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TESTING
CNAS L4595

**TEST REPORT
IEC 62619**

Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications

Report Number.....: LCSA03066084S

Date of issue.....: 2026-03-26

Total number of pages.....: 18 pages

Applicant's name.....: Wuxi Fengrui New Energy Power Battery CO.,Ltd.

Address.....: No.5Jingxin Road,Xibei Town,Xishan District,Wuxi City

Test specification:

Standard.....: IEC 62619:2022

Test procedure.....: Type Test

Non-standard test method.....: N/A

Test Report Form No.....: TRF-4-S-321 A/1

Test Report Form(s) Originator.....: UL Solutions (Demko)

Master TRF.....: Dated 2023-02-24

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General disclaimer:

The test results presented in this report relate only to the object tested.

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Test item description.....: Low-Voltage Integrated PV-Storage-Charging-Diesel ESS

Trade Mark.....: /

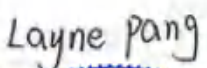
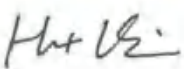
Manufacturer.....: Same as Applicant

Model/Type reference.....: MESS-10-16K

Ratings.....: 51.2V,314Ah,16.07kWh





Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒	Testing Laboratory:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Testing location/ address..... :		Room 101, 201, Building A and Room101, 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China
Tested by (name, signature)..... :		Layne Pang  
Checked by(name, signature)..... :		Junyuan Xuan
Approved by (name, signature)..... :		Hart Qiu 
☐	Testing procedure: CTF Stage 1:	N/A
Testing location/ address..... :		
Tested by (name, function, signature)..... :		
Approved by (name, function, signature)... :		
☐	Testing procedure: CTF Stage 2:	N/A
Testing location/ address..... :		
Tested by (name + signature)..... :		
Witnessed by (name, function, signature).. :		
Approved by (name, function, signature)... :		
☐	Testing procedure: CTF Stage 3:	N/A
☐	Testing procedure: CTF Stage 4:	N/A
Testing location/ address..... :		
Tested by (name, function, signature)..... :		
Witnessed by (name, function, signature).. :		
Approved by (name, function, signature)... :		
Supervised by (name, function, signature) :		



**List of Attachments (including a total number of pages in each attachment):**

Attachment 1: Photo Documentation (1 pages).

Summary of testing:

The sample(s) tested complies with the requirements of IEC 62619:2022.

Tests performed (name of test and test clause):

- 7.1 Charging procedure for test purposes
- 7.2.3 Drop test (cell or cell block, and battery system);
- 8.2.2 Overcharge control of voltage (battery system);
- 8.2.3 Overcharge control of current (battery system);
- 8.2.4 Overheating control (battery system).

Tests are made with the number of cells and batteries specified in IEC 62619: 2022 Table 1.

Testing location:**Shenzhen LCS Compliance Testing Laboratory Ltd.**

Room 101, 201, Building A and Room 101,301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Summary of compliance with National Differences (List of countries addressed):

- ☒ The product fulfils the requirements of EN IEC 62619: 2022.

Use of uncertainty of measurement for decisions on conformity (decision rule) :

- ☒ No decision rule is specified by the IEC standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

Other: ... (to be specified, for example when required by the standard or client, or if national accreditation requirements apply)

Information on uncertainty of measurement:

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.



**Copy of marking plate:**

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

+ -

Low-Voltage Integrated PV-Storage-Charging-Diesel ESS
Model:MESS-10-16K
51.2V, 314Ah, 16.07kWh
IFpP74/176/209[1P16S]M/-10+50/90
Date: YYYY/MM/DD Made in China
Wuxi Fengrui New Energy Power Battery CO.,Ltd.
Recommend charging method declared: Charge the battery
at constant current 157A until voltage reaches 57.6V, then
charge at constant voltage 57.6V till charge current is 50A at
ambient 25°C ± 5°C.
Warning:
Risk of Fire and Burns.
Do Not Open, Crush, or Incinerate.
Do not short circuit. If bulges severely, discontinue use.
Follow Manufacturer's Instructions

Remark:

1. The rule of Date of manufacture was showed as below.

Date of production:

YYYY/MM/DD: YYYY for year

MM for month

DD for day



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 1-2F, Building A&3F, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



Test item particulars :	
Classification of installation and use : To be defined in final product	
Supply Connection : Terminals	
Possible test case verdicts: - test case does not apply to the test object..... : N/A - test object does meet the requirement..... : P (Pass) - test object does not meet the requirement..... : F (Fail)	
Testing :	
Date of receipt of test item : 2026-03-09	
Date (s) of performance of tests : 2026-03-10 to 2026-03-24	
General remarks: "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.	
Throughout this report a ☐ comma / ☒ point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC60950-1:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided:	☐ Yes ☒ Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies) : Same as Applicant	



**General product information and other remarks:**

The MESS-10-16K is a Low-Voltage Integrated PV-Storage-Charging-Diesel ESS Battery with a nominal voltage of 51.2V and a Rated capacity of 314Ah which is used in energy storage applications.

The battery pack consists of 16 Lithium Iron Phosphate cells connected in 16S1P; cell model no. is CB75.

The internal Cells used were complied with the requirements of IEC 62619:2022, Certified by TÜV, Certificate No. JPTUV-154531-A1/M1, and the report No. CN23DD2Z 003.

The main features of the cell and the battery are shown as below:

Cell and battery	Cell	Battery System
Model Name	CB75	MESS-10-16K
Rated capacity (Ah)	314	314
Nominal voltage (V)	3.2	51.2
Standard Charge Current (A)	157	157
Standard Discharge Current (A)	157	157
Maximum continuous charge current (A)	314	200
Maximum continuous discharge current (A)	314	200
Standard Charge Voltage (V)	3.65	57.6
Upper limit Charging Voltage (V)	3.75	58.4
End-of-discharge Voltage (V)	2.5(>0°C) 2.0(≤0°C)	44.8
Charge temperature Range (°C)	0°C~ 60°C	0°C~ 55°C
Discharge temperature Range (°C)	-30°C~ 60°C	-10°C~ 50°C
Weight (kg)	5.78±0.3kg	115kg
Structure	☐ Cylindrical ☒ Prismatic	16 series & 1 parallel
Recommend charging method declared by the manufacturer	Charge the cell at constant current 157A until voltage reaches 3.65V, then charge at constant voltage 3.65V till charge current is 15.7A	Charge the battery at constant current 157A until voltage reaches 57.6V, then charge at constant voltage 57.6V till charge current is 50A
Further Configuration of Battery Management System		
Overcharge Voltage Protection:	3.65V/Cell, 58.4V/Pack	
Overcharge Current Protection:	210A	
Charge Thermal Protection:	55°C	





IEC 62619			
Clause	Requirement + Test	Result - Remark	Verdict
4	PARAMETER MEASUREMENT TOLERANCES		P
	Parameter measurement tolerances		P
5	GENERAL SAFETY CONSIDERATIONS		P
5.1	General		P
	Cells and batteries are safe under conditions of both intended use and reasonably foreseeable misuse :	See also table 5.1 for Critical components information.	P
	Reduce the risk of injuries from moving parts		N/A
5.2	Insulation and wiring		P
	Voltage, current, altitude, and humidity requirements		P
	Adequate clearances and creepage distances between connectors and live parts at different voltages or between live parts and non-current-carrying accessible parts		P
	Protect from hazardous live parts, including during installation		N/A
	The mechanical integrity of internal connections		P
5.3	Venting		P
	Pressure relief function	Explosion-proof safety valve for venting exists, and vent design in cell.	P
	Encapsulation used to support cells within an outer casing		P
5.4	Temperature/voltage/current management		P
	The design prevents abnormal temperature-rise		P
	Voltage, current, and temperature limits of the cells		P
	Specifications and charging instructions for equipment manufacturers		P
5.5	Terminal contacts of the battery pack and/or battery system		P
	Polarity marking(s)	Marking near the terminal.	P
	Polarity marking not provided for keyed external connector		N/A
	Capability to carry the maximum anticipated current		P
	External terminal contact surfaces		P
	Terminal contacts are arranged to minimize the risk of short circuits		P
5.6	Assembly of cells, modules, or battery packs into battery systems		P
5.6.1	General		P
	Independent control and protection method(s)		P
	Recommendations of cell operating limits, mounting advice, storage conditions and other design		P





IEC 62619			
Clause	Requirement + Test	Result - Remark	Verdict
	recommendations by the cell manufacturer		
	Batteries designed for the selective discharge of a portion of their series connected cells		N/A
	Protective circuit component(s) and consideration to the end-device application		P
5.6.2	Battery system design		P
	The voltage control function		P
	Maximum charging/discharging current of the cell are not exceeded		P
5.7	Operating region of lithium cells and battery systems for safe use		P
	The cell operating region:		P
	Designation of battery system to comply with the cell operating region		P
5.8	System lock (or system lock function)		P
	Non-resettable function to stop battery operation		P
	Manual with procedure for resetting of battery operation		P
5.9	Quality plan		P
	Manufacturing quality plan (for example: ISO9001, etc.) prepared and implemented :	ISO 9001 certificate is provided.	P
	The process capabilities and the process controls		P

6	TYPE TEST CONDITIONS		P
6.1	General		P
6.2	Test items		P
	Cells or batteries that are not more than six months old (See Table 1 of IEC62619)		P
	Capacity confirmation of the cells or batteries		P
	Default ambient temperature of test, 25 °C ± 5 °C		P

7	SPECIFIC REQUIREMENTS AND TESTS		P
7.1	Charging procedure for test purposes		P
	The battery discharged to a specified final voltage prior to charging	See page 6	P
	The cells or batteries charged using the method specified by the manufacturer..... :		P
7.2	Reasonably foreseeable misuse		P
7.2.1	External short-circuit test (cell or cell block)	The cell has been certified.	N/A
	Short circuit with total resistance of 30 mΩ ± 10 mΩ at 25 °C ± 5 °C		N/A
	Results: no fire, no explosion		N/A
7.2.2	Impact test (cell or cell block)		N/A
	Cylindrical cell, longitudinal axis impact		N/A
	Prismatic cell, longitudinal axis and lateral axis impact		N/A





IEC 62619			
Clause	Requirement + Test	Result - Remark	Verdict
	Results: no fire, no explosion.		N/A
7.2.3	Drop test (cell or cell block, and battery system)		P
7.2.3.1	General		P
7.2.3.2	Whole drop test (cell or cell block, and battery system)		N/A
	Description of the Test Unit.....:		—
	Mass of the test unit (kg).....:		—
	Height of drop (m).....:		—
	Results: no fire, no explosion		N/A
7.2.3.3	Edge and corner drop test (cell or cell block, and battery system)		P
	Description of the Test Unit.....:	Battery :B01	—
	Mass of the test unit (kg).....:	117.0kg	—
	Height of drop (m).....:	0.025m	—
	Results: no fire, no explosion		P
7.2.4	Thermal abuse test (cell or cell block)	The cell has been certified.	N/A
	Results: no fire, no explosion		N/A
7.2.5	Overcharge test (cell or cell block)	The cell has been certified.	N/A
	For those battery systems that are provided with only a single protection for the charging voltage control		—
	Results: no fire, no explosion.....:		N/A
7.2.6	Forced discharge test (cell or cell block)	The cell has been certified.	N/A
	Redundant or single protection for discharge voltage control provided in battery system.....:		N/A
	Cells connected in series in the battery system.....:		N/A
	Target Voltage.....:		N/A
	Maximum discharge current of the cell, I_m:		N/A
	Discharge current for forced discharge, 1.0 I_t:		N/A
	Discharging time, $t = (1 I_t / I_m) \times 90$ (min.).....:		N/A
	Results: no fire, no explosion.....:		N/A
7.3	Considerations for internal short-circuit – Design evaluation		N/A
7.3.1	General		N/A
7.3.2	Internal short-circuit test (cell)	The cell has been certified.	N/A
	Samples preparation procedure: In accordance with Clause A.5 and A.6 of IEC 62133-2:2017		N/A
	Tested per 7.3.2 b) in an ambient temperature of 25 °C ± 5 °C.		N/A
	The appearance of the short-circuit location recorded by photograph or other means.....:		—
	The pressing was stopped - When a voltage drop of 50 mV was detected; or		N/A
	- The pressing force of 800 N (cylindrical cells) or 400 N (prismatic cells) was reached		N/A





IEC 62619			
Clause	Requirement + Test	Result - Remark	Verdict
	Results: no fire.....:		N/A
7.3.3	Propagation test (battery system)	Cell level according to 7.3.2 internal short-circuit test	N/A
	Method to create a thermal runaway in one cell.....:		N/A
	Results: No external fire from the battery system or no battery case rupture.....:		N/A
BATTERY SYSTEM SAFETY (CONSIDERING FUNCTIONAL SAFETY)			P
8.1	General requirements	Functional safety is not considered	N/A
	Functional safety analysis for critical controls		N/A
	Conduct of a process hazard analysis for both the cell manufacturing process and the battery system manufacturing process		N/A
	Conduct of risk assessment and mitigation of the battery system		N/A
8.2	Battery management system (or battery management unit)		P
8.2.1	Requirements for the BMS		P
	The safety integrity level (SIL) target of the BMS		P
	The charge control evaluated by tests in clauses 8.2.2 to 8.2.4		P
8.2.2	Overcharge control of voltage (battery system)		P
	The exceeded charging voltage applied to the whole battery system		P
	The exceeded charging voltage applied to only a part of the battery system, such as the cell(s).....:		N/A
	Results: no fire, no explosion.....:	See appended table 8.2.2	P
	The BMS terminated the charging before exceeding the upper limit charging voltage		P
8.2.3	Overcharge control of current (battery system)		P
	Results: no fire, no explosion.....:	See appended table 8.2.3	P
	The BMS detected the overcharging current and controlled the charging to a level below the maximum charging current		P
8.2.4	Overheating control (battery system)		P
	The cooling system, if provided, was disconnected	No cooling system	N/A
	Elevated temperature for charging, 5 °C above maximum operating temperature.....:	60°C	P
	Results: no fire, no explosion.....:	See appended table 8.2.4	P
	The BMS detected the overheat temperature and terminated charging		P
	The battery system operated as designed during test		P
9	EMC		N/A
	Battery system fulfil EMC requirements of the		N/A





IEC 62619			
Clause	Requirement + Test	Result - Remark	Verdict
	end-device application.....1		
10	INFORMATION FOR SAFETY		P
	The cell manufacturer provides information about current, voltage and temperature limits of their products		P
	The battery system manufacturer provides information regarding how to mitigate hazards to equipment manufacturers or end-users.		P
11	MARKING AND DESIGNATION (REFER TO CLAUSE 5 OF IEC 62620)		P
	The marking items shown in Table 1 in IEC 62620 indicated on the cell, battery system or instruction manual.	See page 4.	P
	Cell or battery system has clear and durable markings		P
	Cell designation		N/A
	Battery designation	See marking.	P
	Battery structure formulation		P
12	PACKAGING AND TRANSPORT		P
	Refer to Annex D		P
ANNEX A	OPERATING REGION OF CELLS FOR SAFE USE		N/A
A.1	GENERAL		N/A
A.2	CHARGING CONDITIONS FOR SAFE USE		N/A
A.3	CONSIDERATION ON CHARGING VOLTAGE		N/A
A.4	CONSIDERATION ON TEMPERATURE		N/A
A.5	HIGH TEMPERATURE RANGE		N/A
A.6	LOW TEMPERATURE RANGE		N/A
A.7	DISCHARGING CONDITIONS FOR SAFE USE		N/A
A.8	EXAMPLE OF OPERATING REGION		N/A
ANNEX B	PROCEDURE OF 7.3.3 PROPAGATION TEST BY LASER IRRADIATION		N/A
B.1	General		N/A
B.2	Test conditions		N/A
B2.1	Cell test (preliminary test)		
	The cell fully charged according to the manufacturer recommended conditions..... :		—
	Laser irradiation point on the cell..... :		—
	Output power of laser irradiation..... :		—
	Tested in an ambient temperature of 25 °C ± 5 °C		N/A
	Repeat of cell test for 3 times		N/A
B.2.2	Battery system test (main test)		N/A





IEC 62619			
Clause	Requirement + Test	Result - Remark	Verdict
	The battery system fully charged according to the manufacturer recommended conditions.....:		—
	Target cell to be laser irradiated.....:		—
	The irradiation point on the target cell same or similar as that on the cell test		N/A
	Output power of laser irradiation.....:		—
	Tested in an ambient temperature of 25 °C ± 5 °C		N/A

ANNEX C	PROCEDURE OF 7.3.3 PROPAGATION TEST BY METHODS OTHER THAN LASER	N/A
C.1	General	N/A
C.2	Test conditions:	N/A
	– The battery fully charged according to the manufacturer recommended conditions.....:	—
	– Target cell forced into thermal runaway.....:	—
	– A specially prepared sample (e.g. a heater or a hole for nail penetration provided) used for ease of testing :	—
C.3	Method used for initiating the thermal runaway. 1) Heater (Heater, Burner, Laser, Inductive heating) 2) Overcharge 3) Nail penetration of the cell 4) Combination of above methods 5) Other methods.....:	—

ANNEX D	PACKAGING AND TRANSPORT	P
	The materials and pack design chosen in a way as to prevent the development of unintentional electrical conduction, corrosion of the terminals and ingress of environmental contaminants	P
	Regulations concerning international transport of secondary lithium batteries	P





TABLE: Critical components information					P
Object/part no.	Manufacturer/ trademark	Type/model	Technical data	Standard	Mark(s) of conformity ¹⁾
Cell	JIANGXI ANCHI NEW ENERGY TECHNOLOGY CO., LTD	CB75	3.2V, 314Ah	IEC 62619:2022	Ref. Certif. No.: FR_718173 Report Number:CN23 LEYD 001
Protection IC (U1)	Shenzhen Xin Fei Hong Electronic Co., Ltd.	--	Overcharge Protection Voltage: 4.38±0.025V, Over discharge Protection Voltage: 2.4±0.1V, Topr: -40°C~+85°C	--	--
MOSFET	Shenzhen Xin Fei Hong Electronic Co., Ltd.	--	VDS: 20V, VGS: ±10V, ID: 6A, TJ: -55°C~+150°C	--	--
NTC	Shenzhen Sunlord Electronics Co., Ltd.	--	47KΩ±1% at 25°C	--	--
PTC	Shenzhen Xin Fei Hong Electronics Co., Ltd.	--	Vmax=6V, Ih=4500mA Tmoa=85°C	--	--
PCB	Hunan Shengli High-tech Energy Technology Co., Ltd	--	130°C	--	--
Wire	Yueyang Super Global Electronics Co.,Ltd	--	30V, 105°C, 28AWG	--	--
Connector	--	--	85°C, Imax: 2.0A, 2Pin	--	--
Supplementary information: 1) Provided evidence ensures the agreed level of compliance.					





7.2.1	TABLE: External short-circuit test (cell or cell block)					N/A
Sample No.	Ambient (at 25°C ± 5°C)	OCV at start of test (V dc)	Resistance of Circuit (mΩ)	Maximum Case Temperature Rise ΔT (°C)	Results	
Supplementary information: A – No fire or Explosion B – Fire C – Explosion D – The test was completed after 6 h E – The test was completed after the cell casing cooled to 20% of the maximum temperature rise F – Other (Please explain): _____						

7.2.5	TABLE: Overcharge test (cell or cell block)					N/A
Sample No.	OCV at start of test (V dc)	OCV at end of test (V dc)	Measured Maximum Charging Current (A)	Measured Maximum Charging Voltage (V dc)	Max. Cell Case Temperature, (°C)	Results
Supplementary information: Results: A – No fire or Explosion B – Fire C – Explosion D – Test concluded when temperature reached a steady state condition E – Test concluded when temperature returned to ambient F – Other (Please explain): _____						

7.2.6	TABLE: Forced discharge test (cell or cell block)					N/A
Sample No.	OCV before applying reverse charge, (V dc)	Target Voltage (V dc)	Measured Reverse Charge Current I_t , (A)	Total Time for Reversed Charge Application (min)	Results	
Supplementary information: Results: A – No fire or Explosion B – Fire C – Explosion D – Other (Please explain): _____						





7.3.2	TABLE: Internal short-circuit test (cell)				N/A
Sample No.	OCV at start of test, (V dc)	Particle location ¹⁾	Maximum applied pressure, (N)	Results	

Supplementary information:

¹⁾ Identify one of the following:

1: Nickel particle inserted between positive and negative (active material) coated area.

2: Nickel particle inserted between positive aluminium foil and negative active material coated area.

Results:

A – No fire or explosion

B – Fire

C – Explosion

D – Test concluded when 50 mV voltage drop occurred prior to reaching force limit

E – Test concluded when 800/400 N pressure was reached and 50 mV voltage drop was not achieved

F – Test was concluded when fire or explosion occurred

G – Other (Please explain): ____

7.3.3	TABLE: Propagation test (battery system)					N/A
Sample No.	OCV of Battery System Before Test, (V dc)	OCV of Target Cell Before Test, (V dc)	Maximum Cell Case Temperature, (°C)	Maximum DUT Enclosure Temperature, (°C)	Results	
Method of cell failure ¹⁾		Location of target cell		Area for fire protection (m ²)		

Supplementary information:

1) Cell can be failed through laser exposure, applied heat, overcharge, nail penetration or combinations of these failures or other acceptable methods. See supporting documentation for details on cell failure method

2) If the battery system has no outer covering, the manufacturer is required to specify the area for fire protection.

Results:

A – No fire external to DUT enclosure or area for fire protection or no battery case rupture

B – Fire external to DUT enclosure or area for fire protection

C – Explosion

D – Battery case rupture

E – Other (Please explain): ____





8.2.2	TABLE: Overcharge control of voltage (battery system)					P
Sample No.	OCV at start of test for Cell/Cell Blocks, (V dc)	Maximum Charging Current, (A)	Max. Charging Voltage, (V dc)	Max. Voltage of Cell/Cell Blocks, (V dc)	Results	
B01	2.913~2.934	200	56.75	3.656	A, D, F	
			Charge Voltage Applied Battery System: 1)			
			Whole		Part	
			64.24Vdc		--	

Supplementary information:

1) The exceeded voltage can be applied to only a part of the system such as the cell(s) in the battery system per Figure 6 of IEC 62619, if it is difficult to do it in using the whole battery system.

Results:

A – No Fire or Explosion

B – Fire

C – Explosion

D – The voltage of the measured cells or cell blocks did not exceed the upper limit charging voltage

E – The voltage of the measured cells or cell blocks did exceed the upper limit charging voltage

F – All function of battery system did operate as intended during the test.

G – All function of battery system did not operate as intended during the test.

H – Other (Please explain): ____

8.2.3	TABLE: Overcharge control of current (battery system)				P
Sample No.	OCV at start of test, (V dc)	Max. Charging Current, (A)	Max. Charging Voltage, (V dc)	Results	
B01	49.06	240	50.16	A, D, F	
Supplementary information:					
Results:					
A – No fire or Explosion					
B – Fire					
C – Explosion					
D – Overcurrent sensing function of BMU did operate and then charging stopped					
E – Overcurrent sensing function of BMU did not operate and then charging stopped					
F – All function of battery system did operate as intended during the test.					
G – All function of battery system did not operate as intended during the test.					
H – Other (Please explain): _____					





8.2.4	TABLE: Overheating control (battery system)			P
Model No.	OCV at start(SOC 50%) of test, V dc	Maximum Charging Current, A	Maximum Measured Charging Voltage, V dc	
B02	52.80	200	53.2	
Maximum Specified Temperature of Battery System, °C		Maximum Measured Cell Case Temperature, °C	Results	
55		60.3	A, D, F	

Supplementary information:

Results:

A – No fire or Explosion

B – Fire

C – Explosion

D – Temperature sensing function of BMU did operate and then charging stopped

E – Temperature sensing function of BMU did not operate and then charging stopped

F – All function of battery system did operate as intended during the test.

G – All function of battery system did not operate as intended during the test.

H – Other (Please explain): _____

9	TABLE: EMC					N/A
Standard used for EMC test:						
Sample No.	EMC Test Item	Battery Condition	EMC Test Level/ Parameters	Compliance Criteria	Results	
Supplementary information:						
Battery Condition During EMC test						
1 – In Operation Mode, [] Supplied at _____, [] Load at _____						
2 – In non-operation Mode, Battery state of charge (SOC) before test at around _____						
Compliance Criteria and Test Results:						
A – No fire or Explosion						
B – Fire						
C – Explosion						
D – Battery system did operate as intended during the test.						
E - All function of battery system did operate as intended after the test.						
F - All function of battery system did not operate as intended during the test, (Please explain): _____						
G - Other (Please explain): _____						

- End of Report -





Attachment 1(Pictures for product)



Figure 1 Overall view 1 of Battery



Figure 2 Overall view 2 of Battery

