





GLOBAL LEADING ESS SOLUTIONS PROVIDER













Company Introduction

IMOCH is a company focusing on the research and development, production and sales of new energy lithium battery technology. It is headquartered in Yichun, the lithium capital of Asia.

Yichun has formed a complete industrial chain from lithium resource mining, purification and processing to upstream and downstream products such as power batteries and new energy vehicles. It already has a complete industrial chain advantage and is a veritable lithium capital of Asia.

As a company with innovative spirit and forward-looking vision, IMOCH is committed to becoming the world's leading lithium battery manufacturer and solar energy solution provider. We know that the lithium battery industry, as an important part of the new energy field, is of great significance in promoting the transformation of the global energy structure and achieving sustainable development. Therefore, we continue to invest in research and development to improve product quality and performance and services to meet the growing market demand.

IMOCH has passed ISO9001 quality management system, ISO14001 environmental management system, QHSAS18001 occupational health and safety management system, energy management system and other system certifications. The products have also successfully passed CE, UL, UN38

1000 PCS

Monthly Production Capacity

2

R&D centers

2.2GW

Annual Production Capacity

2

Production Base
-YiChun -DongGuan

3

Overseas Base
-Mandalay, Myanmar

-Manila,Philippines

-Hanoi, Vietanam



▶ Reliable

Tier-1 top brands' A-Grade LFP cells to ensure high safety and excellent performance Over 8000 times cycle life

The adoption of high-performance processors, international brand devices, better stability

▶ Intelligent

Multi-level intelligent energy management implemented, enhance performance and extent life span One-button switch machanism, more convenient operation

 $\label{thm:bms} \mbox{High BMS compatibility, perfect match of energy storage inverter}$

Intelligent BMS to enable a safe and reliable operation



6-pin Dip Switch ensures a maximum 16 units parallel arrangement Over 95% world-famous inverter brands can be compatible with

Residential or small commercial, off-grid or hybrid, the battery goes with the application scenarios



> 5/10/15KWh PowerWall

Model Capacity	PM5ESS-LV	PM10ESS-LV	PM15ESS-LV		
Battery type	LiFePo4				
Capacity Energy	5KWh	10KWh	15KWh		
Capacity (Ah)	100Ah	200Ah	295Ah		
Battery pack type	16S1P	16S1P	16S1P		
Suggested SOC		10~100%			
Nominal Voltage		51.2V			
Operation Voltage		44.8~57.6V			
Max Charging/Discharging Current	50A	100A	150A		
BMS	Robust multi	point monitoring BM	S pre installed		
Scalable (Parallel function)		es, maximum 16 pac	ks		
Life Cycling (0.5C&25°C)	6000 cycles @ 0.5C; 80% DOD				
Operation Temperature	Chrage	: 0~45°C, Dischrage: -	10~45°C		
Warranty		5 years			
Storage Temperature		-20~45°C			
Net Weight	50kg	90kg	119kg		
Gross Weight	62kg	102kg	135kg		
Dimensions	645*385*165mm	715*415*290mm	813*415*290mm		
Packing Size	725*460*360mm	790*490*450mm	880*490*450mm		
Certifications	MSDS, UN	38.3, CE,IEC62619 (Ce	ell), UL (Cell)		
IP Grade		IP21			
Communication		RS232,RS485,CAN			

>>> Compatible Inverter Brands.







































▶ Lift-up Mobility

From 20.48KWhto 51.2KWh

Between 2 to 5 battery modules can be used in single stack to give 20.48 to 51.2Kwh usable capacity

Up to 6 stacks can be connected in parallel to give a maximum 307.2kWh usable capacity

Additional module orparallel stack can be added to increase capacity

Safety Guaranteed

LFP battery, Cobaltfree, environmentally friendly \cdot Maximized safety cycle life, and poweroutput

➤ Wide-range Application Scenarios

Suitable for Emergency-Backupand Off-Grid

 ${\sf Self-Consumption\,Optimization\,for\,Residential\,and\,Commercial}$



> > 20-50KWh Ground Eco Low Voltage Battery Energy Storage System

Model Capacity	LH02-IMC20	LH03-IMC30	LH04-IMC40	LH05IMC50		
System Demo	· □ IMOCH	· · · · · · · · · · · · · · · · · · ·	IMOCH	IM©CH		
Battery Module	ECOBOX-LV-	-10(10.24kWh,20	00AH,51.2V,90kg	,640*379*230)		
Battery Type		LiF	ePo4			
Number Of Modules	2	3	4	5		
Energy Capacity(kW-h)	20.48	30.72	40.96	51.2		
Normal Voltage(V)	51.2					
Operating Voltage Range(V)	44.8~57.6					
Standard Charge/Discharge Current	100A@0.5C(max200A)					
Dimension mm(W/D/H)	640*379*500	640*379*730	640*379*960	640*379*119		
Weight(KG)	180	270	360	450		
OperationTemperature	-10-45°C					
IP Protection	IP21					
Installation	Floor installation 5 years					
Warranty						
BMS Monitoring Parameters	SOC, system voltage, current, cell voltage					
	Application					
Application scenarios	Solar System ,Power Back Up, UPS system					
Life Cycling (0.5C &25°C)		6000 cycles (@0.5C;80%DOD			
Communication Port		CAN	/RS485			

>> Compatible Inverter Brands.



































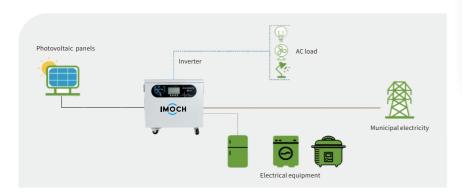




All In One - Battery and inverter integrated to work together.

- ➤ Can be directly connected to the mains for charging;
- ➤ Can be directly connected to photovoltaic panels for charging;
- ➤ Simple wiring and installation;
- ➤ Can be used outdoors;
- ➤ 220V output, can directly power household appliances;

Product application diagram <<<





> > 3KW/5KWh 5KW/10KWh All In One ESS

ltem	3KW/5KWh	5KW/10KWh			
Inverter					
Rated Power	3000W	5000W			
Peak Power	5000W	7500W			
System Voltage	25.6V	51.2V			
Output Voltage	220\	/AC			
Input Voltage	220\	/AC			
Output Frequency	501	ΗZ			
Efficiency	≥85	5%			
Overload Capacity	105~120%30min;120~130%5min;130~15	.0% 1min;>150%20S;ShortCircuit 10ms			
Output Waveform	Pure sin	e wave			
Solar Controller					
Charge Mode	MP	PT			
Maximum Input Power	3000W				
Maximum Output Current					
Input Voltage	72-15	72-150VDC			
Battery					
Rated Voltage	25.6V	51.2V			
Nominal Capacity	200Ah	200Ah 10000Wh			
Rated power	5000Wh				
Charging Voltage	29.2V	58.4V			
Continuous charging current	0-50A	0-100A			
Continuous discharge current	0-100A	0-100A			
General parameters					
Protection function	Overvoltage/low voltage/ove	rload/short circuit protection			
Operation temperature	-10~	45°C			
Storage temperature	-20~	50°C			
Cooling	Fa	an			
Dimension	470*300*455	520*370*590			
Gross Weight	70KG	121KG			



▶ long life

- The battery pack adopts an insulatedframe, the airflow three-dimensional direct cooling cell, and the coolingis efficient.
- Efficient heat dissipation reduces the temperature rise of the battery coreduring
- use and extends its servicelife;

► High reliability and easy maintenance

- The insulating material is used as the battery core supportframe, which has high
- voltageresistance and makes the systemmore reliable;
- BMS adopts three-level protection toimprove system reliability;
- No coolant circuit, suitable for alpineareas and easy to maintain;

• Passive passive fire excitation systemmakes fire control more reliable;

► Full parameter interaction: income increased by20%

- EMS adopts full parameter control,96 timezones throughout the day, and operates according to one policy at a time.
- $\bullet \ \mathsf{EMS} \ \mathsf{cloud}\text{-}\mathsf{edge} \ \mathsf{collaboration}, \mathsf{full}\text{-}\mathsf{parameter} \mathsf{interaction}, \mathsf{the} \ \mathsf{cloud} \ \mathsf{optimizes} \ \mathsf{the} \ \mathsf{controlstrategy}$
- based on operational results, and issuescontrol instructions based on predictions;

► Flexible configuration for multiple applications

- Different 314Ah/280Ah options available;
- Multiple cabinets in parallel: supports upto 10 cabinets;
- Support on-grid/ off-grid;

Configuration <<<

➤ C2110M/C2110S

C2 series battery cabinet, C2110M can be installed and used independently, and C2110S can be used in parallel as a cabinet. The cabinet is equipped with 215kwh power, 100kwPCS and EMS for independent/local applications.

➤ Ax combiner cabinet

Ax is a C2 series busbar cabinet used for multi cabinet parallel busbar, with standard configuration of main control EMS and busbar circuit breaker; Optional STS switch are control to the control EMS and busbar circuit breaker and the control EMS are controlled by the control EMS and busbar circuit breaker and the control EMS are controlled by the control EMS and busbar circuit breaker and the control EMS are controlled by the control EMS and busbar circuit breaker and the control EMS are controlled by the control EMS and busbar circuit breaker and the control EMS are controlled by the control EMS and busbar circuit breaker and the control EMS are controlled by the control EMS and busbar circuit breaker and the control EMS are controlled by the control EMS and busbar circuit breaker and the control EMS are controlled by the control EMS and busbar circuit breaker and the control EMS are controlled by the controlled by the control EMS are controlled by the control EMS are controlled by the control EMS are controlled by the controlled by the controlled by the control EMS are controlled by the controlle



Configuration

Number of battery	1	2	3	4	5	6	7	8	9	10
FlexBESS C2110M	1	1	1	1	1	1	1	1	1	1
FlexBESS C2110S	0	1	2	3	4	5	6	7	8	9
Flex BESS C2-Ax	0	A2	A3	A4	A5	A3X2	A4X2	A4X2	A5X2	A5X2
Output power(kw)	100	200	300	400	500	600	700	800	900	1000
Energy capacity(kwh	215	430	645	860	1075	1290	1505	1720	1935	2150

> > System Technical Specifications

Item	C2110MVC2110S
DC Side parameters	
Battery chemistry	Lithium Iron Phosphate (LFP)
Cell life cycle	6,000 Cycles @0.5C 25C 80% remaining capacity
Cell Spec.	3.2V/280 Ah
Cluster configuration	1P240S
Rated capacity	215kWh
Rated voltage	768V
Voltage range	672V~852V
BMS communication interface	RS485, Ethernet
BMS communication protoco	Modbus RTU, Modbus TCP
AC Side Parameters	
Rated AC power	100kW
Maximum AC power	125kW
Rated voltage	400V
Grid voltage range	±15%
AC rate of current	150A
Output THDi	≤3%
Adjustable PF	+1~-1
Grid frequency range	150±2.5Hz
Output	3P+N+PE
General Parameters	
Dimension w/o clearances(W*D*H)	1,100*1,400*2,100mm(Cabinet section)
Weight	<2t
Degree of protection	IP54
Operating temperature range	-20~40°C
Relative humidity	0~95%(non-condensing)
Max working altitude	≤3000m
Communication interfaces	RS485,Ethernet,GPRS
Certifications	GB36276