

SYSTEM FEATURES

Energy Storage System (ESS) Type	PBXESS 460,8kWh - 368kWc
LiFePO ₄ , E6, 3.2 V/150 Ah	
14,40 kWh BMU - 460,8 kWh (DOD%80)	
768 HVDC	
668~1315 HVDC	
RS485, Ethernet,	
Modbus RTU, Modbus TCP, Can-Bus	
Energy Management System (EMS)	
2 x 2 x 92 kWc/1C PCS	
460,8kWh BMU	
668~1315 HVDC	
RS485, Ethernet,	
Modbus RTU, Modbus TCP, Can-Bus	
embedded tag in energy scada software	

Battery Module	BMU30S1P
Battery Module Type	E6-LFP prismatic
Cell Type	LiFePO ₄
Capacity	150 Ah
Energy	14,40 kWh
Cell Configuration	3,2 VDC-30S1P-96 VDC
Nominal Operation Voltage Rang	84 VDC~108 VDC
Limited Charge Voltage	108 VDC
Nominal Charge/Discharge Current	75 A
Max. Charge/Discharge Current	80 A
Absolute Discharge Voltage Limit	84 VDC
Cooling Type	Natural Air
Cycle Life @80 DOD,0.5C / 0.5C, 25 °C	6.000
IP Rating	IP54
Operation Temperature (Outside)	-20 °C ~ 60 °C
Charge Temperature (Inside)	0 °C ~ 25 °C
Discharge Temperature (Inside)	0 °C ~ 25 °C
Dimensions (W * H * D)	600 * 225 * 900 mm
Weight	120 kg

Battery Management System	BMS30S1P
Cell type	LiFePO ₄ , E6/3,2 VDC/150 Ah
Configuration of system	15,00 kWh
Battery capacity	14,40 kWh
Battery voltage range	96 VDC
BMS communication interfaces	RS485, Ethernet,
BMS communication protocols	Modbus RTU, Modbus TCP, Can-Bus

PDU (Power Distribution Unit)	PDU8S1P
Rated power	115,2 kWh
Current regulation	±1%
Voltage regulation	±1%
Voltage ripple	<3%
Current ripple	<2%
Voltage range	668~1315 HVDC (768 HVDC)
Max. Load current	135 A
Transfer switch current	160A - two way
Moulded Case Circuit Breaker	2P160A
Operation Voltage	DC
By-pass	Yes
Control voltage	24V
Build-in transformer	Yes
Transfer between - on/off grid	Manual(default) - Automatic(optional) - ≤10ms
Insulated rate	1.000V
Frequency	50/60Hz
Communication	
Display	Touch screen
Communication	RS485/Can-Bus

Device Management System	DMS4P
Cell type	LiFePO4, E6, 3,2 VDC/150 Ah
Configuration of system PCS	2 x 2 x 92 kWc
Battery capacity	460,8 kWh
Battery voltage range	668~1315 HVDC
BMS communication interfaces	RS485, Ethernet,
EMS/PCS/BMS communication protocols	Modbus RTU, Modbus TCP, Can-Bus
Battery Management System debug	embedded tag in energy scada software

Power Conversion System	PCS4P
Apparent power	460 kVA
Rated power	368 kWc (2 x 2 x 92 kWc)
Rated voltage	400 VAC
Rated current	699 A
Voltage range	360~440 VAC (400VAC)
Rated frequency	50/60 Hz
Frequency range	45-55/55-65 Hz
THDI	<3%
PF	0.8 lagging~0.8 leading
AC connection	3/N/PE
Maximum efficiency %	Charge 98,51% - Discharge 98,69%
Operating temperature	-25 °C~+55 °C
Cooling	Forced-air
Relative humidity	100% non-condensing
Maximum altitude	3.000 m (derating from 2.000 m)
Standards	CE, EN 61000-6-2, EN61000-6-4, EN62109-1, EN62109-2
Dimensions (H * W * D)	2 x 2(719 mm x 699 mm x 450 mm)
Weight	2 x 2 x 74kg for 2 x 2 x 92 kWc
DC (Battery)	
Rated power	2 x 2 x 109,5 kWh/t
Current regulation	±1%
Voltage regulatoin	±1%
Voltage ripple	<3%
Current ripple	<2%
Voltage range	668~1315 HVDC (768 HVDC)
Max.charge/discharge current	640 A/t
Communication	
Display	Touch screen
Communication	RS485/Can-Bus
Build-in transformer	Yes
on/off grid	Manual(default)
	Automatic(optional)
	≤10ms
Safety	EN 62109-1, EN 62109-2
Compliance	IEC
Certificate	EN 61000-6-2 / 62920 -Class A, EN55011 - Class A / EN61000-3-11, EN 61000-3-12

Details of ESS unit	ESS10F
Dimensions of ESS unit (W * H * D)	
ISO-C type	ISO 10 Feet (3.058 x 2.591 x 2.438 mm)
ISO-HC type	ISO 10C Feet (3.058 x 2.896 x 2.438 mm)
Dimensions of battery unit (W * H * D)	6(700/800 x 2250 x 900/1000 mm)
Weight of ESS unit	6.560kg
Weight of battery unit (with / without battery)	5.760kg / 800kg
Degree of protection	IP66 /NEMA 4X
Operating temperature range	-30 °C ~ +50 °C
Relative humidity	0 ~ 95 % (non-condensing)
Max. working altitude	< 3.000 m
Cooling concept of battery chamber	Heating, Ventilation and Air Conditioning
Cooling concept of PCS chamber	Temperature controlled forced air cooling
Fire suppression system of battery unit	FM-200 extinguishment system
Camera monitoring system	IPV - 12X - 1080P - HD
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP, IEC 104
Compliance	IEC