

WECO

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ESS - 5K3-DUAL VOLTAGE

HV-LV



Lithium Energy Storage System

WeCo FZE LLC United Arab Emirates

STACKABLE MODULE

5K3 LV and HV ALL IN ONE



Fast Charge



Cost Effective



EV charger ready



100% DoD



Active Equalizer



Cluster BMU

LV Circuit - Parallel

MAX PARALLEL UNITS	N	5
MAX PARALLEL UNITS WITH WE-HUB	N	25
CLUSTER of 5 UNITS MAX CURRENT (CH-DIS)	A	800



Cluster interconnections



Remote controlled
Self upgrade

Dimensions	mm	460x520x155	Cell Type	ID	LiFePO4
Weight	kg	53	Cells Distribution	P/S	16S
Case material	Type	Steel	BMS charge Temp.	°C	-10°C +55°C
Stack Tower (max)	N°	5	BMS Disch. Temp.	°C	-25°C +65°C
Stackable	Type	Yes	Storage Time/Temp.	°C	-20°C +45°C 4months
Digital Output	N°	2	Self Discharge	%	1% month @25°C



High Speed Data



Self Detection
Wi-Fi net



UN 38.3
Safety Passed



End Life
Recycling Program

Nominal Voltage	Vdc	52,0
Max Voltage	Vdc	58.4
Low Voltage	Vdc	44.5
Rated Capacity	Ah	105
Rated Energy	kWh	5,3
Charge /Disch.	A	100A / 200A
Cycles (Up to)	N	10.000

350Vdc STACKABLE 6 UNITS



- Fast Charge
- Cost Effective
- EV charger ready
- 100% DoD
- Active Equalizer
- Cluster BMU

Master HUB		
INBUILT BMU/BMS	Vdc	32-1000Vdc
CAN MASTER	N	1 X BMS CAN PORT
CAN PARALLEL/SERIAL	N	2 X BMS CAN PORT
RS 485	N	2
RS232 _ MONITORING	N	1

Cluster interconnections

Remote controlled Self upgrade

Dimensions tower 1	mm	460x520x932	Cell Type	ID	LiFePO4
Dimensions tower 2	mm	-	Cells Distribution	P/S	16S
Weight (Total)	kg	310 kg	BMS charge Temp.	°C	-10°C +55°C
Case material	Type	Steel	BMS Disch. Temp.	°C	-25°C +65°C
BMU	N°	01 Every 18 modules	Storage Time/Temp.	°C	-20°C +45°C 4months
Stackable	Type	Yes	Self Discharge	%	1% month @25°C

5G High Speed Data

Self Detection Wi-Fi net

Nominal Voltage	Vdc	307
Max Voltage	Vdc	350
Low Voltage	Vdc	294
Rated Power	kW	31
Rated Energy	kWh	31
Charge /Disch.	A	As per BMS

UN 38.3 Safety Passed


End Life Recycling Program


700 Vdc STACKABLE 6 UNITS TWO TOWERS



-  Fast Charge
-  Cost Effective
-  EV charger ready
-  100% DoD
-  Active Equalizer
-  Cluster BMU

Master HUB		
BMU	Vdc	32-1000Vdc
CAN MASTER	N	1 X BMS CAN PORT
CAN PARALLEL/SERIAL	N	2 X BMS CAN PORT
RS 485	N	2
RS232_ MONITORING	N	1

 Cluster interconnections

 Remote controlled Self upgrade

Dimensions tower 1	mm	460x520x932	Cell Type	ID	LiFePO4
Dimensions tower 2	mm	40x520x790	Cells Distribution	P/S	16S
Weight (Total)	kg	630 kg	BMS charge Temp.	°C	-10°C +55°C
Case material	Type	Steel	BMS Disch. Temp.	°C	-25°C +65°C
BMU	N°	01 Every 18 modules	Storage Time/Temp.	°C	-20°C +45°C 4months
Stackable	Type	Yes	Self Discharge	%	1% month @25°C

 High Speed Data

 Self Detection Wi-Fi net

Nominal Voltage	Vdc	614
Max Voltage	Vdc	700
Low Voltage	Vdc	588
Rated Power	kW	62
Rated Energy	kWh	62
Charge /Disch.	A	As per BMS

 UN 38.3 Safety Passed

 End Life Recycling Program

LOW VOLTAGE CLUSTER

Modules	1	2	3	4	5
Net Energy (95% DoD)	5,1	10,2	15,3	20,4	25,5
Max Voltage	58,4				
Low Voltage	48,5				
Rated Input (kW)	5,1	10,2	15,3	20,4	25,5
Rated Output (kW)					
Power Output (Peak 2s) (kW)	10	20	30	40	50
System Weight (kg)	54	108	162	216	270
UP TO 5 CLUSTERS OF 5 MODULES EACH IN PARALLEL (MAX 132 kWh net energy)					

HIGH VOLTAGE CLUSTER

Scalable up to 9 towers

CLUSTER 01 12 modules (max 16 modules)										
	Tower 01				Tower 02					
Modules	1+2+3	4	5	6	7	8	9	10	11	12
Net Energy (95% DoD)		20,4	25,5	30,6	35,7	40,8	45,9	51,0	56,2	61,3
Max Voltage		233.6	292.0	350.4	408.8	467.2	525.6	584.0	642.4	700.8
Low Voltage		196	245	294	343	392	441	490	539	588
Rated Power (kW)		204.8	256.0	307.2	358.4	409.6	460.8	512.0	563.2	614.4
Rated Energy (kWh)		20.8	26.0	31.2	36.4	41.6	46.8	52.0	57.2	62.4
Power In-Out (kW)		20.8	26.0	31.2	36.4	41.6	46.8	52.0	57.2	62.4
Power Out (Peak 5 min)		31.2	39.0	46.8	54.6	62.4	70.2	70.8	85.8	93.6
System Weight (kg)		212	265	318	371	424	477	530	583	636
UP TO 9 CLUSTERS OF 16 MODULES EACH IN PARALLEL										