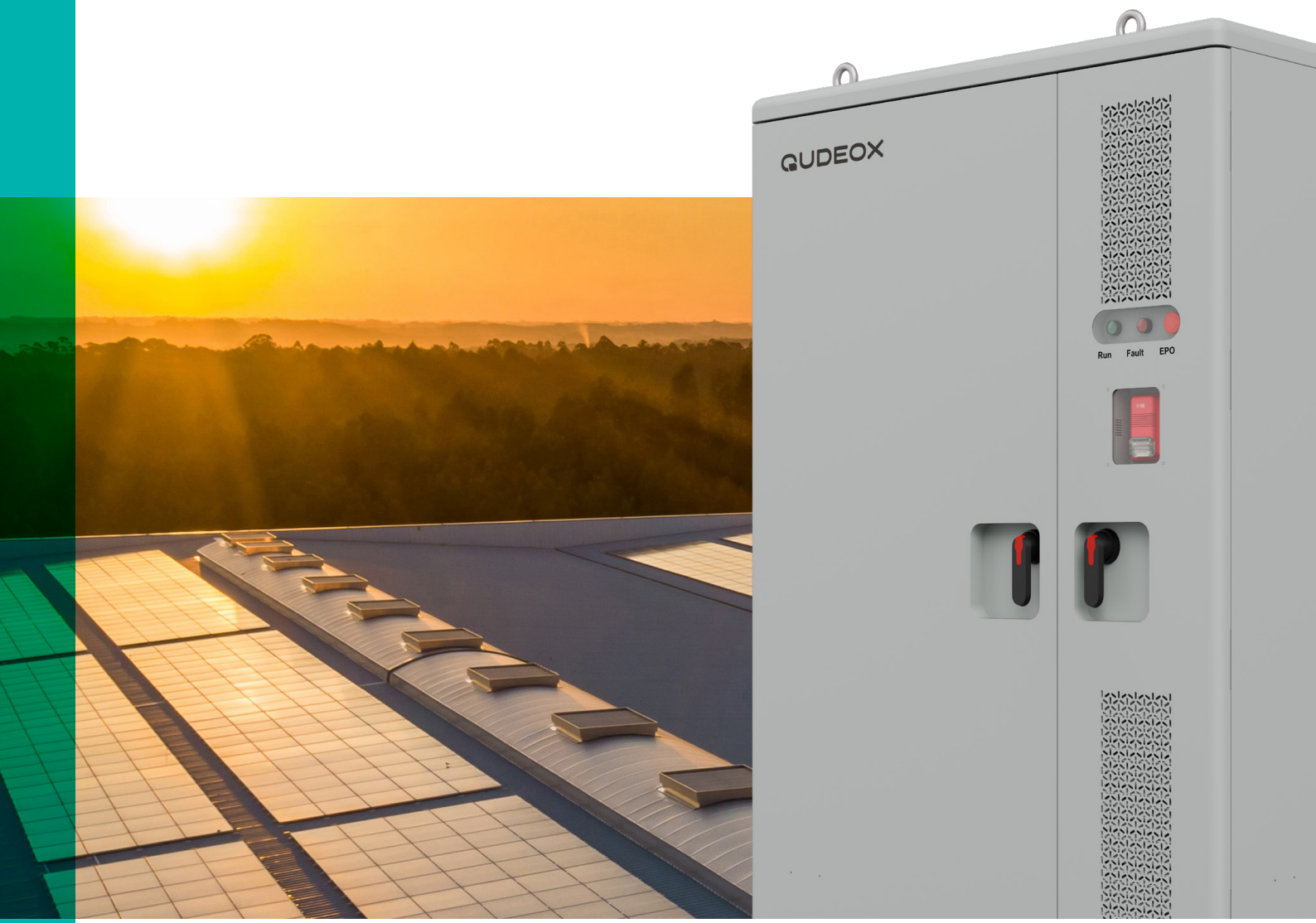
QUDEOX



Commercial & Industrial ESS

2025 Catalogue

POWERING A SUSTAINABLE WORLD

www.qudeox.com

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

COMMERCIAL & INDUSTRIAL ESS

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

Spot market compatible to maximize the revenue

Technical Data	QC-215K-O
Battery data	
Battery system model	CB02
Battery type	LFP / LiFePO4 (Lithium Iron Phosphate)
Rated battery cell capacity	3.2V / 280Ah
Rated battery current	140A
Battery designation	IFpP73/175/208[1P240S]E/-20+50/95
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
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

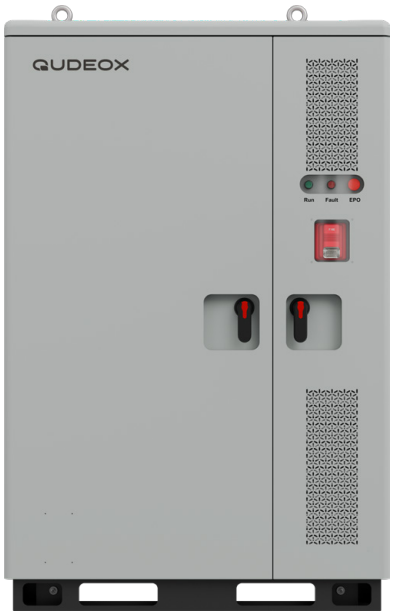
Ultra-low power loss

Minimal heat generation

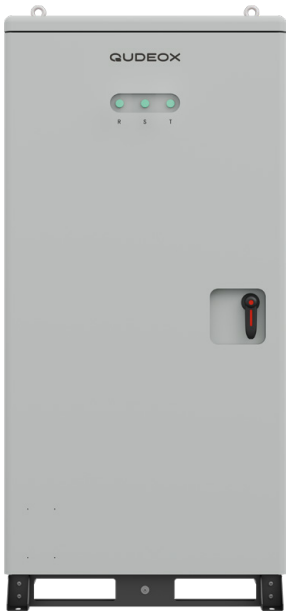
Eliminates cooling system costs

Reduces operational energy expenses

Technical Data	QCB-400V
Rated working voltage	AC400V
Rated working voltage frequency	50Hz/60Hz
Rated forking current	630A
Rated insulation voltage	AC800V
Rated impact withstand voltage	6kV
ESS access	2x100kW
Load access	2x100kW
Operating temperature	-30°C~70°C
Maximum operating altitude	2000 m
Ingress protection rating	IP54
Weight	225 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.

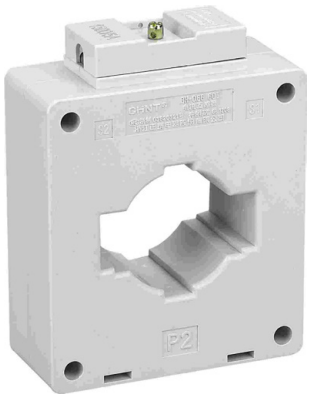


Chint DTSU666

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



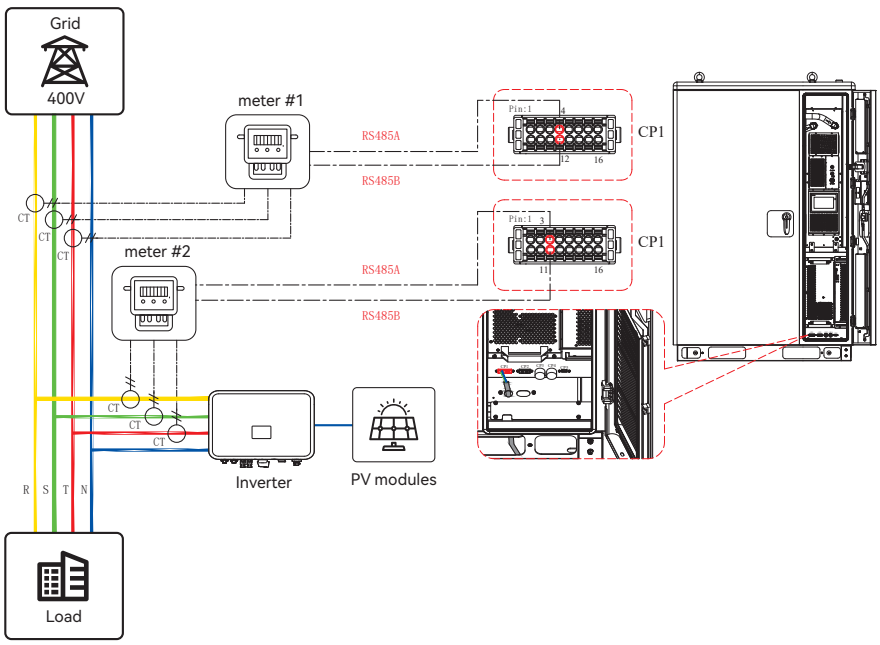
BH-0.66 60 I

Current Transformer (CT)

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

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

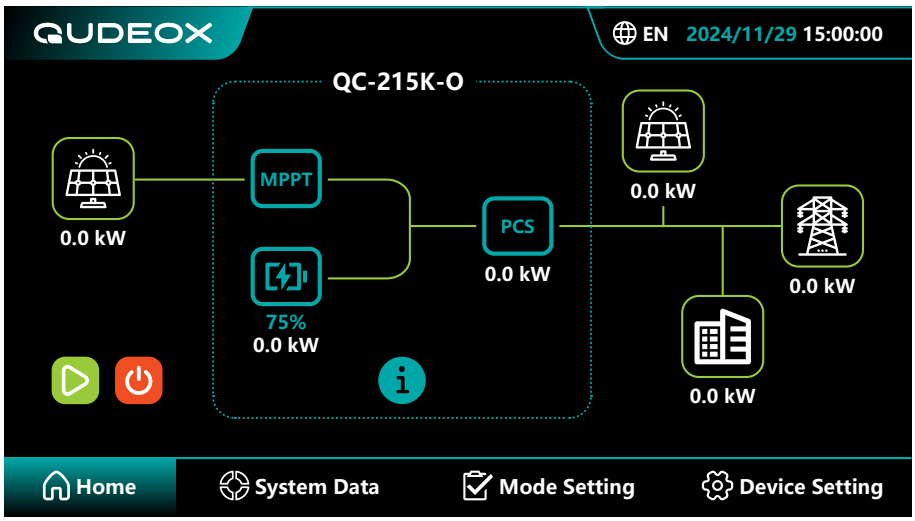
QC-215K-O
Single cabinet wiring diagram



Qudeox EMS

The intelligent "brain" of our energy storage systems

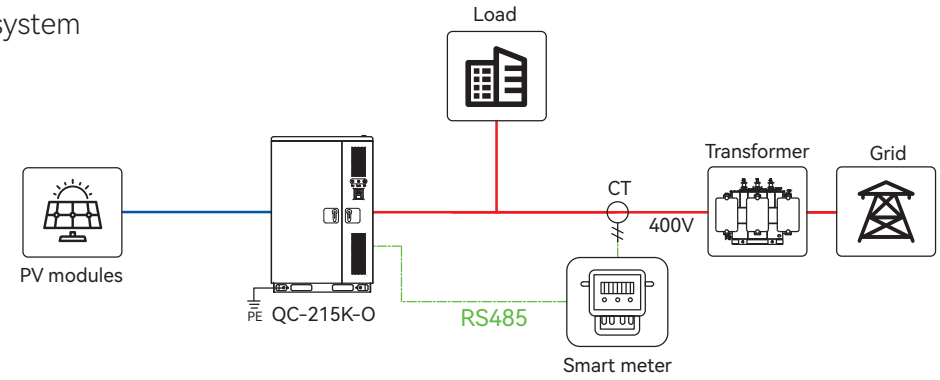
The EMS (Energy Management System) is the intelligent "brain" of QUDEOX energy storage cabinets, designed specifically for industrial/commercial applications. With its outstanding performance, it carries out operations such as status monitoring, data acquisition, safety protection, and energy scheduling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



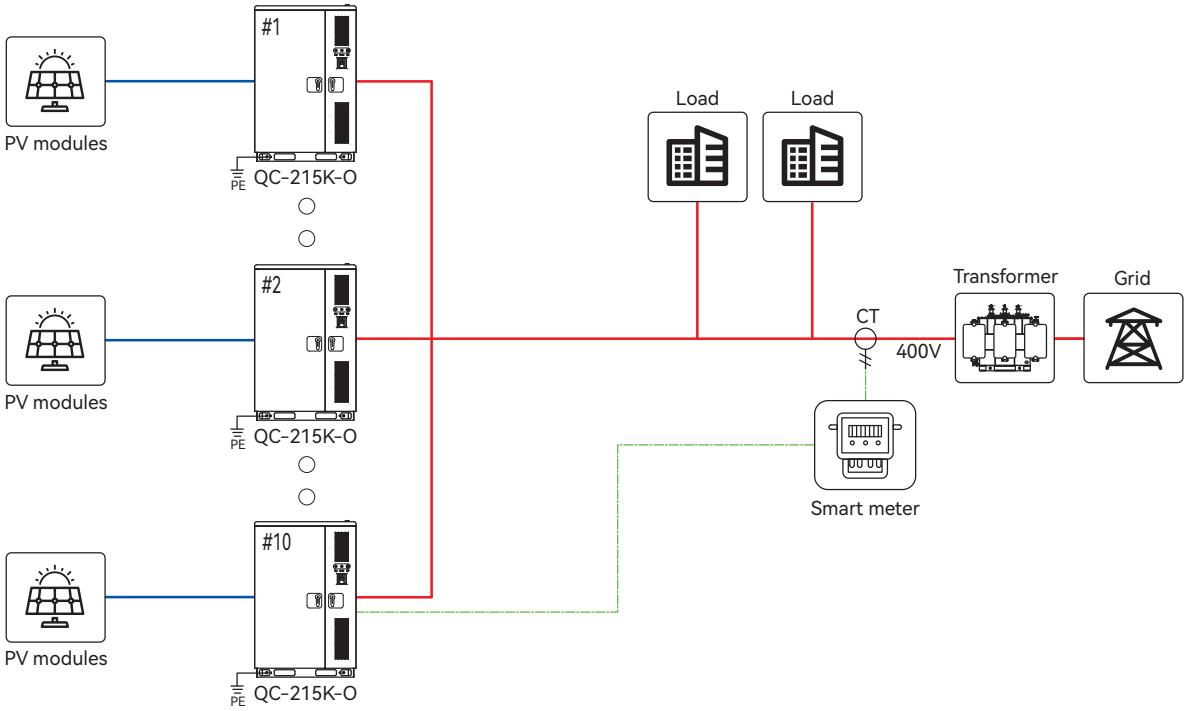
Local and remote control via web and mobile application

DIAGRAMS OF C&I ESS SCENARIOS

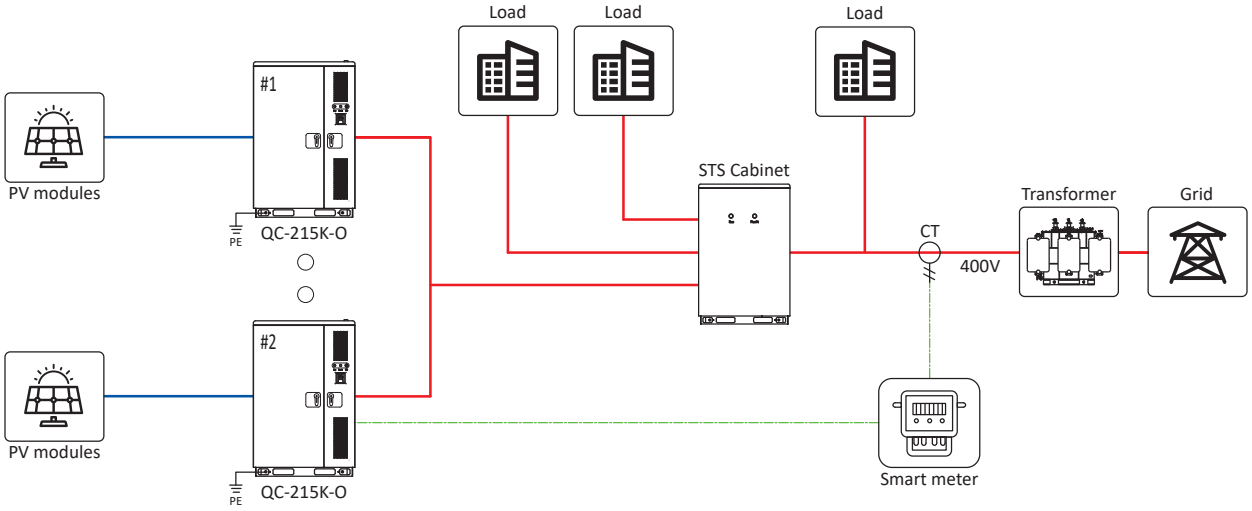
Single cabinet system



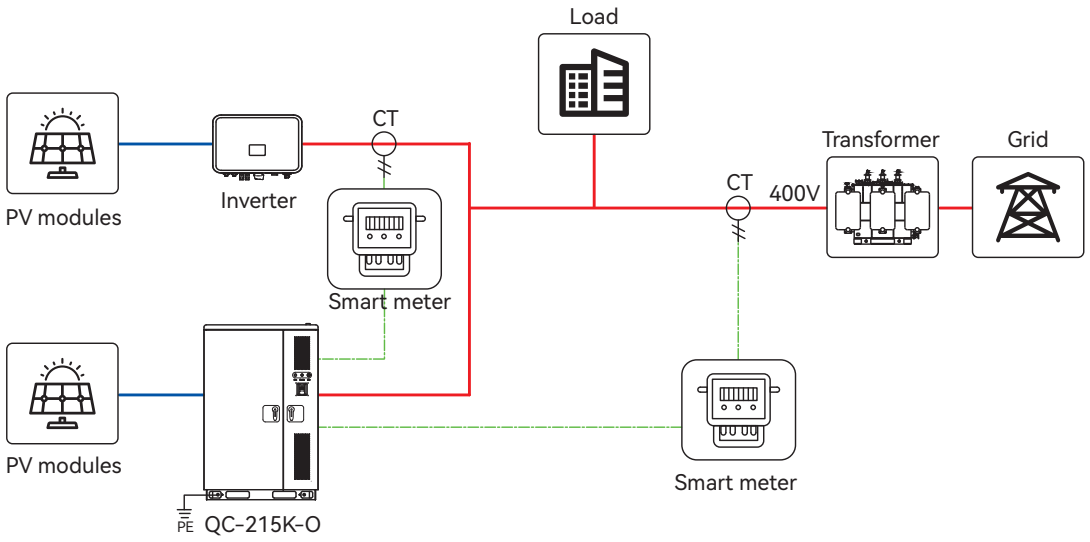
Parallel cabinet system



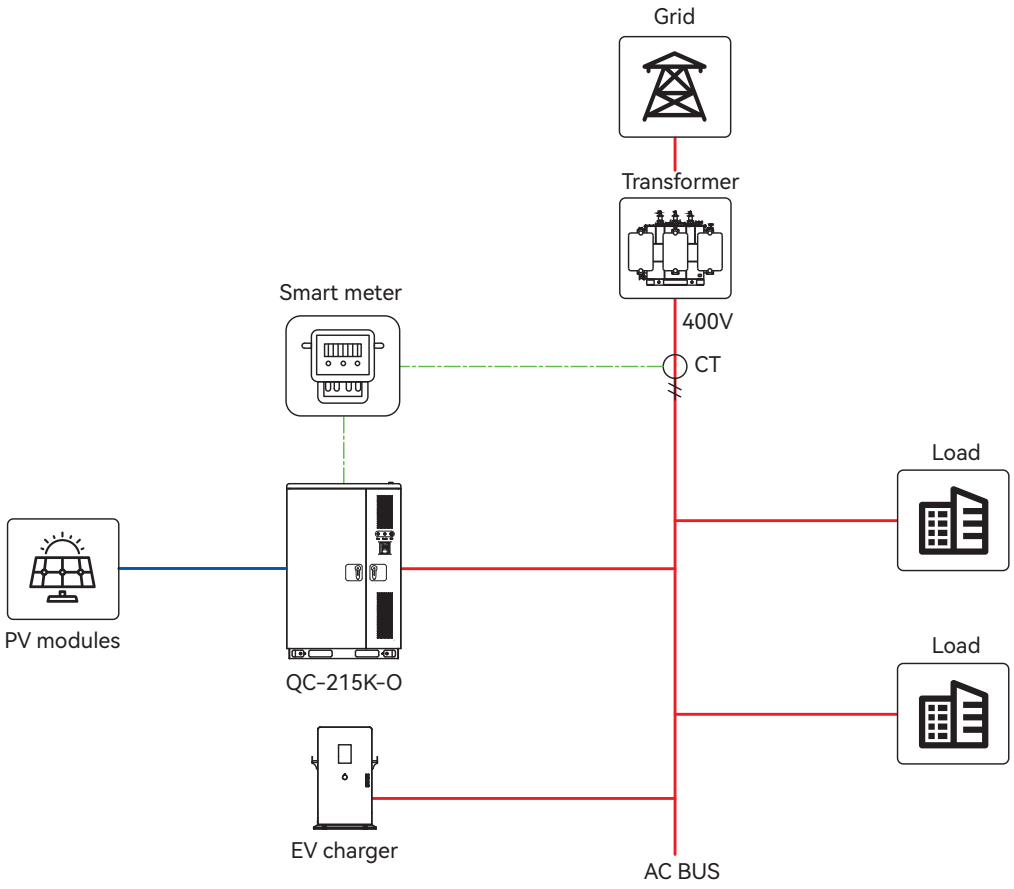
Off-grid cabinet system



Retrofit cabinet system



Cabinet system with use of EV charger



The Smarter E Europe 2025 – EES Europe

May 7-9, 2025

Messe München, Munich (Germany)

Joint participation with company Entrade (Italy), a member of our Partner Program.

KEY Expo 2025

March 5-7, 2025

Rimini Expo Centre, Rimini (Italy)

Joint participation with company Entrade (Italy), a member of our Partner Program.

The Smarter E Europe 2024 – EES Europe

June 19-21, 2024

Messe München, Munich (Germany)

Joint participation with company Entrade (Italy), a member of our Partner Program.

Metal stamping factory, retrofit project.

Electric vehicle charging station, 920kWh.

Energy storage project, 1.6MWh.

Energy storage project, 4.6MWh.

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

Electric vehicle charging station, 460kWh.

Classic Case Study: Energy Storage System for Italian Metal Stamping Plant

Padova, Italy (2025)

1. Project Overview

An industrial metal stamping facility in Northern Italy faced a peak power demand of 140kW but operated under a grid contract limited to 116kW. To avoid steep penalty fees for excess usage, we integrated our Energy Storage System with the existing 116kW photovoltaic system.

2. Safety Innovation – oil immersion system

Beyond standard liquid-cooled designs, our proprietary oil-immersion system eliminates fire and explosion risks. This breakthrough enables safe indoor/outdoor deployment.

3. Ultra-Stable Performance

The facility's extreme operational conditions characterized by instantaneous current fluctuations during metal stamping demand robust power conversion. Our PCS (Power Conversion System) maintains uninterrupted operation under such dynamic loads.

4. Intelligent Energy Management

Our EMS (Energy Management System) supports Self-consumption optimization and Peak shaving operational modes to maximise customer benefits

5. Off-Grid Function for Backup Use

Upcoming off-grid functionality (Q4 release) will provide instant backup power during outages, ensuring continuous production.

Notes

QUDEOX

POWERING A
SUSTAINABLE
WORLD

Qudeox (Zhejiang) ESS Co., Ltd.

Headquarter
198-208 Chezhan Road, Liushi Town, Wenzhou, Zhejiang, China

Europe After-sales Center
Partida Salto del Agua, 22 · 46940 Manises, Valencia, Spain

info@qudeox.com

www.qudeox.com