

Power The Future!

COMMERCIAL & INDUSTRIAL



DOWELL



linkedin



YouTube

Dowell Technology Co., Ltd
www.dowellelectronic.eu
sales@dowellelectronic.eu



GenkiPWR Social Media



DOWELL Social Media





At Dowell, we're committed to shaping a sustainable future for heavy industries.

Dowell iCube , a revolutionary, compact, and smart battery energy storage system (BESS) designed to transform the way we power commercial building, Industry factory, EV charging station, construction sites, mining plants, oil fields, oil wells, tunnels, and more.

Dowell iCube is a powerful solution that replaces the conventional reliance on dirty, noisy, and hazardous diesel generators. Crafted to meet the diverse demands of these challenging environments, it comes in various sizes to adapt seamlessly to the specific needs of different Clients.



Adaptive to Strict outdoor enviroment



Annual OPEX saving by Simple O&M



Alternative foot Margin installation



1P / 0.5P Flexible for Multi-Choice

C&I CABINET
Liquid-Cooling
BATTERY STORAGE SYSTEM





Product Model	iCube-D Series	
Battery Cell Parameters		
Cell Brand	CATL	
Cell Capacity	LFP-280Ah	LFP-306Ah
C Rate	1P / 1P	0.5P / 0.5P
Battery Pack Parameters		
Configuration	1P52S	
Rated Voltage	166.4V	
Rated Energy	46.59kWh	50.92kWh
Cabinet Parameters		
DC Rated Voltage	1331.2V	
Configuration	1P416S	
Pack Quantity	4-8	
@BOL Rated Energy	186 / 232 / 279 / 326 / 372kWh	203 / 254 / 305 / 356 / 407 kWh
Working Voltage Range	600~1500V	
Size (W*D*H)	1300x1350x2300mm	
IP Grade	IP54	
Operating Humidity Range	0~95%	
Operating Temperature Range	-20 ~ +55℃ (>4 5℃ derating)	
Operating Altitude	≤ 4000m	
Cooling Method	Liquid-cooling	


Note: Delflagration venting is optional configuration, result in different quotation





Note: Flexible Capacity Configuration: Pack Qty 4 to 8 into Cabinet adaptive to 600 – 1500V system.
Flexible Configuration of each cabinet from 1 to 20, adaptive to Hybrid/PCS flexible layout.

- 

280Ah / 306Ah LFP , 0.5P/1P Solution, Module / Rack level UL9540A No fire.
- 

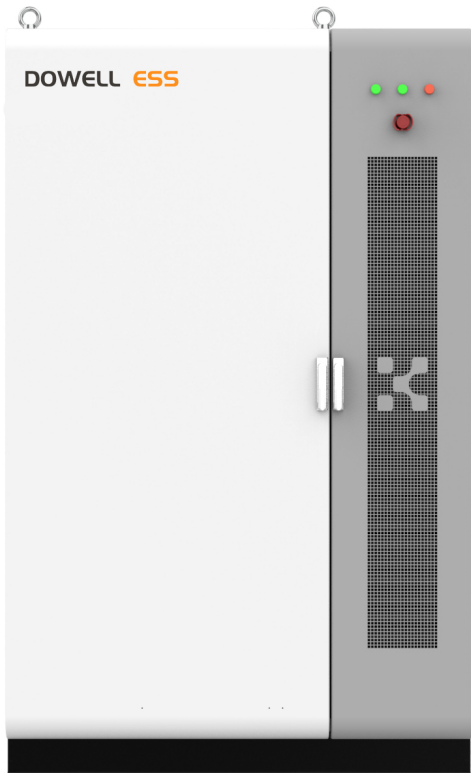
BMS integrates safety algorithm and aging analysis model.
- 

Alternative FES design for different market. NFPA68 compliant.
- 


Integrated Frequency Conversion Liquid-cooling System, 33% Increase of Life Expectancy.
- 

Configurable from 1 to 20, adaptive to PCS with different power and flexible layout.


C&I CABINET
Liquid-Cooling
ENERGY STORAGE SYSTEM



CATL 280Ah LFP , Module / Rack level UL9540A No fire.

 BMS integrates safety algorithm and aging analysis model.

 Alternative FES design for different market. NFPA68 compliant.

 Integrated Frequency Conversion Liquid-cooling System, 33% Increase of Life Expectancy.

 MPPT Module, STS module as option to release PV / ESS solution.

Product Model	iCube- C Series
Model Name	iCube 125/233
Cell Brand	CATL
Cell Capacity	LFP-280Ah
C Rate	0.5P / 1P
Configuration	1P260S
Number of strings	1
Rated energy capacity	233kWh
Battery Voltage Range	650-950Vdc
BMS communication interface	RS485, Ethernet
BMS communication protocol	Modbus RTU, Modbus TCP
Certification	UL9540A UL1973 IEC62619
AC Data	
Rated AC power	125kW
Maximum AC power	138kW
Rated voltage	380V/400V/480V
Grid voltage range	±15%
Maximum AC current	200A
Frequency	50HZ/60HZ
Output THDi	<3%
PF	0.99 1 (lead) ~1 (lag)
AC output	3W+PE / 3W+N+PE
Certification	UL1741 IEEE1547.1:2020,CSA C22.21EC62477,EN50549
General Data	
Dimension W/O Clearances[W*D*H]	1400*1350*2100mm
Weight of the whole system	2.7t
Degree of protection	NEMA 3R /IP 54
Operating temperature range	-20~5 5℃
Relative humidity	0~95% (non-condensing)
Max working altitude	<4000m
Cooling concept of DC hatch	Liquid- cooling

Note: Delflagration venting is optional configuration, result in different quotation
Flexible Configuration of each cabinet in parallel, adaptive to flexible capacity layout.

C&I CABINET
Air-Cooling
ENERGY STORAGE SYSTEM



Air cooling energy storage system adapts to various scenarios
It adopts an "All-In-One" design concept
AC/DC Converter and Battery system



BMS integrates safety algorithm and aging analysis model.



Alternative FES design for different market.



Integrated Frequency Conversion air-cooling System, Easy maintenance.



Multi-Scenario Applications, Modular Design for high integration.

Product Model	iCube- C Series
Model Name	iCube 125/215
Cell Capacity	LFP-280Ah
C Rate	0.5P
Configuration	1P240S
Number of strings	1
Rated energy capacity	215kWh
Battery Voltage Range	672-876Vdc
BMS communication interface	RS485, Ethernet
BMS communication protocol	Modbus RTU, Modbus TCP
Certification	CE EMC IEC62619
AC Data	
Rated AC power	125kW
Maximum AC power	138kW
Rated voltage	380V/400V/480V
Grid voltage range	±15%
Maximum AC current	200A
Frequency	50HZ/60HZ
Output THDi	<3%
PF	0.99 1 (lead) ~1 (lag)
AC output	3W+PE / 3W+N+PE
Certification	UL1741 IEEE1547.1:2020,CSA C22.21EC62477,EN50549
General Data	
Dimension W/O Clearances[W*D*H]	1100*1150*2100mm
Weight of the whole system	2.4t
Degree of protection	NEMA 3R /IP 54
Operating temperature range	-20~5 5°C
Relative humidity	0~95% (non-condensing)
Max working altitude	<2000m
Cooling concept of DC hatch	Air- cooling

Note: Delflagration venting is optional configuration, result in different quotation
Flexible Configuration of each cabinet in parallel, adaptive to flexible capacity layout.

C&I CABINET
Air-Cooling
ENERGY STORAGE SYSTEM



Power Up Your Business with Seamless Solar & Storage Solutions
All-in-One Outdoor Energy Hub
System Integration of PV and ESS



Integrated System Design: Simplify your energy management with a fully contained solution tailored for C&I Application.



Maximize Your Renewable Potential – Offered with optional MPPT and STS modules, seamlessly integrate with PV systems.



Perfect for charging stations, factories, industrial parks, and commercial buildings.




Easy Installation & Maintenance: Minimize downtime and streamline maintenance with our user-friendly design.


Product Model	iCube- All in one
PV input	
Nominal PV Power	50-100kW
Max. PV Power	55-110kW
MPPT Voltage Range	200V-650V (600V-650V)Full Load
Max. PV Input Current	110A
AC Output	
Norminal Power	100kW
Max. Output Power	110kW
Nominal AC Voltage	400Vac
AC Frequency Range	50HZ/60HZ
Nominal AC Current	144A
Efficiency	97.3%
Grid Connection	3W+N+PE / 3W+PE
Overload Capacity	Up to110%(Continue), Up to120% by 1 min
Battery System	
Nominal Energy	215kWh
Nominal Capacity	280Ah
Nominal Voltage	768V
Operating Voltage Range	672V-852V
Max. Charge / Discharge Current	140A
System Parameter	
Dimension W/O Clearances[W*D*H]	1100*1900*2200mm
Noise Emission	<70db
Relative Humidity	0~95% (non-condensing)
Operating temperature range	-20~5 5℃
Communication	RS485, CAN, Ethernet, Dry contact
Max working altitude	<2000m
Cooling concept of DC hatch	Air- cooling


Note: Delflagration venting is optional configuration, result in different quotation
Flexible Configuration of each cabinet in parallel, adaptive to flexible capacity layout.


C&I CONTAINER
BATTERY STORAGE SYSTEM




- 

280/306Ah cells with slow degradation, longer service life and higher efficiency.
- 

Integrated two UPS system.
- 

3-level of safety: cells safety, electrical safety and 4-level FES strategy.
- 

Excellent BMS and TMS performance to extend life span, reduce fault rate and improve yearly availability to 98% above.
- 

Non-walk-in/Modular design with high integration, Pre-assembly installation.

iHouse 20ft - B series			
DC Side Data			
P-Rate	0.5P		
Cell capacity	280Ah		306Ah
Cell Voltage range	2.5-3.65V		
Cell rated Energy	896Wh		979.2Wh
Cell rated Energy	5P2P416S		
Rated Energy	3720kWh		4073.47kWh
Rated Voltage	1331.2VDC		
Voltage Range	1040 ~ 1500VDC		
Rated Charge/discharge Power	1860kW		2036.73kW
Auxiliary Power & Communication Data			
P-Rate	0.5P		
Relative Humidity	0~ 95 % (non-condensing)		
Degree of Anti-corrosion of Batt	C4, (optional C5)		
Seismic Level	IEEE 693-2018 Moderate design level		
Voltage Range	3AC+N+PE 380V~480V ±10% , 50/60HZ		
Power	Max. 31.01kW		
Inrush Current	≤65A, < 5S		
Voltage Range	1AC230(L+N) or 2AC(380-480)		
Power	Max. 0.8kW (Continuous)		
Inrush Current	5A		
Capacity	DC24V. 7Ah capacity.@25°C		
Communication Protocol	CAN, Modbus/TCP		
Mechanical Data			
Size	2896mm(H)*2438mm(D)*6058mm(W)		
Weight	~35.2t		
IP Level	IP55		
Environment condition			
Charge Temperature Range	- 25°C~55 °C		
Discharge Temperature Range	- 25°C~55 °C		
Storage Temperature Range	- 30°C~60 °C		
Application Altitude	≤2000m (no derating)		

C&I CONTAINER
ALL IN ONE
ENERGY STORAGE SYSTEM



Complete PCS/Battery all-in-one integrated design.



Smart String ESS, Optimal Low cost operation cost,Active Safety.



Rack-level Optimization, Independent Full charging&discharging.



Flexible system configuration, Supports multi-machine parallel function.

iHouse 20ft 500/1000		
Cell	Type	LFP
	Rated Voltage	3.2V
	Cell Capacity	280AH
Pack	Configuration	1P20S
	Rated Voltage	64V
	Voltage range	56V~73V
	Pack Capacity	17920Wh
	Cooling Method	Air-Cooling
Rack	Rated Voltage	768V
	Voltage range	672V~876V
	Rack Capacity	215.04kWh
	Cooling Method	Air-Cooling

AC Side

Rated output (kW)	525
PCS Rated Voltage	AC230V/400V
Voltage Range	-10%~+15%
Rated Power (kW)	105kW
Module Qty	5
Frequency (Hz)	50/60HZ
Power Factor	0.99
Power Factor Range	1 (lead) ~1 (lag)
Overload capacity	110% continous, 120%/1min
AC Output Type	3W+PE / 3W+N+PE

System

Operation temperature range	-20℃~40℃
Relative humidity	0~95% (non-condensing)
System Voltage	AC230V/400V
System Rated Capacity	1075kwh
Measurement (L*W*H)	6058* 2438 * 2591 mm
BMS communication interface	RS485, Ethernet
BMS communication protocol	Modbus RTU, Modbus TCP
Fire Fighting system	3-Level
IP rate	IP54
Weight of Whole	about 16 tons

DOWELLESS

Power The Future!