



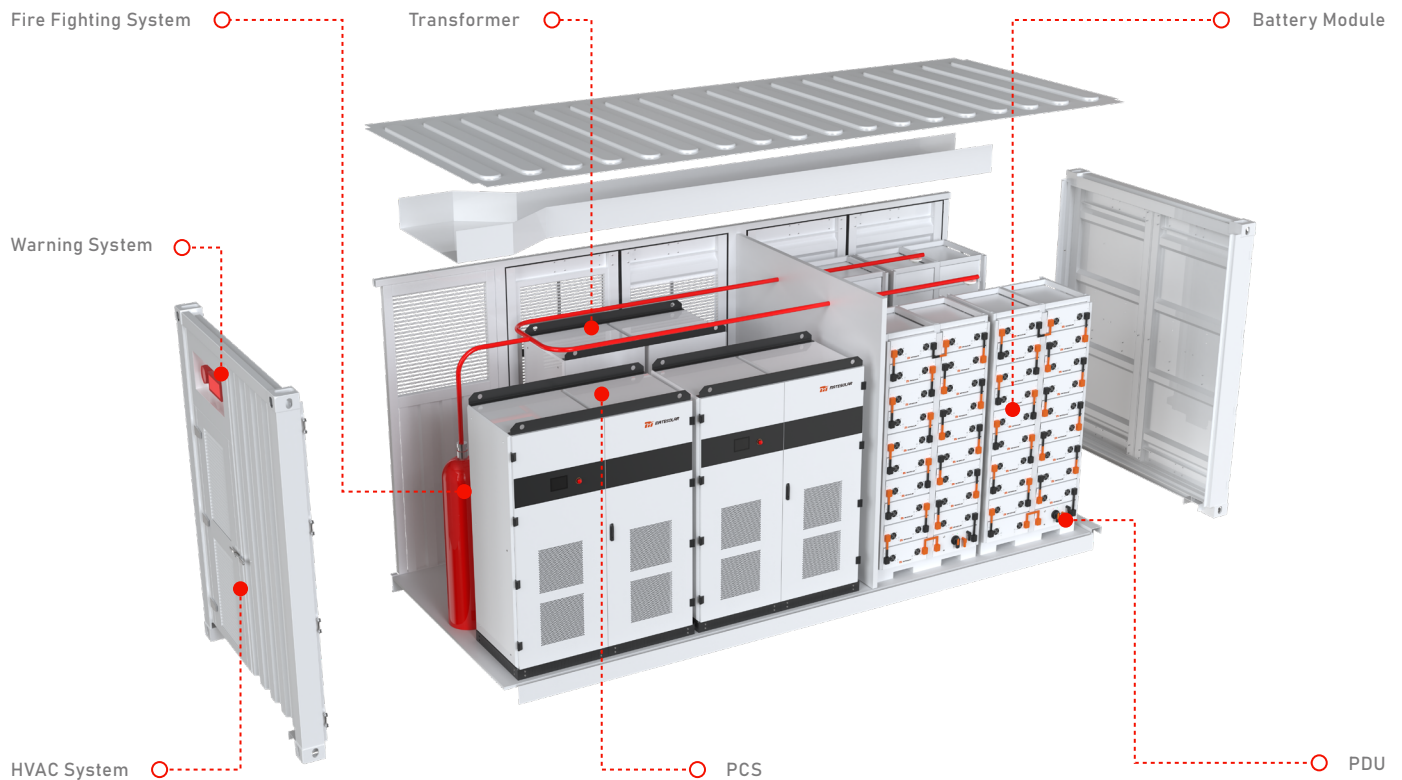
MTCB-500kW-1000kWh

Container Energy Storage System

MTCB Series

- LiFePO₄ battery module, stable discharge platform, good safety performance, long cycle life;
- Three-level battery management system, support overcharge, over-discharge, over-voltage and other functional protection;
- Modular design, support elastic expansion and front maintenance;
- Comes with local monitoring EMS, which can remotely view system information;
- Optional with EMS (Customized microgrid energy management system, including energy storage, photovoltaic, grid, load, generator, video monitoring, etc.);

MTCB Series



PCS、BMS、EMS Integrated

- Support PV, BAT, DG and GRID access
- Automatic switching between on/off-grid
- Support forklift and hoisting transportation
- Event and Caution Alarm
- Multiple Protections
- Real time and History Data Accumulation
- Dual Working Power Support

MTCB Serise

A high-performance, all-in-one, containerized battery energy storage system developed by Mate Solar, provides C&I users with the intelligent and reliable solution to optimize energy efficiency and resilience. BESS related products are useful for a wide range of applications which covers commercial & industrial, renewable energy and grid services.



MTCB Series

MODULE	MTCB-500K-1MWH
DC Data	
Cell type	Prismatic LFP
Cell brand	HiGEE
Cell life cycle	>8,000 cycles@0.5C,25°C
Cell spec	3.2V/280Ah
String configuration	1P224S
Number of strings	5
String rated energy capacity	200kWh
DC rated energy capacity	1000kWh
Rated AC voltage	716.8V
Vokage range	628V~806V
BMS communication interface	Ethernet, CAN, RS485
BMS communication protocol	Modbus RTU, Modbus TCP
AC Data	
Rated AC power	500kW
Maximum AC power	550kW
Rated AC vokage	400V
AC PF	1 leading ~ 1 lagging
Output THDi	≤ 3%
Nominal grid frequency	50/60Hz
Isolation method	3 Phase 4 Line Transformer
General Data	
Dimension w/o clearances (L*W*H)	6,058*2,438*2, 591mm
Weight of whole system	<30MT
Degree of protection	IP65
Operating temperature range	-20~65°C
Relative humidity	0~95% (non-condensing)
Max working altitude	3,000m/9,842ft
Cooling concept of DC hatch	HAVC
Cooling concept of PCS hatch	Forced air cooling
Fire extinguisher system	HFC bottle group
Communication interfaces	RS485, Ethernet, GPRS
Communication protocols	Modbus RTU, Modbus TCP

* In case of changes in product dimensions and parameters, the latest information from our company shall prevail without prior notice.

Application Scenarios

Power Expansion

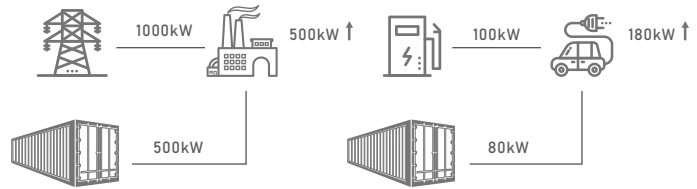
Discharge when the distribution capacity cannot meet the load demand to achieve the effect of virtual capacity expansion.



Factory



Charging Station



Wind and Solar Energy Consumption

Storing the surplus power emitted by the PV during the day for discharging at night.



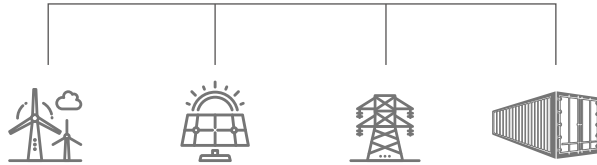
PV Power Station



Wind Power Station



Hybrid Charging



Solar & Energy Microgrid

Can realize electricity saving. Applications such as backup power supply provide stable power in areas that cannot be connected to the grid, such as islands and mountainous areas.



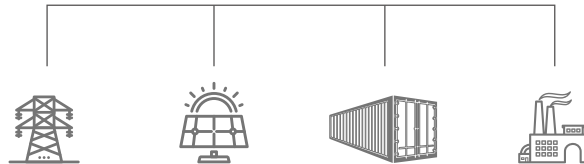
Factory



Charging Station



Remote Area



Demand Response

Enable power grid dispatching, entitle dispatching subsidies.



Factory



Office Block



Shopping Mall

