

Form



Product Service

Data form for critical components and material information

Applicant name and address..... :	Jiangsu SolarEast Energy Storage Technology Co., Ltd No. 199, Yingzhou South Road Haizhou District 222243 Lianyungang City, Jiangsu Province PEOPLE'S REPUBLIC OF CHINA
Manufacturer name and address . :	Jiangsu SolarEast Energy Storage Technology Co., Ltd No. 199, Yingzhou South Road Haizhou District 222243 Lianyungang City, Jiangsu Province PEOPLE'S REPUBLIC OF CHINA
Name and address of factory / factories..... :	Jiangsu Solareast Energy Storage Technology Co., Ltd No. 199, Yingzhou South Road Haizhou District 222243 Lianyungang City, Jiangsu Province PEOPLE'S REPUBLIC OF CHINA
Project-No./Report-No. :	5061923021303-00
Test item description..... :	Rechargeable Li-ion Battery System
Model/Type reference :	PowerCool-LFP-HV-10 PowerCool-LFP-HV-15 PowerCool-LFP-HV-20 PowerCool-LFP-HV-25 PowerCool-LFP-HV-30 PowerCool-LFP-HV-35
Device type :	<input checked="" type="checkbox"/> component / <input type="checkbox"/> sub-assembly / <input type="checkbox"/> equipment / <input type="checkbox"/> system

Ratings :	PowerCool-LFP-HV-10: DC 102.4V, 102Ah PowerCool-LFP-HV-15: DC 153.6V, 102Ah PowerCool-LFP-HV-20: DC 204.8V, 102Ah PowerCool-LFP-HV-25: DC 256.0V, 102Ah PowerCool-LFP-HV-30: DC 307.2V, 102Ah PowerCool-LFP-HV-35: DC 358.4V, 102Ah
Connection to electrical supply..... :	<input type="checkbox"/> N/A <input type="checkbox"/> Permanent / <input checked="" type="checkbox"/> Detachable cord set / <input type="checkbox"/> Non detachable cord set / <input type="checkbox"/> Direct plug-in / <input type="checkbox"/> Battery operated / <input type="checkbox"/> Others:

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Park, No.8 Xihu Road, Changzhou, Jiangsu, 213164, P. R.
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Overvoltage category..... :	<input type="checkbox"/> I / <input checked="" type="checkbox"/> II / <input type="checkbox"/> III / <input type="checkbox"/> IV / <input type="checkbox"/> N/A
Pollution degree..... :	<input type="checkbox"/> 1 / <input checked="" type="checkbox"/> 2(internal) / <input type="checkbox"/> 3 / <input checked="" type="checkbox"/> 4(external) / <input type="checkbox"/> N/A
Class of protection..... :	<input checked="" type="checkbox"/> Class I (PE connected) <input type="checkbox"/> Class II (isolated) <input type="checkbox"/> Class III <input type="checkbox"/> Others: <input type="checkbox"/> N/A
Product with functional earthing :	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A
Environmental conditions / Maximum ambient temperature (°C)..... :	Refer to Table for parameters
Equipment mobility / Classification of installation and use..... :	<input type="checkbox"/> transportable / <input type="checkbox"/> portable / <input checked="" type="checkbox"/> stationary / <input type="checkbox"/> mobile / <input type="checkbox"/> fixed / <input type="checkbox"/> permanently installed / <input type="checkbox"/> hand-held / <input type="checkbox"/> body-worn / <input type="checkbox"/> building-in / <input type="checkbox"/> Others:
Operating conditions..... :	<input checked="" type="checkbox"/> Continuous / <input type="checkbox"/> Short-time / <input type="checkbox"/> Intermittent
Overall size of equipment (mm) :	Refer to Table for parameters
Mass of equipment (kg)..... :	Refer to Table for parameters
Degree of ingress protection (IEC 60529, UL 50 / UL 50 E)..... :	IP55
Noise emission [dB(A)]..... :	N/A
Vibration [m/s ²]	N/A
Connection to hydraulic power..... :	N/A
Connection to pneumatic power... :	N/A
Connection to water installation ... :	N/A
Description of special features..... :	N/A
Additional information for Laser equipment, classification according to IEC/EN 60825-1: <input checked="" type="checkbox"/> N/A	

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Type:	N/A	Wavelength:	N/A	Output power:	N/A
Class:	N/A	Pulse duration:	N/A		
Data communication ports: <input checked="" type="checkbox"/> N/A					
Wired ports	<input type="checkbox"/> N/A <input type="checkbox"/> USB <input checked="" type="checkbox"/> LAN <input type="checkbox"/> DALI <input type="checkbox"/> other:				
Wireless ports	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> Wifi <input type="checkbox"/> Bluetooth <input type="checkbox"/> NFC <input type="checkbox"/> 4G/LTE <input type="checkbox"/> 5G <input type="checkbox"/> Other:				
Data Storage/ Processing	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> Local <input type="checkbox"/> Cloud				

Additional	
IEC 60601-1 / EN 60601-1 / ANSI/AAMI ES60601-1 / CAN/CSA-C22.2 No. 60601-1:	
<input checked="" type="checkbox"/> N/A	
Applied part type	<input type="checkbox"/> B <input type="checkbox"/> BF <input type="checkbox"/> CF <input type="checkbox"/> Defibrillation-Proof <input checked="" type="checkbox"/> No AP
Software Version.....	N/A

General product information and other remarks:																													
Main label / Warning Markings:	<p>Rechargeable Li-ion Battery System</p>  <p>Product Name: LFP Energy Storage System Rated Capacity : 102Ah Protection Class: I Max. continuous charging current: DC 50A IP Rating: IP55 Max. Continuous Discharging Current: DC 50A</p> <table border="1"> <thead> <tr> <th>Model</th> <th>No. of Battery Module</th> <th>Rated Energy</th> <th>Nominal Voltage</th> </tr> </thead> <tbody> <tr> <td>PowerCool-LFP-HV-10</td> <td>2</td> <td>10.44kWh</td> <td>DC 102.4V IFpP51/161/119/[(1P/16S)2S]M/0+50/50</td> </tr> <tr> <td>PowerCool-LFP-HV-15</td> <td>3</td> <td>15.66kWh</td> <td>DC 153.6V IFpP51/161/119/[(1P/16S)3S]M/0+50/50</td> </tr> <tr> <td>PowerCool-LFP-HV-20</td> <td>4</td> <td>20.88kWh</td> <td>DC 204.8V IFpP51/161/119/[(1P/16S)4S]M/0+50/50</td> </tr> <tr> <td>PowerCool-LFP-HV-25</td> <td>5</td> <td>26.11kWh</td> <td>DC 256.0V IFpP51/161/119/[(1P/16S)5S]M/0+50/50</td> </tr> <tr> <td>PowerCool-LFP-HV-30</td> <td>6</td> <td>31.33kWh</td> <td>DC 307.2V IFpP51/161/119/[(1P/16S)6S]M/0+50/50</td> </tr> <tr> <td>PowerCool-LFP-HV-35</td> <td>7</td> <td>36.55kWh</td> <td>DC 358.4V IFpP51/161/119/[(1P/16S)7S]M/0+50/50</td> </tr> </tbody> </table> <p>    Jiangsu SolarEast Energy Storage Technology Co.,Ltd www.solareastess.com </p> <p>Remark: The last suffix 16S represent one basic module, 2S/3S/4S/5S/6S/7S represent the module No. 2/3/4/5/6/7</p>	Model	No. of Battery Module	Rated Energy	Nominal Voltage	PowerCool-LFP-HV-10	2	10.44kWh	DC 102.4V IFpP51/161/119/[(1P/16S)2S]M/0+50/50	PowerCool-LFP-HV-15	3	15.66kWh	DC 153.6V IFpP51/161/119/[(1P/16S)3S]M/0+50/50	PowerCool-LFP-HV-20	4	20.88kWh	DC 204.8V IFpP51/161/119/[(1P/16S)4S]M/0+50/50	PowerCool-LFP-HV-25	5	26.11kWh	DC 256.0V IFpP51/161/119/[(1P/16S)5S]M/0+50/50	PowerCool-LFP-HV-30	6	31.33kWh	DC 307.2V IFpP51/161/119/[(1P/16S)6S]M/0+50/50	PowerCool-LFP-HV-35	7	36.55kWh	DC 358.4V IFpP51/161/119/[(1P/16S)7S]M/0+50/50
Model	No. of Battery Module	Rated Energy	Nominal Voltage																										
PowerCool-LFP-HV-10	2	10.44kWh	DC 102.4V IFpP51/161/119/[(1P/16S)2S]M/0+50/50																										
PowerCool-LFP-HV-15	3	15.66kWh	DC 153.6V IFpP51/161/119/[(1P/16S)3S]M/0+50/50																										
PowerCool-LFP-HV-20	4	20.88kWh	DC 204.8V IFpP51/161/119/[(1P/16S)4S]M/0+50/50																										
PowerCool-LFP-HV-25	5	26.11kWh	DC 256.0V IFpP51/161/119/[(1P/16S)5S]M/0+50/50																										
PowerCool-LFP-HV-30	6	31.33kWh	DC 307.2V IFpP51/161/119/[(1P/16S)6S]M/0+50/50																										
PowerCool-LFP-HV-35	7	36.55kWh	DC 358.4V IFpP51/161/119/[(1P/16S)7S]M/0+50/50																										

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	<p>Serial no. E932U0012304150000 can trace the manufacture information of the battery system. This is not the actual code and only for example.</p> <p>1. "+", "-", are marked near the polarity of the battery system. + represents battery +. - represents battery -.</p> <p>2. Serial no. E932U0012304150000 E9: ESS manufacturer code, E9 represents Jiangsu SolarEast Energy Storage Technology Co., Ltd. 3: brand code, 3 represents ESS. 2U: production code, 2U represents ESS product, 2V represents dummy ESS product, 2W represents Li-ion battery module. 001: production model code, 001 represents one battery module connected in series, 002 represents two battery modules connected in series, 003 represents three battery modules connected in series, 004 represents four battery modules connected in series, 005 represents five battery modules connected in series, 006 represents six battery modules connected in series, 007 represents seven battery modules connected in series. 23: year. 04: month. 15: day. 0000: production serial number.</p> <p>3. The code "E932U0012304150000" can trace the manufacture information of the battery system. This is not the actual code and only for example.</p>
Description of model differences:	Refer to Table for differences
General information / Intended use:	Refer to Table for parameters
Protective earth connection:	Connected with screw
Drawing(s) / Picture(s):	N/A





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Table for parameters			
Product name	Rechargeable Li-ion Cell	Rechargeable Li-ion Battery Module	Rechargeable Li-ion Battery System
Type/model	IFP50160116A-102Ah	PowerCool-LFP-HV	PowerCool-LFP-HV-10 PowerCool-LFP-HV-15 PowerCool-LFP-HV-20 PowerCool-LFP-HV-25 PowerCool-LFP-HV-30 PowerCool-LFP-HV-35
Nominal voltage	3.2V	51.2V	PowerCool-LFP-HV10: DC 102.4V PowerCool-LFP-HV15: DC 153.6V PowerCool-LFP-HV20: DC 204.8 V PowerCool-LFP-HV25: DC 256.0V PowerCool-LFP-HV30: DC 307.2V PowerCool-LFP-HV35: DC 358.4V
Rated capacity	102Ah	102Ah	102Ah
Charging voltage declared by manufacturer	3.65V	3.6V for cell	3.6V for cell
Upper limit charging voltage	3.9V	3.65V for cell	3.65V for cell
Charging current declared by manufacturer	20.4A	20.4A	20.4A
Maximum continuous charging current	50A	50A	50A

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Discharging current declared by manufacturer	20.4A	20.4A	20.4A
Maximum continuous discharging current	125A	50A	50A
Discharge cut-off voltage	2.0V	2.8V for cell	2.8V for cell
Lower limit discharging voltage	2.0V	2.6V for cell	2.6V for cell
Standard temperature range for charging	0°C to 60°C	0°C to 57°C	0°C to 57°C
Standard temperature range for discharging	-20°C to 65°C	-3°C to 57°C	-3°C to 57°C
Standard charging method by manufacturer	Charge at constant current 20.4A until voltage reaches 3.65V, then charge at constant voltage 3.65V till current is 5.1A.	Charge at constant current 20.4A until the max cell voltage reaches 3.6V. Then still for 30min followed by charging at constant current 5 A until the max cell voltage reaches 3.6V.	PowerCool-LFP-HV-10: Charge at constant current 20.4A until the max cell voltage reaches 3.6V, then still for 30min followed by charging at constant current 5A until the max cell voltage reaches 3.6V. PowerCool-LFP-HV-15: Charge at constant current 20.4A until the max cell voltage reaches 3.6V, then still for 30min followed by charging at constant current 5A until the max cell voltage reaches 3.6V. PowerCool-LFP-HV-20: Charge at constant current 20.4A until the max cell

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			<p>voltage reaches 3.6V, then still for 30min followed by charging at constant current 5A until the max cell voltage reaches 3.6V.</p> <p>PowerCool-LFP-HV-25: Charge at constant current 20.4A until the max cell voltage reaches 3.6V, then still for 30min followed by charging at constant current 5A until the max cell voltage reaches 3.6V.</p> <p>PowerCool-LFP-HV-30: Charge at constant current 20.4A until the max cell voltage reaches 3.6V, then still for 30min followed by charging at constant current 5A until the max cell voltage reaches 3.6V.</p> <p>PowerCool-LFP-HV-35: Charge at constant current 20.4A until the max cell voltage reaches 3.6V, then still for 30min followed by charging at constant current 5A until the max cell voltage reaches 3.6V.</p>
Charging method for internal short-circuit test	Charge at constant current 50A until voltage reaches 3.65 V, then charge at constant voltage 3.65 V till current is 0.05I _r A (5.1 A)	-	-
Dimension	LxWxH: (49.9±0.5)x(118.5±0.5)x(160±0.8) mm	LxWxH: (720±2)x(420±2)x(173.7±2) mm	<p>PowerCool-LFP-HV-10: (720±2)x(420±2)x(616±3) mm</p> <p>PowerCool-LFP-HV-15: (720±2)x(420±2)x(766±5) mm</p> <p>PowerCool-LFP-HV-20: (720±2)x(420±2)x(916±7) mm</p>

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			PowerCool-LFP-HV-25: (720±2)x(420±2)x(1066±9) mm PowerCool-LFP-HV-30: (720±2)x(420±2)x(1216±11) mm PowerCool-LFP-HV-35: (720±2)x(420±2)x(1366±13) mm
Weight	1.947±0.03 kg	47±2 kg	PowerCool-LFP-HV-10: 116.2±3 kg PowerCool-LFP-HV-15: 163.38±5 kg PowerCool-LFP-HV-20: 210.42±7 kg PowerCool-LFP-HV-25: 257.46±9 kg PowerCool-LFP-HV-30: 304.5±11 kg PowerCool-LFP-HV-35: 351.54±13 kg
Configuration	-	1P16S	PowerCool-LFP-HV-10: 1P16S(2S) PowerCool-LFP-HV-15: 1P16S(3S) PowerCool-LFP-HV-20: 1P16S(4S) PowerCool-LFP-HV-25: 1P16S(5S) PowerCool-LFP-HV-30: 1P16S(6S) PowerCool-LFP-HV-35: 1P16S(7S)
Remark: Battery system consists of different number of rechargeable Li-on battery modules with model PowerCool-LFP-HV connected in series and one controller box. PowerCool-LFP-HV-10 consists of two battery modules and one controller box. PowerCool-LFP-HV-15 consists of three battery modules and one controller box. PowerCool-LFP-HV-20 consists of four battery modules and one controller box. PowerCool-LFP-HV-25 consists of five battery modules and one controller box. PowerCool-LFP-HV-30 consists of six battery modules and one controller box. PowerCool-LFP-HV-35 consists of seven battery modules and one controller box. The battery module PowerCool-LFP-HV consists of 16 Rechargeable Li-ion Cells with model no. IFP50160116A-102Ah connected in series.			

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Object/part No.	Manufacturer/ trademark	Type/Model	Technical Data	Standard	Marks of Conformity
1.Cell	Hefei Gotion High-tech Power Energy Co., Ltd	IFP50160116A- 102Ah	DC 3.2Vd.c., 102Ah	IEC 62619- 2017	IEC Cert. No.: DK-110904- UL
2.Busbar between cells	Changzhou Helong-sheng New Energy Technology Co., Ltd	Al1060	500Vd.c., 200A, 104mm ² , Topr: -40°C~80°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
3.Busbar of modules	Jiangsu Huansheng Alloy Technology Co., Ltd	Cu	500Vd.c., 200A, 104mm ² , Topr: -40°C~80°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
4.Insulation sheet for module	SICHUAN DONGFANG INSULATING MATERIAL Co., Ltd	DFR117	0.5mm, V-0, Topr: -40°C~80°C	IEC 60695- 11-10	UL E199019
5.Cover plate	KING SCI & TECH Co., Ltd	JH960HT(M1)(sr)	1.5mm, V-0, Topr: -40°C~80°C	IEC 60695- 11-10	UL E171666
6.Insulation sheet for pack	Shenzhen Futureway Technology Co., Ltd	SRL-1140F	2mm, V-0, Topr: ≤200°C	IEC 60695- 11-10	UL E519126
7.Copper busbar	Jiangsu Huansheng Alloy Technology Co., Ltd	Cu	500Vd.c., 220A, 36 mm ² , Topr: -40°C~80°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
8.Sampling wire	Dongguan Haode Wire & Cable Technology Co., Ltd	1332	24AWG, 300V, V-1, Topr: ≤200°C	UL 758	UL E364036
9.LV Sampling connector (male)	Ningbo Degson Electrical Co., Ltd	15EDGKNHB-3.5- 16P-14-14A(H)	8.5A, V-0, Topr: -40°C~105°C	UL 508	UL E228872

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Object/part No.	Manufacturer/ trademark	Type/Model	Technical Data	Standard	Marks of Conformity
-Alternative	Ningbo Degson Electrical Co., Ltd	15EDGKNHB-3.5- 18P-15-14A(H)	8.5A, V-0, Topr: -40°C~105°C	UL 508	UL E228872
10.LV Sampling connector (female)	Ningbo Degson Electrical Co., Ltd	15EDGKNHB-3.5- 16P-14-14A(H)	8.5A, V-0, Topr: -40°C~105°C	UL 508	UL E228872
-Alternative	Ningbo Degson Electrical Co., Ltd	15EDGKNHB-3.5- 18P-15-14A(H)	8.5A, V-0, Topr: -40°C~105°C	UL 508	UL E228872
11.Enclosure	Nantong Xingmingjiang Precision Hardware Co., Ltd	Zn-Mg-Al	L*W*H: 720mm*420mm*173mm	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
12.NTC (2pcs for one module)	Suzhou Xinliben Electronics Co., Ltd	SK103F6R1000ST -22#	10KΩ±1%, Topr: -40°C~125°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
13.FUSE	Xi'an Sinofuse Electric Co., Ltd	RS308-HB- 4G100A	AC690V/DC550V, 10A~100A, Ic=50kA, Topr: -40°C~85°C	UL 248-13	UL E353337
14.Connector (Socket/plug)	Amphenol technology(zhu hai)Co.,Ltd	C10-781650- 1000/C10-781651- 1000	DC 1000V, 120A, Topr: -40°C~125°C	UL 4128	TÜV Rheinland AK505910490 001
15.Module internal case	Changzhou Helong-sheng New Energy Technology Co., Ltd	ABS+PC	V-0, 5VB, Topr: -20°C~120°C	UL 94	UL E171666
16.Wiring	WuxiHUAhaoEl ectric Co.,Ltd	10269 4AWG	DC 1000V, Topr: 105°C	UL 758	UL E231903
For high voltage controller box					
17.Positive connector (Socket/plug)	Huizhou Futronics Electronic Technology Co., Ltd	FSPC80160Z- 25A4/FSPC80160 Z-M6A	600Vd.c., 125 A, V-0, Topr: -40°C~125°C	UL 4128	UL E524083

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18.Negative connector (Socket/plug)	Huizhou Futronics Electronic Technology Co., Ltd	FSPC80160W-25B4/FSPC80160 WZ-M6B	600Vd.c., 125 A, V-0, Topr: -40°C~125°C	UL 4128	UL E524083
19.Relay	Xiamen Hongfa Electroacoustic Co., Ltd.	HFZ16V-150/900-24-SHSAL5E-1	750Vd.c., 150A, Coil DC 24V, I _c =1500A, Topr: -40°C~85°C	UL 60947-4-1	UL E133481
20.DC Shunt	Doublecircle	UFL-100A	L*W*H: (18±0.2)*(8.4±0.5)*(25±2)mm, 100A, Topr: ≤125°C	EN IEC 62040-1:2019/A11:2 021EN 62477-1:2012/A12:2 021	Test with unit
21.DC Breaker	ProJoy	PEBS-H	DC 500V, 80A, 2P, Topr: -30°C~70°C	EN 60947-2	TUV Rheinland AN 50426348
22.BMS (Bottom board)	Hangzhou LiDe Communicatio Co., Ltd	BCMU-AH-M-A0-1.0.0.3	Monitoring the cells' temperature and voltage	EN IEC 62040-1:2019/A11:2 021EN 62477-1:2012/A12:2 021	Test with unit
-PCB material	YING PAI TECHNOLOGY Co., Ltd	YP-04	130°C, V-0	UL 746A	UL E492700
-Isolation transformer (T7, T8, T9, T10)	TNK	TSQ331	VISO: 1500Vd.c., Topr: -40°C~125°C	EN IEC 62040-1:2019/A11:2 021EN 62477-1:2012/A12:2 021	Test with unit
--Case	Wan Hong Industrial Corp.	WH-8100	130°C, V-0	IEC 60695-11-10	UL E150608
--Varnishes	GUANGDONG JIANXIN TECHNOLOGY CO., Ltd	JS-812	155°C	UL 1446	UL E339578
--Wire	SUZHOU YUSHENG ELECTRONIC CO., Ltd	FLW-B	130°C	UL 60950-1	UL E332529

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-Isolation transformer (T1)	TNK	TDB2327	VISO: 3750Vd.c., Topr: -25°C~125°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
--Platics	Chang Chun Plastics Co., Ltd	T375HF	150°C, V0	UL 94	UL E59481
--Varnishes	Guangdong Jianxin Technology Co., Ltd	JS-812	150°C	UL 1446	UL E339578
--Magnet Wire	Guangdong Suntek wire Co.,Ltd	xUEW180	180°C	UL1446	UL E234867
--Tape	Suzhou Mailaduona Electric Material Co., Ltd	JY313	130°C	UL 510A	UL E188295
--Winding Wire	Suzhou Yusheng Electronic Co., Ltd	TIW-B	34-18 AWG, 130°C	UL 60950-1	UL E332529
-Isolation IC for communication (U35, U36, U37, U43)	2PAI Semiconductor	π122M31	3~5.5V, AC 3750Vrms, Topr: -40°C~125°C	UL 1577	UL E494497
Opticalcoupler (U29, U30, U31)	APSEMI	APV278AE	VISO: AC 5000V, Topr: -40°C~85°C	UL 1577	UL E534710
-Opticalcoupler (PC1)	Toshiba Electronic Devices & Storage Corporation	TLP291-GB	VISO: AC 3750V, Topr: -55°C~110°C	IEC 60747-5- 5:2020	VDE 40009347
-Opticalcoupler (PC2, PC19)	EVERLIGHT	EL817S1(C)(TU)-F	VISO: AC 5000V, Topr: -55°C~110°C	UL 1577	UL E214129
-Relay (G1)	HONGFA	HFE80V-20C	24Vd.c., Topr: -40°C~85°C	UL 508	UL E133481
-Fuse (F7)	Shanghai Fullness Electrical Co., Ltd	SPT1800100	1000Vd.c., 30A, Ic=10kA~33kA	IEC 60269- 6:2011	TÜV Rheinland R50585551

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Date: 2023-12-12

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China
Name of Project Handler: *Jinlan*



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Data form for critical components and material information

Object/part No.	Manufacturer/ trademark	Type/Model	Technical Data	Standard	Marks of Conformity
-Fuse (F17)	Xi 'an Zhongrong Electric Co., Ltd	RS309-MF-S100A- 3SA	700Vd.c., 100A, Ic=AC100kA or DC50kA, Topr: -40°C~85°C	UL 248	UL E353337
-CAN Communication chip (U40, U41, U54)	Tokmas	TJA1051T	4.5V~5.25V, Topr: -40°C~150°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
-RS485 Communication chip (U50, U51)	MaxLinear	SP485EEN	4.75V~5.5V, Topr: -40°C~125°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
-Voltage sampling resistance (R231, R232, R234, R235, R237, R238, R239, R240, R241, R247, R249, R251, R253)	Guangdong Fenghua Advance Technology Holding Co.,Ltd	CSR0204DTDV	1MΩ,±0.1%, Topr: -55°C~125°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
-Fuse (F1, F2, F3, F4, F5, F6, F20)	Wayon	1206WHF500A072 V	125Vd.c., 150A, Topr: -55°C~150°C	UL 248-1	UL E311435
-Y capacitor (C28, C29)	SHM	DCF472M46Y5VG 6BLOA0	4.7nF, 20%, DIP, Topr: -40°C~125°C	UL 60384-14	UL E154899
23.BMS (Core board)	Hangzhou LiDe Communication s Co., Ltd	BCMU-AH-E1-A0- 1.0.0.1	Monitoring the cells' temperature and voltage	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
-PCB material	YING PAI TECHNOLOGY Co., Ltd	YP-04	130°C, V-0	UL 746A	UL E492700

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-MCU (U16)	NXP	MIMXRT1061CVL 5B	3V~3.6V, Topr: -40°C~125°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
-WIFI Communication chip (U2)	Espressif	ESP32-WROOM- 32UE	3V~3.6V, Topr: -40°C~85°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
-Memory chip (U53)	HuaDa Semiconductor	BL24C512A	1.7V~5.5V, Topr: -40°C~85°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
-Memory chip (U54, U55)	Macronix International Co., Ltd	MX25L12833FM2I- 10G	2.7V~3.6V, Topr: -40°C~85°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
-Watchdog (U21)	VP	VP706TESA/T	3.3V~5.5V, Topr: -40°C~85°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit

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Object/part No.	Manufacturer/ trademark	Type/Model	Technical Data	Standard	Marks of Conformity
24.BMS (Slave board)	Hangzhou LiDe Communication s Co., Ltd	BMU-C16B-A0- 1.0.0.2	Overcharge detection voltage for each cell: 3.65 V, 116.8V/175.2V/233.6V/2 92V/350.4V/408.8V for battery system PowerCool-LFP-HV-10/ PowerCool-LFP-HV-15/ PowerCool-LFP-HV-20/ PowerCool-LFP-HV-25/ PowerCool-LFP-HV-30/ PowerCool-LFP-HV-35. Over discharge detection voltage for each cell: 2.60V, 83.2V/124.8V/166.4V/20 8V/249.6V/291.2V for battery system PowerCool-LFP-HV-10/ PowerCool-LFP-HV-15/ PowerCool-LFP-HV-20/ PowerCool-LFP-HV-25/ PowerCool-LFP-HV-30/ PowerCool-LFP-HV-35. Charge overcurrent detection current: 60A, Discharge overcurrent detection current: 60A, High temperature protection: 57°C Low temperature protection: -3°C	-	-
-PCB material	YING PAI TECHNOLOGY Co., Ltd	YP-04	130°C, V-0	UL 746A	UL E492700
-Balanced resistance (R48, R49, R50, R51, R58, R59, R60, R61, R62, R63, R73, R74, R75, R76, R77, R78, R796)	EVER OHMS	2512	10Ω, ±1%, 1W, 200V	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit

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Object/part No.	Manufacturer/ trademark	Type/Model	Technical Data	Standard	Marks of Conformity
-AFE	Texas Instruments	BQ79616PAPRQ1	11V~80V, Topr: -40°C~150°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
Opticalcoupler (PC3)	Toshiba Electronic Devices & Storage Corporation	TLP291-GB	VISO: AC 3750V, Topr: -55°C~110°C	IEC 60747-5- 5:2020	VDE 40009347
IC for network (L2)	Donguan Pulse	HMU1228NL	Topr: -40°C~125°C	IEC 62368-1	Test with unit
Diodes (Q3)	ZETEX	ZXTN4004KTC	Topr: -55°C~150°C	EN IEC 62040- 1:2019/A11:2 021EN 62477- 1:2012/A12:2 021	Test with unit
Supplementary information:					



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Routine Test (Safety, Security, ...):

N/A, No requirement in standard, Non certification mark project

Model/Type reference:	Tests performed (name of test and test clause):	Test Details:	Test Points:	Test Values:
All models	EN IEC 62040-1:2019/A11:2021 EN 62477-1:2012/A12:2021 clause 5.2.3.4	Voltage test 100% test	Across power circuit DC port to enclosure & COM port	2120Vdc @min. 1s
All models	EN IEC 62040-1:2019/A11:2021 EN 62477-1:2012/A12:2021 clause 5.2.3.11	Protective equipotential bonding continuity test 100% test	Across PE port to enclosure	25A, @min. 2s, Voltage drop not exceed 12Vrms



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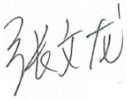
Product Service

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MHS Test Report History:

Rev	Project No.	History
00	5061923021303-00	Initial version

Signature of the Certification Holder:

Name, seal and signature of Certificate Holder:	Jiangsu SolarEast Energy Storage Technology Co., Ltd 
Date:	2023-12-12