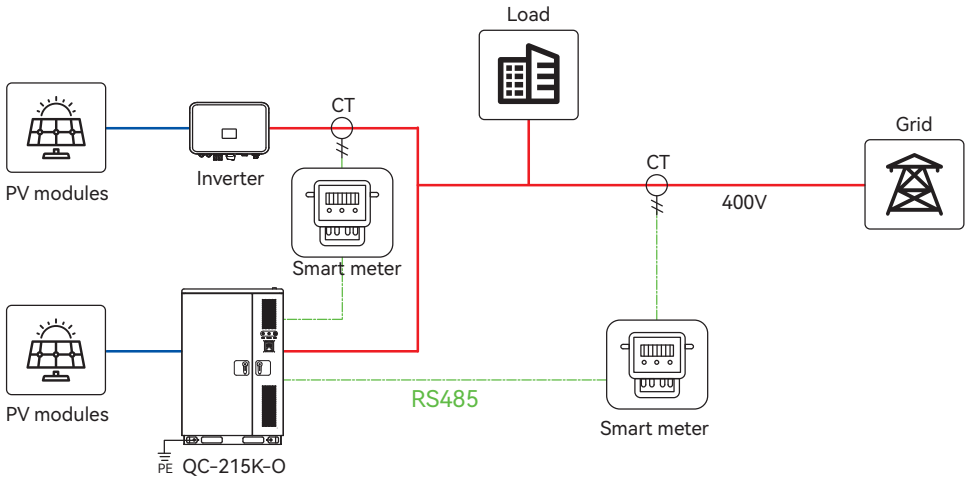
Off-grid cabinet system



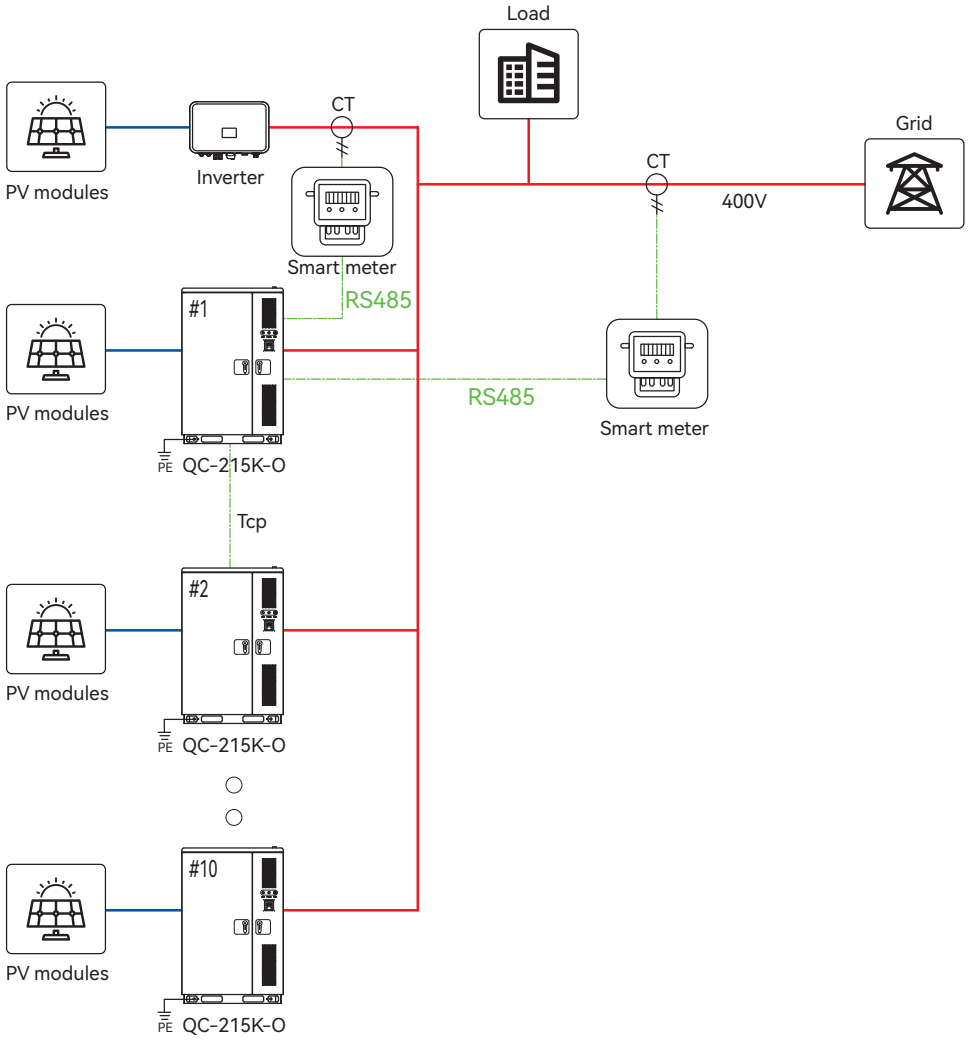
Parallel off-grid cabinet system



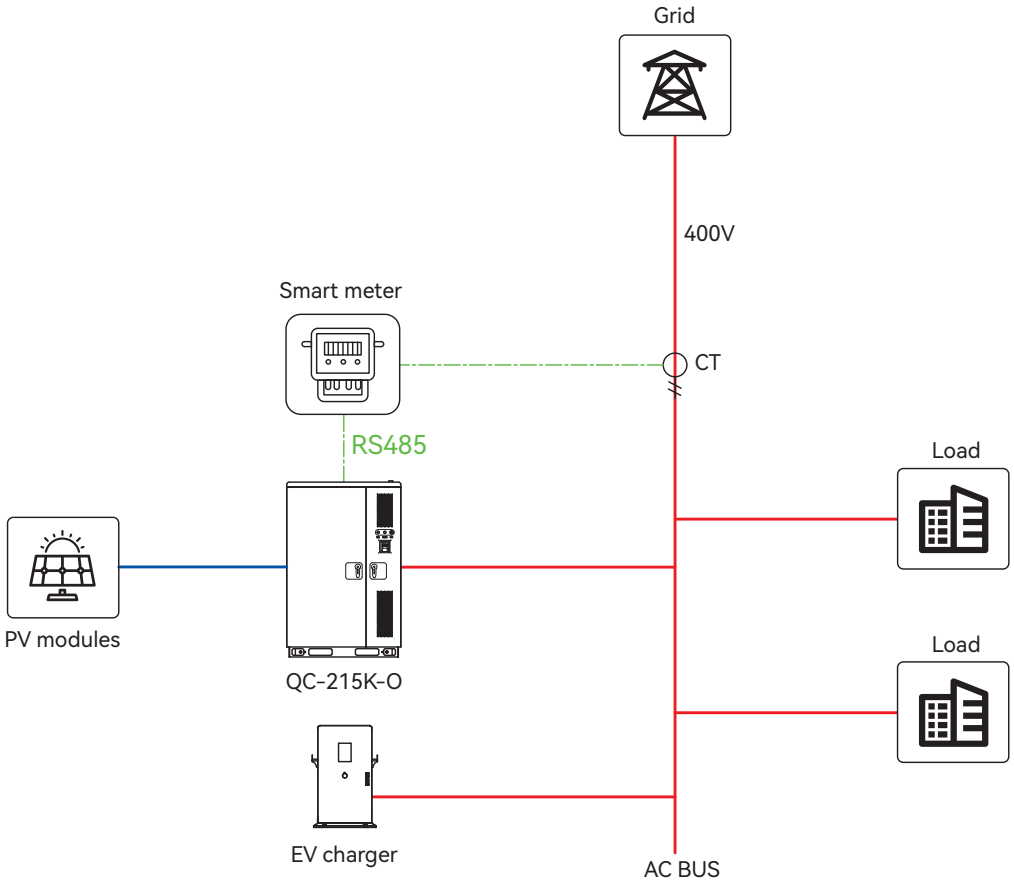
Retrofit cabinet system



Parallel retrofit cabinet system



Cabinet system with use of EV charger



Ongoing projects:

La Rioja, Spain

Fish farm, 100kW.
Expected completion in 2026.01.

Žďár nad Sázavou, Czech

Lubricant manufacturer, 200kW.
Expected completion in 2026.01.

Valencia, Spain

Wedding hotel, 100kW.
Expected completion in 2026.02.

Tangshan, Hebei, China (2025)

Electric vehicle charging station, 460kWh.

Shandong, China (2025)

Switching station area project, 50 sets of QC-215K-O.

Guangdong, China (2024)

Energy storage project, 4.6MWh.

Wuhu, Anhui, China (2024)

Energy storage project, 1.6MWh.

Hefei, Anhui, China (2023)

Electric vehicle charging station, 920kWh.

Solar & Storage Live UK 2025

September 23-25, 2025
The NEC, Birmingham (United Kingdom)

The Smarter E Europe 2025 – EES Europe

May 7-9, 2025
Messe München, Munich (Germany)

KEY Expo 2025

March 5-7, 2025
Rimini Expo Centre, Rimini (Italy)

The Smarter E Europe 2024 – EES Europe

June 19-21, 2024
Messe München, Munich (Germany)

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