

# 5.0 MWh

Efficient.  
Scalable.  
Secure.



## 5M0

### HIGH VOLTAGE CONTAINER

Unlock the future of sustainability ,designed to efficiently harness, store and distribute renewable energy for a cleaner tomorrow



# 5M0

## CONTAINER BASED ESS

### Specifications

SYSTEM	Model Type	5.01 MWh 20 ft Liquid Cooled ESS
	Container Type	20 ft HC ISO Container
	Overall Capacity	5 015 kWh
	Usable Capacity	4 760 kWh
	Recommended Max DoD	90%
	Overall Voltage Range	1 040 ~ 1 497.6 VDC
	Working Voltage Range	1 164.8 ~ 1 497.6 VDC
	Peak Current (Loop 1 & 2)	1 158 A / each
	Standard Current (Loop 1 & 2)	942 A / each
CELL	Module Topology	1P 416S
	Cell Type	LFP
	Round Trip Efficiency	≥ 93.5%
	Rated Charging & Discharging Current	0.5 C
	Peak Charging & Discharging Current	0.6 C
	Cell Temperature Working Range ( STC)	25 ± 5 °C
LIFE & WARRANTY	Expected Cycle Life @ STC	> 8 000 ( 90% DoD)
	Performance Warranty	10 Years or 8 000 cycles
	System Warranty	5 Years
ENVIRONMENT	Altitude	< 3000 m
	Protection Degree	IP55
	Operating Ambient Temperature Range	-30 ~ +50 °C
	Humidity	5 % ~ 95 % RH non-condensing
AUXILIARIES	Auxiliary Power Supply	400 VAC @ 50 Hz 3P + N + PE
	Max Aux Power Supply ( heating /Cooling System)	≤ 42 kW
DIMENSIONS	Dimensions (L x W x H)	6 058 x 2 896 x 2 438 mm
	Weight (Fully Assembled)	43 000 kg
CERTIFICATIONS	Product Certifications	CE, UN 38.3, IEC 62619:2017, IEC 61010-1+A1:2016, IEC 61508:2010, IEC 61000-6-2:2016, IEC 61000-6-4:2019, IEC 61000-6-7:2015, 2006/66/EG
	Battery module	UN 38.3, IEC 62619:2017, IEC 62620:2014
	Cell Certifications	IEC 62619, UL 1642, UN 38.3
FEATURES	Communication Protocol	ModBus RTU, ModBus TCP, CAN 2.0, WiFi
	Dehumidification System	✓
	Fire Detecion System	✓
	Fire Suppression System	✓
	Thermal Management	✓
	Applications	High Voltage Application Three Protection Levels, Real-Time Balancing, Adaptive Charge/ Discharge CAN Logic, 3-Steps Adaptive Charging Logic, Remote Monitoring & Control with WeCo App for Android / iOS



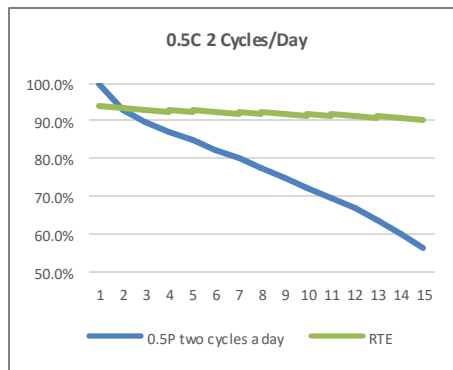
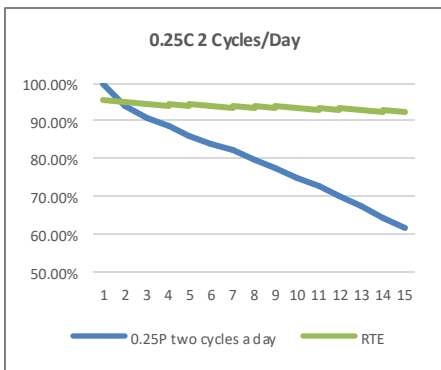
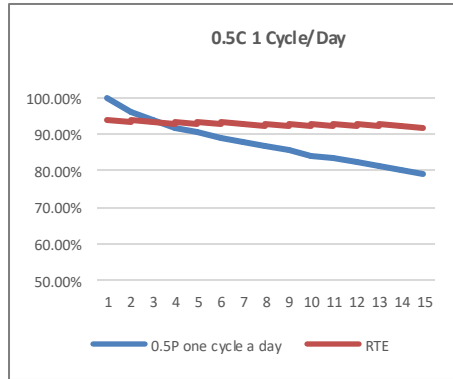
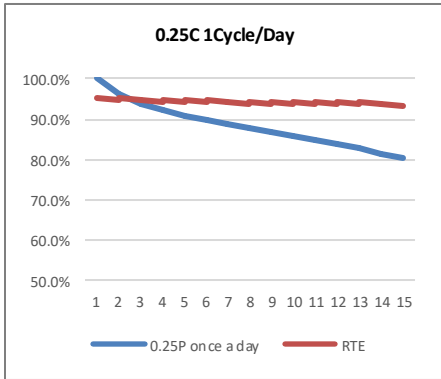
The above-mentioned temperatures are limited to the BMS ranges, such values may not be covered by the performance warranty. We recommend contacting WeCo for the most up-to-date datasheet, read warranty and manual before making any purchasing decisions. No part of this document can be copied or reproduced 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%
<b>10</b>	<b>84,6%</b>	<b>94,23%</b>	<b>4,099</b>	<b>72,70%</b>	<b>93,38%</b>	<b>3,506</b>	<b>83,20%</b>	<b>92,62%</b>	<b>3,996</b>	<b>69,4%</b>	<b>91,65%</b>
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%
<b>14</b>	<b>80,6%</b>	<b>93,94%</b>	<b>3,899</b>	<b>61,58%</b>	<b>92,57%</b>	<b>2,957</b>	<b>79,00%</b>	<b>92,33%</b>	<b>3,788</b>	<b>56,4%</b>	<b>90,65%</b>



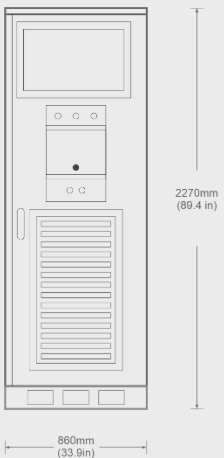
Cells	Nominal voltage	3.2	V
	Nominal capacity	314.0	Ah
	Nominal energy	1004.8	Wh
Container	Nominal voltage	1331.2	V
	Nominal capacity	3768.0	Ah
	Nominal energy	5.016	MWh
RTE	0.25P	95.50%	
	0.5P	94.00%	
Multi-cluster line losses	Cable loss	0.5%	
Depth of discharge	DOD	100%	



# PCS

## CONTAINER BASED ESS

		1250	1500	1725
BATTERY	Max. DC Voltage	1500Vdc		
	Voltage Rating	800-1500Vdc	900-1500Vdc	1000-1500Vdc
	Max. DC Current	1754A	1870A	1936A
AC SIDE	Rated AC Output Power	1250kW	1500kW	1725kW
	Rated AC Output Voltage	690Vac	690Vac	690Vac
	Max. AC Output Current	1443A	1588A	1588A
DIMENSIONS	Rated Grid Frequency	50Hz/60Hz		
	Grid Factor	1( Leading) – 1 (Lagging)		
	Dimensions (W x H x D)	860 x 2270 x 1725 mm		



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## FEATURES:

- High voltage (up to 1.5 kv)
- Cabinet paralleling via ems
- Up to 20 years operations
- 5-year system warranty
- Remote monitoring
- App & web portal assistance

# 5.0 MWh

HIGH VOLTAGE CONTAINER



IP 55 Protection Grade

With its IP55 rating, it's dust-tight and water-resistant, ensuring peak performance in any outdoor scenario



Fire Fighting System

Safety always come first! Each container comes equipped with a sophisticated fire suppression system, offering unparalleled safety and peace of mind



Plug & Play

Easy installation, all is plug and play and cables less. Installation method error free and with final self check control via APP



Liquid Cooled / Heating System

Our cutting-edge heating system keeps the battery cells above critical temperatures, ensuring unwavering performance even in freezing conditions



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