

1.2 MWh/500kW

Efficient. Compact. Reliable.



CEI-016 – ITALIA EN-50549

1M2 1.2 MWh/500 kW ESS ALL-IN-ONE CONTAINER

Unlock The Future Of Sustainability ,Designed To Efficiently Harness, Store And Distribute Renewable Energy For A Cleaner Tomorrow



1M2-500
PLUG & PLAY HYBRID BESS

Specifications

1205 kWh / 500 kW (optional PCS/MPPT)

	Cell Type	LFP 314Ah			
	Cell Configuration	5P-1P240S			
Battery System	Rated Energy	1205 kWh			
	Rated Voltage	768 VDC			
	Voltage Range	672~ 852 VDC			
	Rated Current				
	Max. Current	865 A			
	Max. Input Power	720 kW			
PV Input	Start-Up / Cut-Off Voltage	250/ 150 VDC			
(Optional)	No. of MPPT	12 (60 kW Each)			
	Max. Input Current	350 A x 12			
On-Grid PCS	Rated Power	500 kW			
	Rated Voltage	3L/N/PE; 400 (320 ~ 460) VAC			
	Max. Current	722 A			
	Frequency	50 (45 ~ 55) / 60 (55 ~ 65) Hz			
	Power Factor	0.8 Leading - 0.8 Lagging			
	Total Harmonic Distortion	<3%@ Rated Power			
	Rated PCS Power	500 kW			
	Rated Voltage	3L/N/PE; 400 (320 ~ 460) VAC			
Off-Grid	Max. Current	722 A			
PCS	Frequence	50 (45 ~ 55) / 60 (55 ~ 65) Hz			
	On/Off-Grid Switch Time	< 20 ms			
	Total Harmonic Distortion	<2% @ Linear Load			
	Thermal Management	Redundant A/C Compressor			
	Fire Suppression System/Detection	Gas and Smoke Detector, CO ₂ Detector, Water Sprinkle System			
	Communication	LAN + EXTERNAL EMS			
	Generator Connection	Supported, Multifunction Dry Contact Relay			
	Security Protection	Access Control System, Water Sensor			
Suctor Doromotor	Dimensions (W * D * H)	20' HQ 6.058 * 2.438 * 2.896 m			
System Parameters	Weight	<22t			
	Ingress Protection	IP54			
	Working Temperature	-20 ~ +50 °C			
	Humidity	0~ 95% RH (No Condensation)			
	Elevation	≤3000 m			
	Certifications	UN38.3; IEC62619; IEC61000; IEC62040; CEI-016; EN-50549; CE			





The above-mentioned temperatures are limited to the BMS ranges, such values may not be covered by the performance warranty. We recommend contacting WeCo for the most up-to-date datasheet, read warranty and manual before making any purchasing decisions. No part of this document can be copied or reproduced without WeCo written permission. All data is subject to change without prior notice.

ENERGY RETENTION 15 YEARS OPERATION

Retention rate 15 years operations											
Years	0.25P once a day	RTE	Available power (MWh)	0.25P two cycles a day	RTE	Available power	0.5P one cycle a day	RTE	Available power (MWh)	0.5P two cycles a day	RTE
0	100,0%	95,48%	4,877	100,00%	95,48%	4,877	100,00%	93,98%	4,838	100,0%	93,98%
1	96,3%	95,15%	4,688	93,86%	94,94%	4,565	95,82%	93,61%	4,627	93,0%	93,37%
2	93,8%	94,94%	4,561	90,62%	94,68%	4,401	93,52%	93,42%	4,511	89,8%	93,12%
3	92,1%	94,80%	4,475	88,41%	94,51%	4,290	91,74%	93,27%	4,422	87,2%	92,92%
4	90,8%	94,70%	4,410	86,03%	94,33%	4,170	90,28%	93,16%	4,349	85,0%	92,75%
5	89,9%	94,62%	4,362	84,03%	94,19%	4,070	89,00%	93,06%	4,285	82,3%	92,56%
6	88,6%	94,53%	4,299	82,02%	94,04%	3,970	87,70%	92,96%	4,220	80,1%	92,40%
7	87,6%	94,45%	4,249	79,82%	93,88%	3,860	86,50%	92,87%	4,160	77,7%	92,23%
8	86,6%	94,37%	4,199	77,53%	93,72%	3,746	85,40%	92,79%	4,106	75,0%	92,05%
9	85,6%	94,30%	4,149	75,07%	93,55%	3,624	84,20%	92,70%	4,046	72,3%	91,85%
10	84,6%	94,23%	4,099	72,70%	93,38%	3,506	83,20%	92,62%	3,996	69,4%	91,65%
11	83,6%	94,15%	4,049	70,10%	93,20%	3,378	82,20%	92,55%	3,947	66,8%	91,46%
12	82,6%	94,08%	3,999	67,24%	92,99%	3,236	81,06%	92,47%	3,890	63,6%	91,22%
13	81,6%	94,01%	3,949	64,41%	92,78%	3,096	80,10%	92,40%	3,843	60,0%	90,94%
14	80,6%	93,94%	3,899	61,58%	92,57%	2,957	79,00%	92,33%	3,788	56,4%	90,65%









	Nominal Voltage	3.2	v
Cells	Nominal Capacity	314.0	Ah
	Nominal Energy	1004.8	Wh
	Nominal Voltage	768	V
Container	Nominal Capacity	1569.0	Ah
	Nominal Energy	1.205	MWh
DTE	0.25P	95.50%	
RTE	0.5P	94.00%	
Multi-Cluster Line Losses	Cable Loss	0.5%	
Depth Of Discharge	DOD	100%	

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FEATURES:

- High Voltage
- Cabinet Paralleling Via EMS
- Up To 20 Years Operations
- Remote Monitoring
- App & Web Portal Assistance





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