

TEST REPORT

For

**HUIZHOU FORYOU OPTOELECTRONICS TECHNOLOGY CO.,
LTD.**

**Product Name: Photovoltaic energy storage DC integrated
machine**

Test Model(s): DA802

Report Reference No. : DACE240718006RL006

Applicant's Name : HUIZHOU FORYOU OPTOELECTRONICS TECHNOLOGY CO., LTD.

Address : Building No.6, Foryou Industrial Park Area B, No.1 North Shangxia
Road, Dongjiang High-tech Industry Park, Huizhou, Guangdong, China.

Testing Laboratory : Shenzhen DACE Testing Technology Co., Ltd.

Address : 102, Building H1, & 1/F., Building H, Hongfa Science & Technology Park,
Tangtou Community, Shiyan Subdistrict, Bao'an District, Shenzhen,
Guangdong, China

Test Specification Standard : EN 62311:2020

Date of Receipt : July 18, 2024

Date of Test : July 18, 2024 to July 29, 2024

Data of Issue : July 29, 2024

Result : Pass

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Revision History Of Report

Version	Description	REPORT No.	Issue Date
V1.0	Original	DACE240718006RL006	July 29, 2024

NOTE1:

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EU Directives.



NOTE2:

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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Ben Tang / Test Engineer

Supervised by:

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Tom Chen

Tom Chen / Manager



CONTENTS

1 TEST SUMMARY	4
1.1 TEST STANDARDS	4
1.2 SUMMARY OF TEST RESULT	4
2 GENERAL INFORMATION	5
2.1 CLIENT INFORMATION	5
2.2 DESCRIPTION OF DEVICE (EUT)	5
2.3 DESCRIPTION OF TEST MODES	5
2.4 DESCRIPTION OF SUPPORT UNITS	5
3 EVALUATION RESULTS (EVALUATION)	6
3.1 MAXIMUM PERMISSIBLE EXPOSURE	6
3.2 TEST RESULT	6
4 PHOTOS OF THE EUT	7

1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

EN 62311:2020: Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)

1.2 Summary of Test Result

Item	Standard	Method	Requirement	Result
Maximum Permissible Exposure	EN 62311:2020	Clause 7	RED Article 3.1(a)	Pass

2 GENERAL INFORMATION

2.1 Client Information

Applicant's Name : HUIZHOU FORYOU OPTOELECTRONICS TECHNOLOGY CO., LTD.
Address : Building No.6, Foryou Industrial Park Area B, No.1 North Shangxia Road, Dongjiang High-tech Industry Park, Huizhou, Guangdong, China.

Manufacturer : HUIZHOU FORYOU OPTOELECTRONICS TECHNOLOGY CO., LTD.
Address : Building No.6, Foryou Industrial Park Area B, No.1 North Shangxia Road, Dongjiang High-tech Industry Park, Huizhou, Guangdong, China.

2.2 Description of Device (EUT)

Product Name:	Photovoltaic energy storage DC integrated machine
Model/Type reference:	DA802
Series Model:	N/A
Trade Mark:	ADAYO
Hardware Version:	V1.0
Software Version:	V1.0

2.3 Description of Test Modes

No	Title	Description
TM1	TX mode	Keep the EUT in TX mode

2.4 Description of Support Units

The EUT was tested as an independent device.

3 Evaluation Results (Evaluation)

3.1 Maximum Permissible Exposure

Test Requirement:	RED Article 3.1(a)																																																												
Test Limit:	<p style="text-align: center;">Reference levels for electric, magnetic and electromagnetic fields (0 Hz to 300 GHz, unperturbed rms values)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Frequency range</th> <th style="text-align: center;">E-field strength (V/m)</th> <th style="text-align: center;">H-field strength (A/m)</th> <th style="text-align: center;">B-field (μT)</th> <th style="text-align: center;">Equivalent plane wave power density S_{eq} (W/m²)</th> </tr> </thead> <tbody> <tr> <td>0-1 Hz</td> <td style="text-align: center;">—</td> <td style="text-align: center;">$3,2 \times 10^4$</td> <td style="text-align: center;">4×10^4</td> <td style="text-align: center;">—</td> </tr> <tr> <td>1-8 Hz</td> <td style="text-align: center;">10 000</td> <td style="text-align: center;">$3,2 \times 10^4/f^2$</td> <td style="text-align: center;">$4 \times 10^4/f^2$</td> <td style="text-align: center;">—</td> </tr> <tr> <td>8-25 Hz</td> <td style="text-align: center;">10 000</td> <td style="text-align: center;">$4\ 000/f$</td> <td style="text-align: center;">$5\ 000/f$</td> <td style="text-align: center;">—</td> </tr> <tr> <td>0,025-0,8 kHz</td> <td style="text-align: center;">$250/f$</td> <td style="text-align: center;">$4/f$</td> <td style="text-align: center;">$5/f$</td> <td style="text-align: center;">—</td> </tr> <tr> <td>0,8-3 kHz</td> <td style="text-align: center;">$250/f$</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6,25</td> <td style="text-align: center;">—</td> </tr> <tr> <td>3-150 kHz</td> <td style="text-align: center;">87</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6,25</td> <td style="text-align: center;">—</td> </tr> <tr> <td>0,15-1 MHz</td> <td style="text-align: center;">87</td> <td style="text-align: center;">$0,73/f$</td> <td style="text-align: center;">$0,92/f$</td> <td style="text-align: center;">—</td> </tr> <tr> <td>1-10 MHz</td> <td style="text-align: center;">$87/f^{1/2}$</td> <td style="text-align: center;">$0,73/f$</td> <td style="text-align: center;">$0,92/f$</td> <td style="text-align: center;">—</td> </tr> <tr> <td>10-400 MHz</td> <td style="text-align: center;">28</td> <td style="text-align: center;">0,073</td> <td style="text-align: center;">0,092</td> <td style="text-align: center;">2</td> </tr> <tr> <td>400-2 000 MHz</td> <td style="text-align: center;">$1,375\ f^{1/2}$</td> <td style="text-align: center;">$0,0037\ f^{1/2}$</td> <td style="text-align: center;">$0,0046\ f^{1/2}$</td> <td style="text-align: center;">$f/200$</td> </tr> <tr> <td>2-300 GHz</td> <td style="text-align: center;">61</td> <td style="text-align: center;">0,16</td> <td style="text-align: center;">0,20</td> <td style="text-align: center;">10</td> </tr> </tbody> </table> <p>Notes:</p> <ol style="list-style-type: none"> f as indicated in the frequency range column. For frequencies between 100 kHz and 10 GHz, S_{eq}, E^2, H^2, and B^2 are to be averaged over any six-minute period. For frequencies exceeding 10 GHz, S_{eq}, E^2, H^2, and B^2 are to be averaged over any $68/f^{1.05}$ -minute period (f in GHz). No E-field value is provided for frequencies < 1 Hz, which are effectively static electric fields. For most people the annoying perception of surface electric charges will not occur at field strengths less than 25 kV/m. Spark discharges causing stress or annoyance should be avoided. 	Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μT)	Equivalent plane wave power density S_{eq} (W/m ²)	0-1 Hz	—	$3,2 \times 10^4$	4×10^4	—	1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—	8-25 Hz	10 000	$4\ 000/f$	$5\ 000/f$	—	0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—	0,8-3 kHz	$250/f$	5	6,25	—	3-150 kHz	87	5	6,25	—	0,15-1 MHz	87	$0,73/f$	$0,92/f$	—	1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—	10-400 MHz	28	0,073	0,092	2	400-2 000 MHz	$1,375\ f^{1/2}$	$0,0037\ f^{1/2}$	$0,0046\ f^{1/2}$	$f/200$	2-300 GHz	61	0,16	0,20	10
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Test Method:	Clause 7																																																												
Procedure:	Clause 7.2																																																												

3.2 Test result

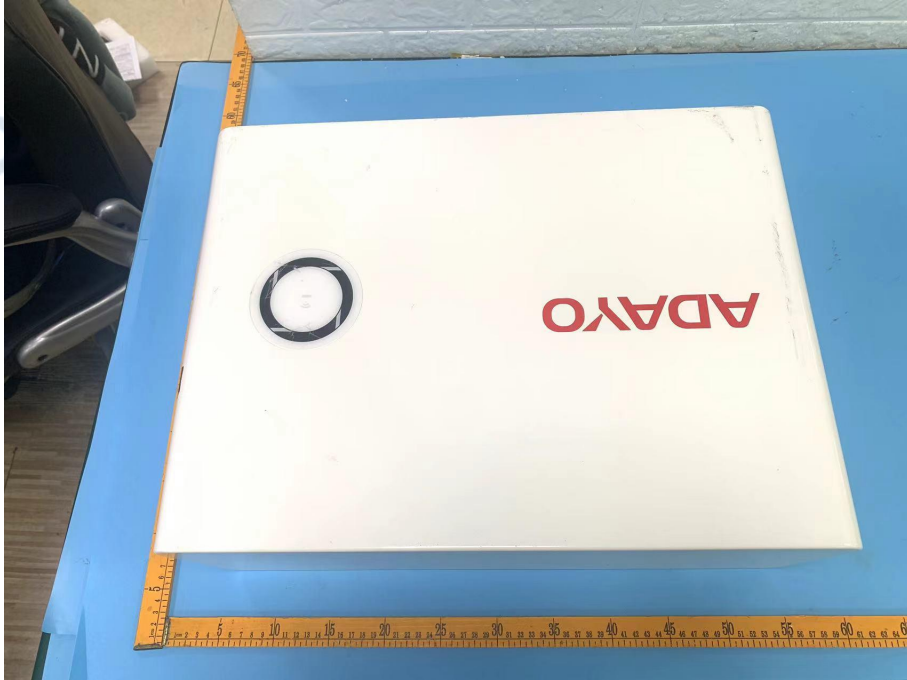
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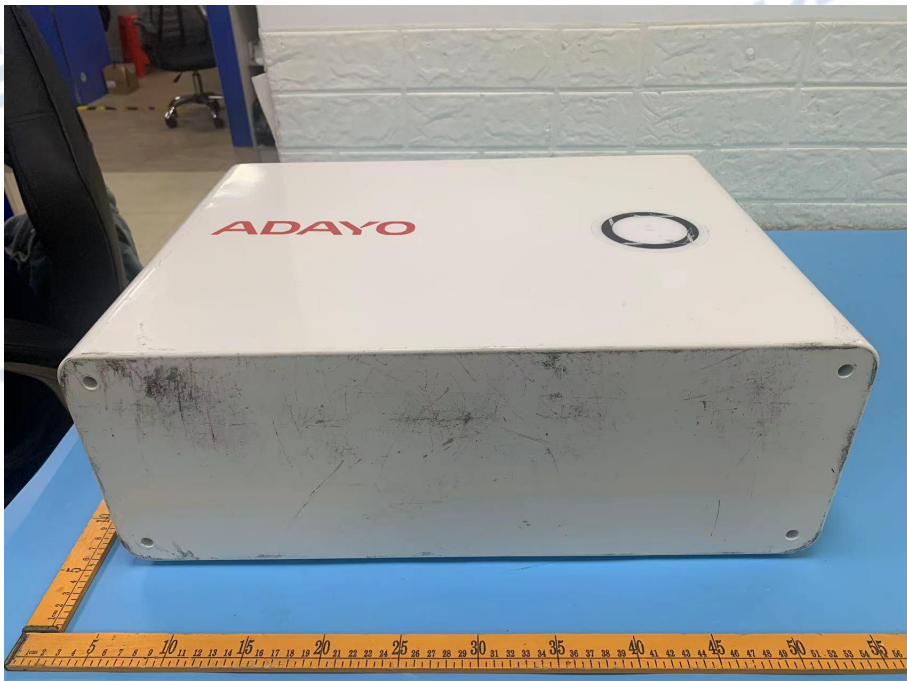
- Please refer to the report NO.: DACE240718006RL002,DACE240718006RL003,DACE240718006RL004, DACE240718006RL005, only show worst mode and max power.
- The manufacturer claims that when using this product normally, the distance from the human body is at least 20cm. Therefore, the following evaluation uses 20cm as the minimum distance
- Antenna Gain (Nemeric)= $10 \cdot \log(\text{Gain})$,

Test Frequency (MHz)	Minimum Separation Distance (cm)	EIRP (dBm)	EIRP (W)	Antenna Gain (Nemeric)	E-field strength Limit (V/m)	E-field strength At 20 cm (V/m)
DH5--2440	20	7.72	0.0059	1.000	61	2.1064
802.11b--2442	20	13.48	0.0223	1.000	61	4.0882
802.11a--5825	20	5.51	0.0036	1.000	61	1.6332
802.11a-5240	20	4.68	0.0029	1.000	61	1.4843

4 PHOTOS OF THE EUT

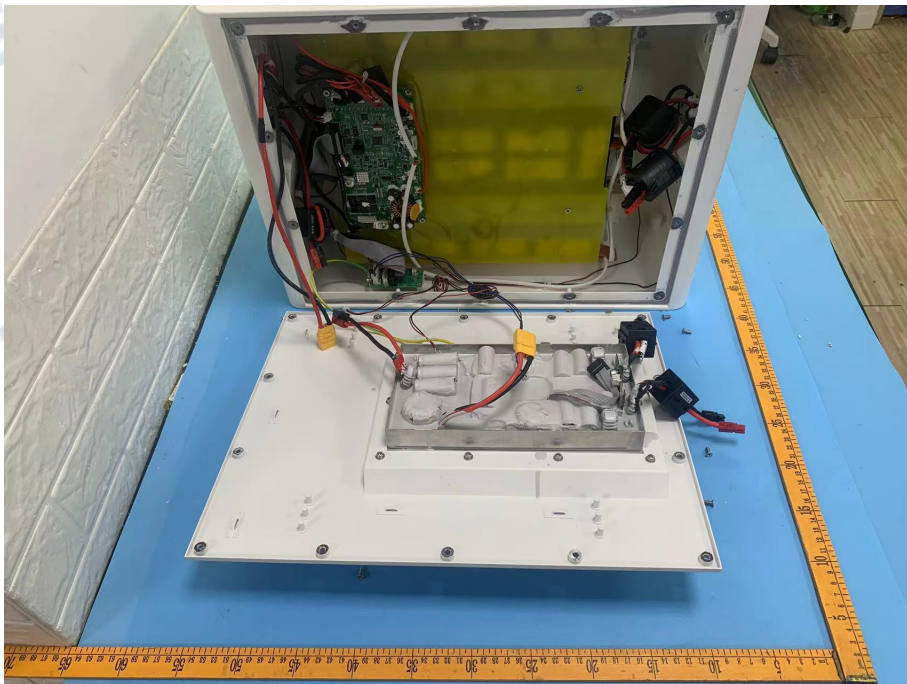
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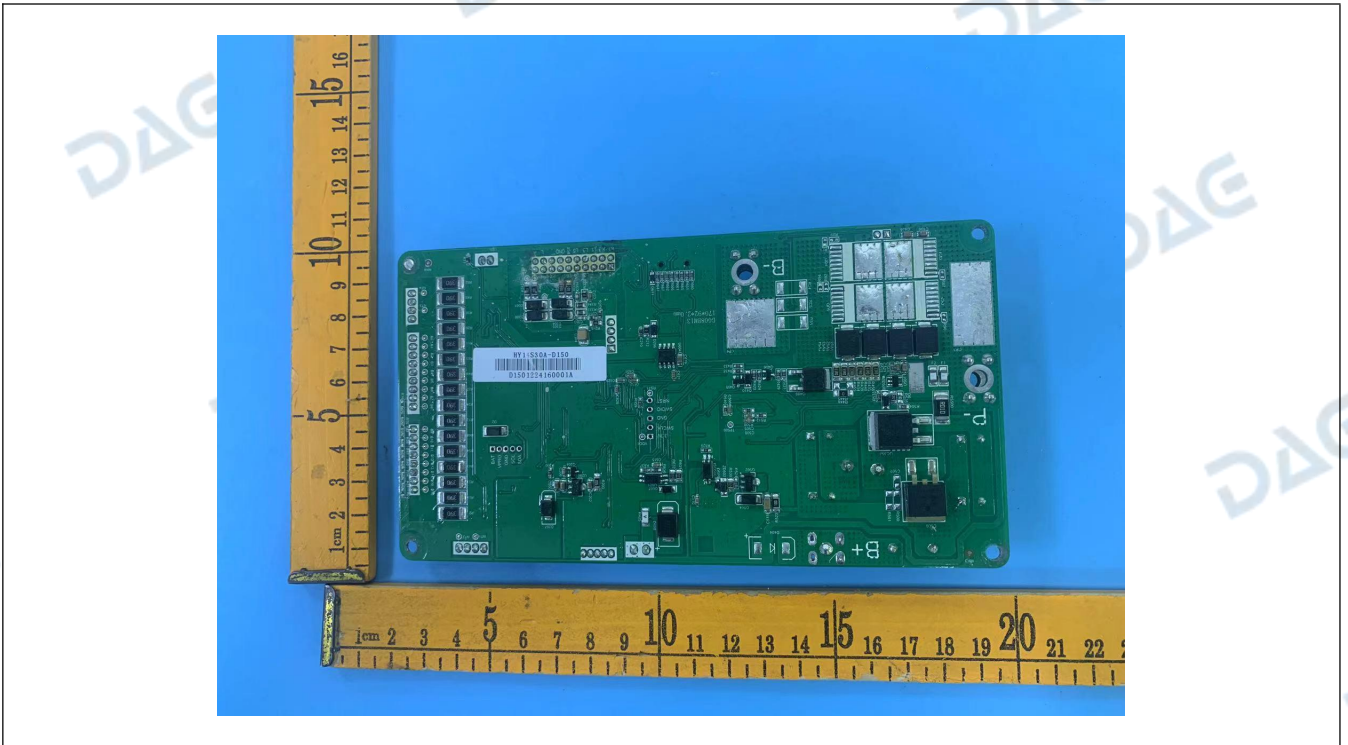
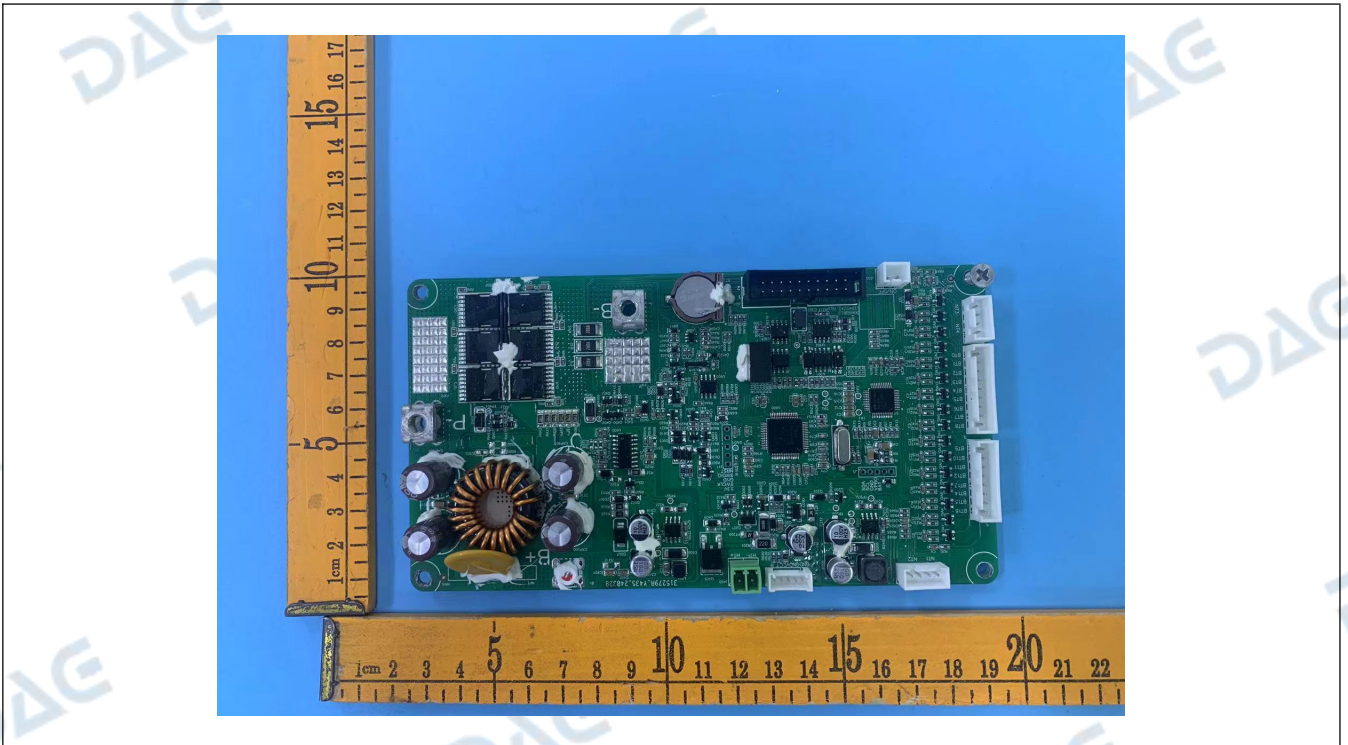


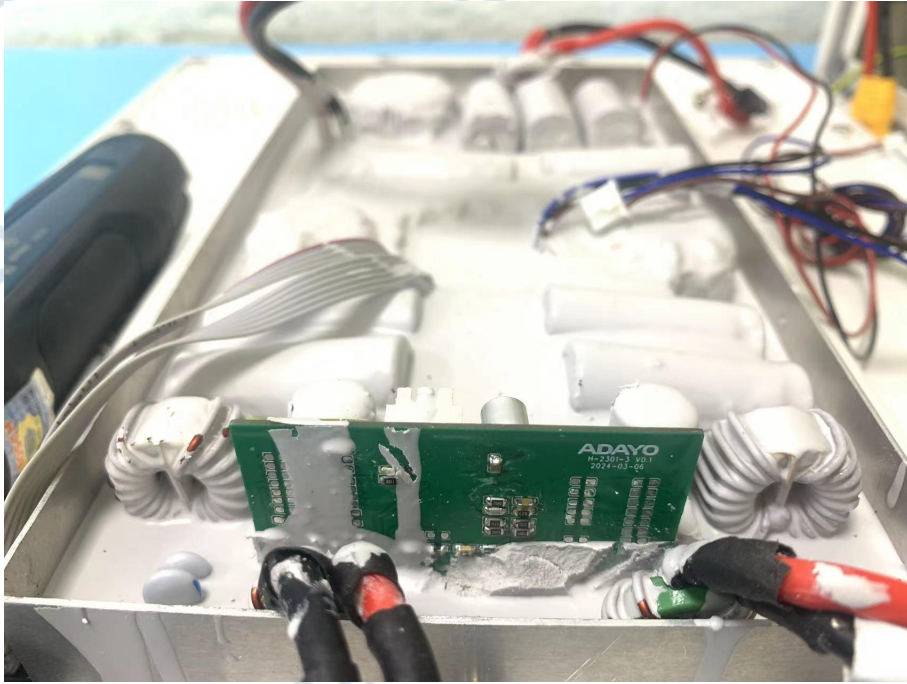


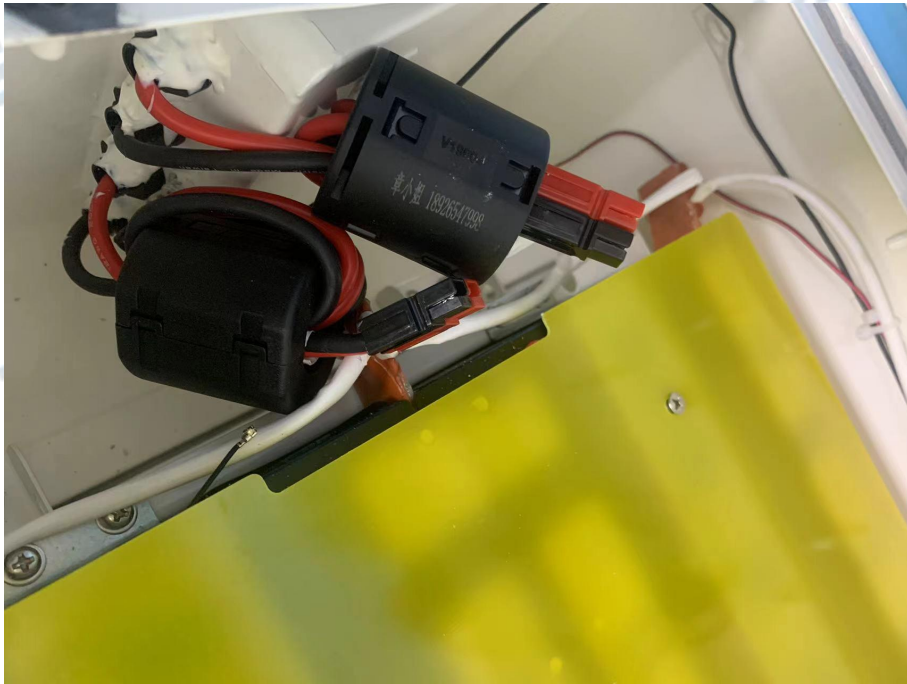
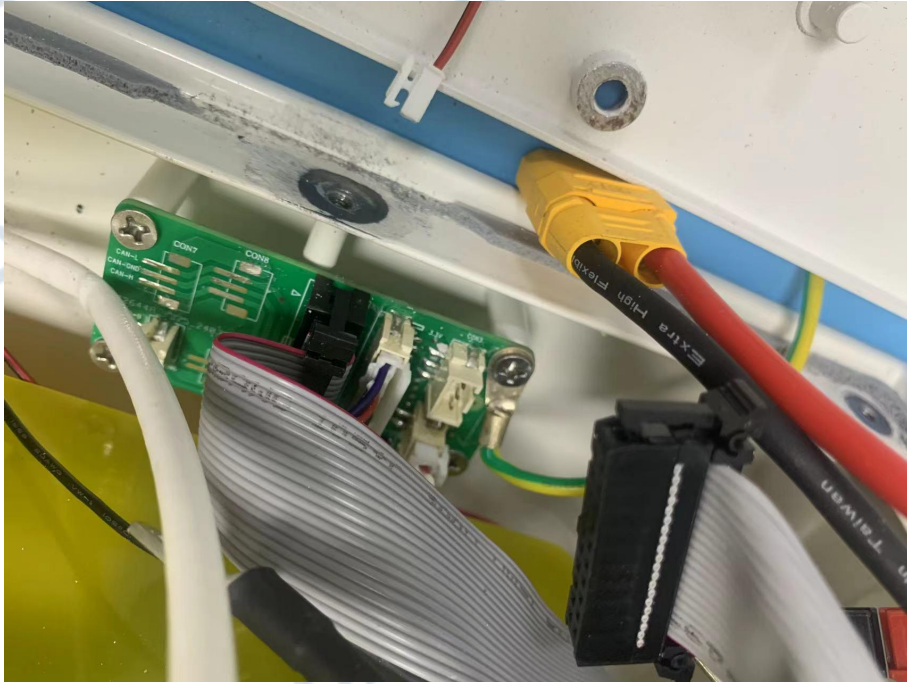


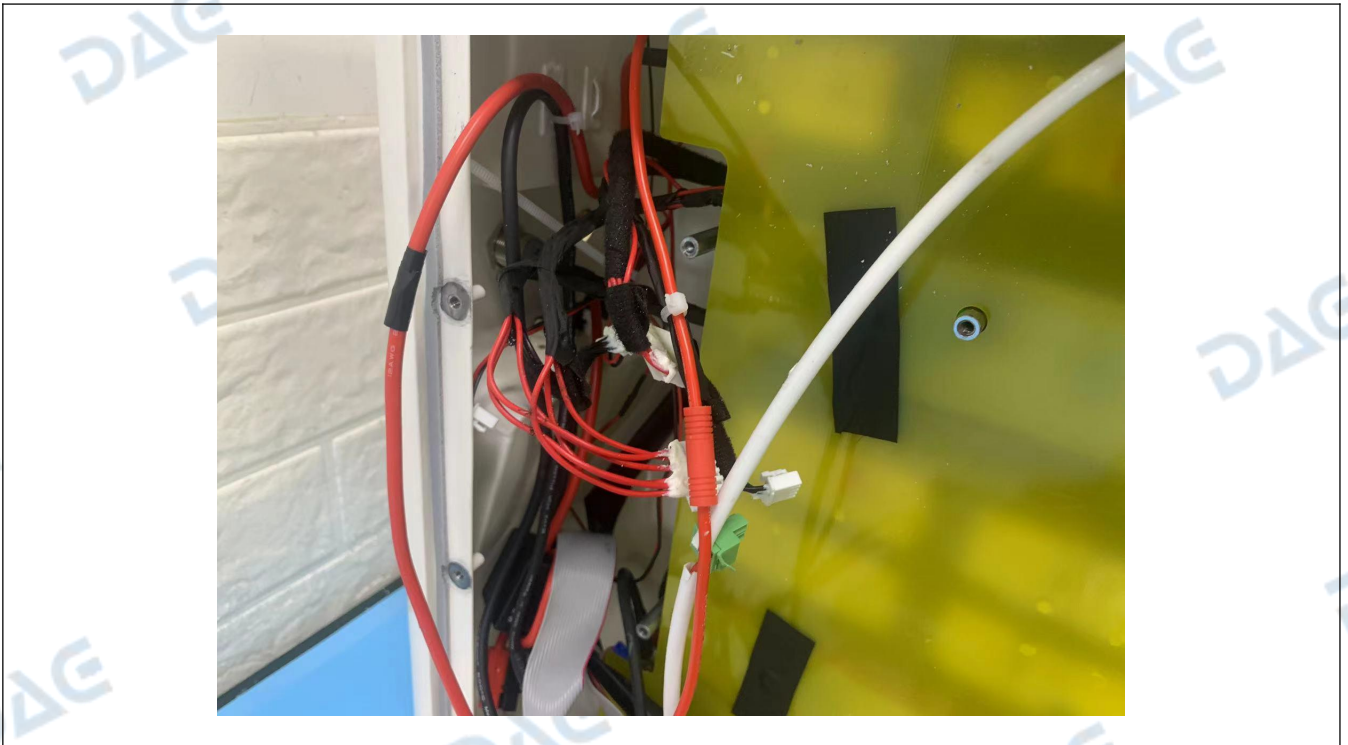
Internal











***** End of Report *****