

WECO



IP 55 Protection Grade



Liquid Cooled/Heating System



Plug&Play



Fire Fighting System

5.0 MWh

Efficient.
Compact.
Versatile.



5.01MWh

HIGH VOLTAGE CONTAINER

Future-proof your business with cutting-edge technology for long-term energy security

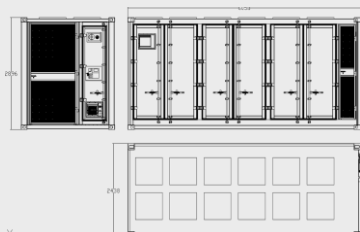


5M0

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
CELL	Standard Current (Loop 1 & 2)	942 A / each
	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
LIFE & WARRANTY	Cell Temperature Working Range (STC)	25 ± 5 °C
	Expected Cycle Life @ STC	> 8 000 (90% DoD)
	Performance Warranty	10 Years or 8 000 cycles
ENVIRONMENT	System Warranty	5 Years
	Altitude	< 3000 m
	Protection Degree	IP55
	Operating Ambient Temperature Range	-30 ~ +50 °C
AUXILIARIES	Humidity	5 % ~ 95 % RH non-condensing
	Auxiliary Power Supply	400 VAC @ 50 Hz 3P + N + PE
DIMENSIONS	Max Aux Power Supply (heating /Cooling System)	≤ 42 kW
	Dimensions (L x W x H)	6 058 x 2 896 x 2 438 mm
CERTIFICATIONS	Weight (Fully Assembled)	43 000 kg
	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
FEATURES	Cell Certifications	IEC 62619, UL 1642, UN 38.3
	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	



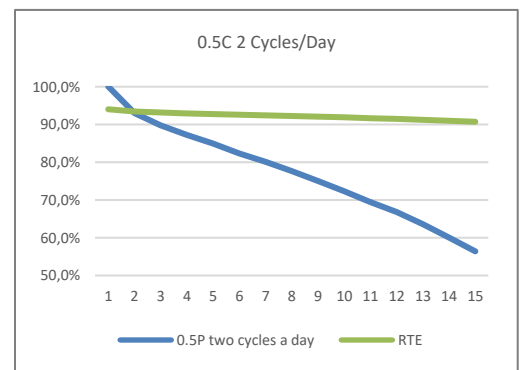
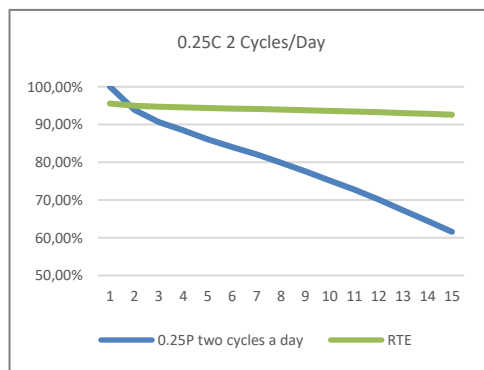
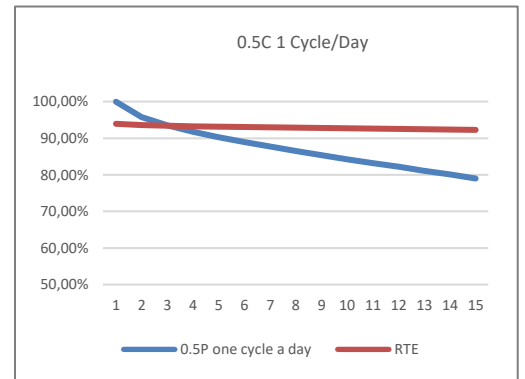
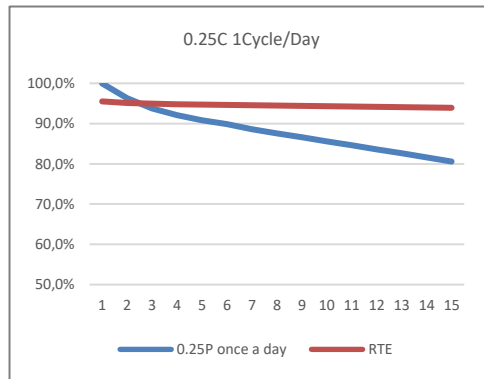
The above-mentioned temperatures are limited to the BMS ranges, such values may not be covered by the performance warranty. We recommend contacting WeCo for the most up-to-date datasheet, read warranty and manual before making any purchasing decisions. No part of this document can be copied or reproduced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

Energy Retention

15 Years Operations



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	Available power (MWh)
0	100.0%	95.48%	4.877	100.00%	95.48%	4.877	100.00%	93.98%	4.838	100.0%	93.98%	4.838
1	96.3%	95.15%	4.688	93.86%	94.94%	4.565	95.82%	93.61%	4.627	93.0%	93.37%	4.484
2	93.8%	94.94%	4.561	90.62%	94.68%	4.401	93.52%	93.42%	4.511	89.8%	93.12%	4.324
3	92.1%	94.80%	4.475	88.41%	94.51%	4.290	91.74%	93.27%	4.422	87.2%	92.92%	4.197
4	90.8%	94.70%	4.410	86.03%	94.33%	4.170	90.28%	93.16%	4.349	85.0%	92.75%	4.084
5	89.9%	94.62%	4.362	84.03%	94.19%	4.070	89.00%	93.06%	4.285	82.3%	92.56%	3.953
6	88.6%	94.53%	4.299	82.02%	94.04%	3.970	87.70%	92.96%	4.220	80.1%	92.40%	3.842
7	87.6%	94.45%	4.249	79.82%	93.88%	3.860	86.50%	92.87%	4.160	77.7%	92.23%	3.722
8	86.6%	94.37%	4.199	77.53%	93.72%	3.746	85.40%	92.79%	4.106	75.0%	92.05%	3.592
9	85.6%	94.30%	4.149	75.07%	93.55%	3.624	84.20%	92.70%	4.046	72.3%	91.85%	3.459
10	84.6%	94.23%	4.099	72.70%	93.38%	3.506	83.20%	92.62%	3.996	69.4%	91.65%	3.316
11	83.6%	94.15%	4.049	70.10%	93.20%	3.378	82.20%	92.55%	3.947	66.8%	91.46%	3.188
12	82.6%	94.08%	3.999	67.24%	92.99%	3.236	81.06%	92.47%	3.890	63.6%	91.22%	3.032
13	81.6%	94.01%	3.949	64.41%	92.78%	3.096	80.10%	92.40%	3.843	60.0%	90.94%	2.856
14	80.6%	93.94%	3.899	61.58%	92.57%	2.957	79.00%	92.33%	3.788	56.4%	90.65%	2.679



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%	

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



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