TEST REPORT N°: CMCC-ESH-P26051868B-1

EMC TEST REPORT

Applicant :	Power Genius GmbH
Address :	Wallbergstr. 3, 82024, Taufkirchen, Germany
Manufacturer :	Power Genius GmbH
Address :	Wallbergstr. 3, 82024, Taufkirchen, Germany
Factory :	1. Zhejiang Adetion Intelligent Information Technology Co., Ltd 2. New Focus Lighting & Power Technology (Shanghai) Co., Ltd
Address :	1. No. 599 Xingshi Road, Tianzihu Town, Anji County, Zhejiang Province 2. No.4589 Waiqingsong Road, Qingpu, Shanghai, China
This document includes : 68 pages	

Product :	Home Energy Hub
Model name :	See model name list
Trade mark :	INDEVOLT
Rated voltage :	Refer to label
Rated capacity :	Refer to label
Highest clock frequency :	⩽108 MHz
Protection class :	I
Tests realised :	On one sample of PG-3000A
Test date :	Jul.08 to Jul.14, 2026



Standards used (date) :	EN IEC 61000-6-4:2019 EN IEC 61000-6-3:2021 EN IEC 61000-6-2:2019 EN IEC 61000-6-1:2019
Clauses examined :	All Clauses Relevant.

CONCLUSION :The sample does satisfy the clauses examined .

Test done by:	Approved by:
Yuan Zhang Name : Yuan ZHANG Date : Aug.18, 2026	Sean Yu Name : Sean YU Date : Aug.18, 2026

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

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TEST REPORT N°: CMCC-ESH-P26051868B-1

Release control record

Report No.	Description	Date Issued
CMCC-ESH-P26051868B-1	Original release	Jul.31, 2026

1 Summary of test results

No.	Item	Result
Emission part:		
1	Continuous disturbances	PASS
2	Discontinuous disturbances	N/A
3	Radiated emission	PASS
4	Harmonic current emission	PASS
5	Voltage fluctuation and flicker	PASS
Immunity part:		
6	Electrostatic discharge	PASS
7	RF electromagnetic fields	PASS
8	Electrical fast transient/Burst	PASS
9	Surge	PASS
10	Injected current	PASS
11	Power frequency magnetic field	PASS
12	Voltage dips and short interruptions	PASS

2 General information of laboratory

2.1 Test facility

The tests done in this report are subcontracted to:

☒ **Laboratory name:** Jiangsu TEM-Wave Testing Service Ltd.

Testing location: No. 113-3-2 Ximei Road, Xinwu District, Wuxi, Jiangsu, China (CNAS L15153)

2.2 Measurement uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

This lab's measurement uncertainty ULab, is low than UCispr , Table 1 – Values of UCispr of CISPR 16-4-2, therefore compliance is deemed to occur if no measured disturbance exceeds the disturbance limit.

Measurement		Value
Disturbance voltage	AC Power Port	1.80 dB
Radiated disturbance (3 m)	30 MHz ~1000 MHz	4.40 dB
	Above 1GHz	4.50 dB

3 General product information

3.1 Specification of product

Operating modes:
☒ Mode A: PV Input to charge the battery + AC Output (on grid)
☒ Mode B: AC Input to charge the battery
☒ Mode C: Battery Discharge to AC Output (on grid)
☒ Mode D: Battery Discharge to AC Load

Types of port:
☒ AC power port
☒ DC power port
☐ wired network port
☒ signal/control port
☒ enclosure port

Special comments: The differences of these models are the PV ports, and power. All models use the same hardware platform, and the different powers are realized by software derating. Models PG-3000A, PG-2400AH and PG-800A have PV ports, while other models do not have PV ports. After evaluation, we choose model PG-3000A to perform all test items.

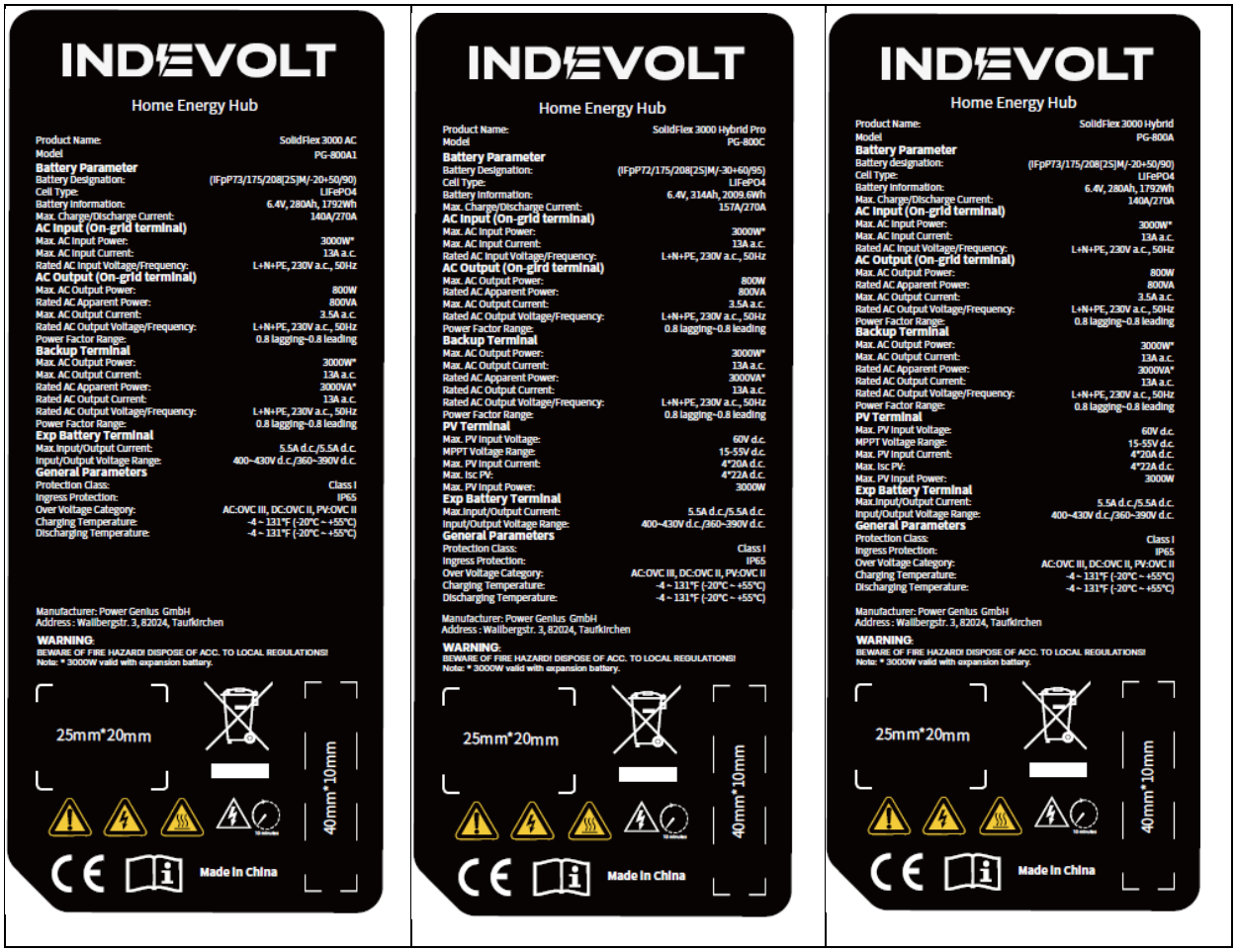
3.2 Model name list

800W	2400W	3000W
PG-800A	PG-2400AH	PG-3000A
PG-800A1	PG-2400AA	PG-3000B
PG-800B	PG-2400BH	PG-3000C
PG-800B1	PG-2400BA	PG-3000A1
PG-800C	PG-2400CH	PG-3000B1
PG-800C1	PG-2400CA	PG-3000C1
/	/	PG-3000B1-AU

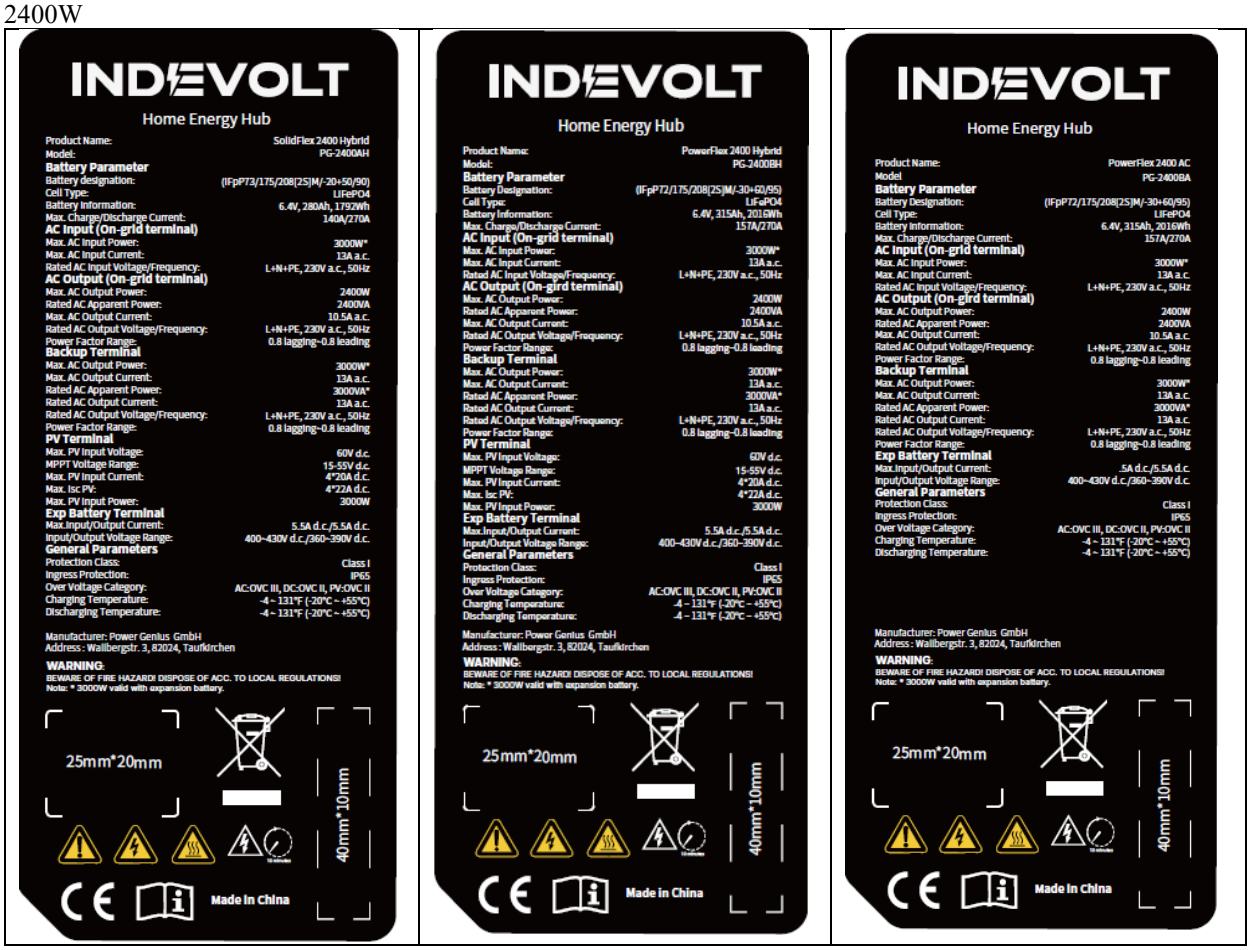
Rating label:

800W



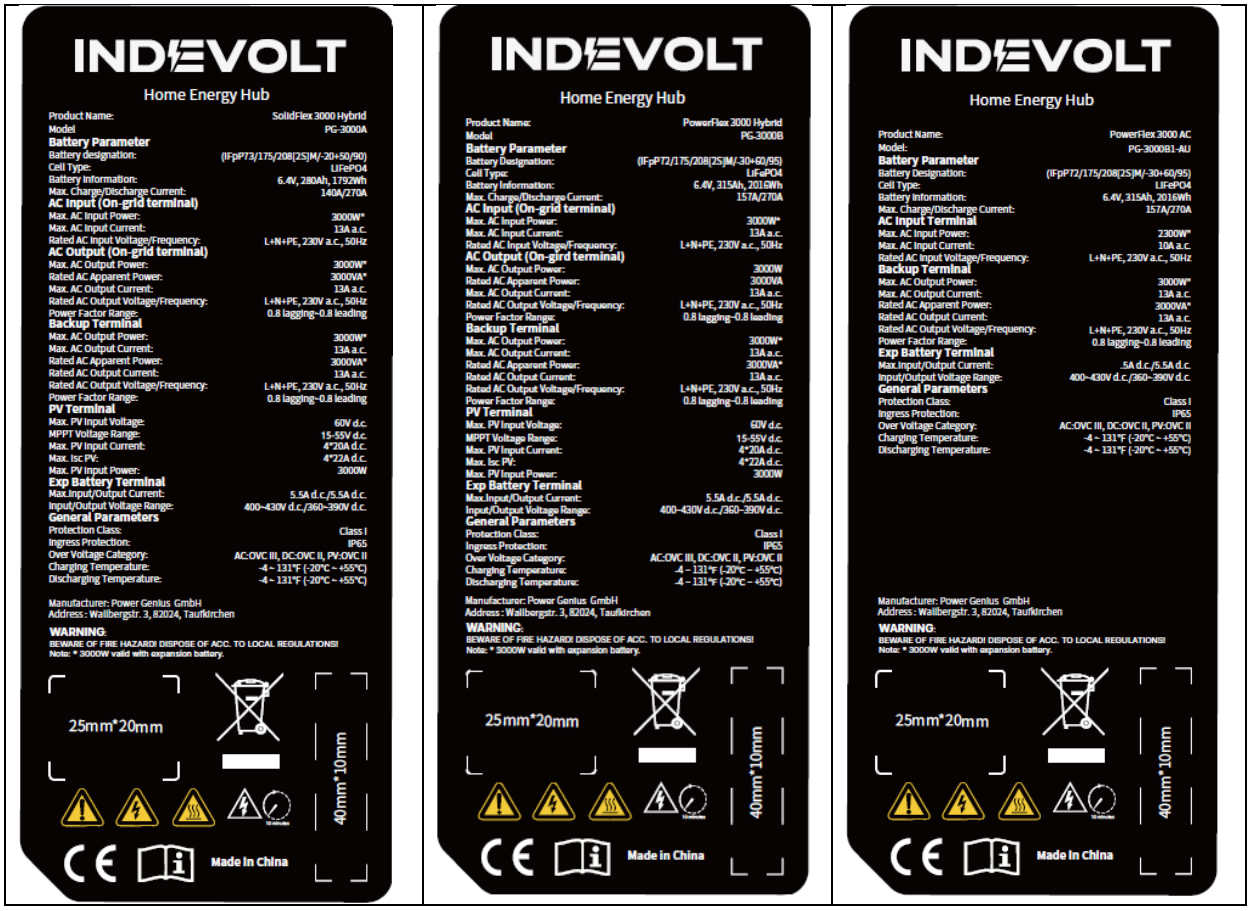

INDEVOLT
Home Energy Hub
Product Name: SolidFlex 3000 AC
Model PG-800A1
Battery Parameter
Battery Designation: (IFpP73/175/208[2S]M/-20+50/90)
Cell Type: LiFePO4
Battery Information: 6.4V, 280Ah, 1792Wh
Max. Charge/Discharge Current: 140A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-grid terminal)
Max. AC Output Power: 800W
Rated AC Apparent Power: 800VA
Max. AC Output Current: 3.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: SolidFlex 3000 Hybrid Pro
Model PG-800C
Battery Parameter
Battery Designation: (IFpP72/175/208[2S]M/-30+60/95)
Cell Type: LiFePO4
Battery Information: 6.4V, 314Ah, 2009.6Wh
Max. Charge/Discharge Current: 157A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-grid terminal)
Max. AC Output Power: 800W
Rated AC Apparent Power: 800VA
Max. AC Output Current: 3.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
PV Terminal
Max. PV Input Voltage: 60V d.c.
MPPT Voltage Range: 15-55V d.c.
Max. PV Input Current: 4*20A d.c.
Max. Isc PV: 4*22A d.c.
Max. PV Input Power: 3000W
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: SolidFlex 3000 Hybrid
Model PG-800A
Battery Parameter
Battery designation: (IFpP73/175/208[2S]M/-20+50/90)
Cell Type: LiFePO4
Battery Information: 6.4V, 280Ah, 1792Wh
Max. Charge/Discharge Current: 140A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-grid terminal)
Max. AC Output Power: 800W
Rated AC Apparent Power: 800VA
Max. AC Output Current: 3.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
PV Terminal
Max. PV Input Voltage: 60V d.c.
MPPT Voltage Range: 15-55V d.c.
Max. PV Input Current: 4*20A d.c.
Max. Isc PV: 4*22A d.c.
Max. PV Input Power: 3000W
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
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Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China

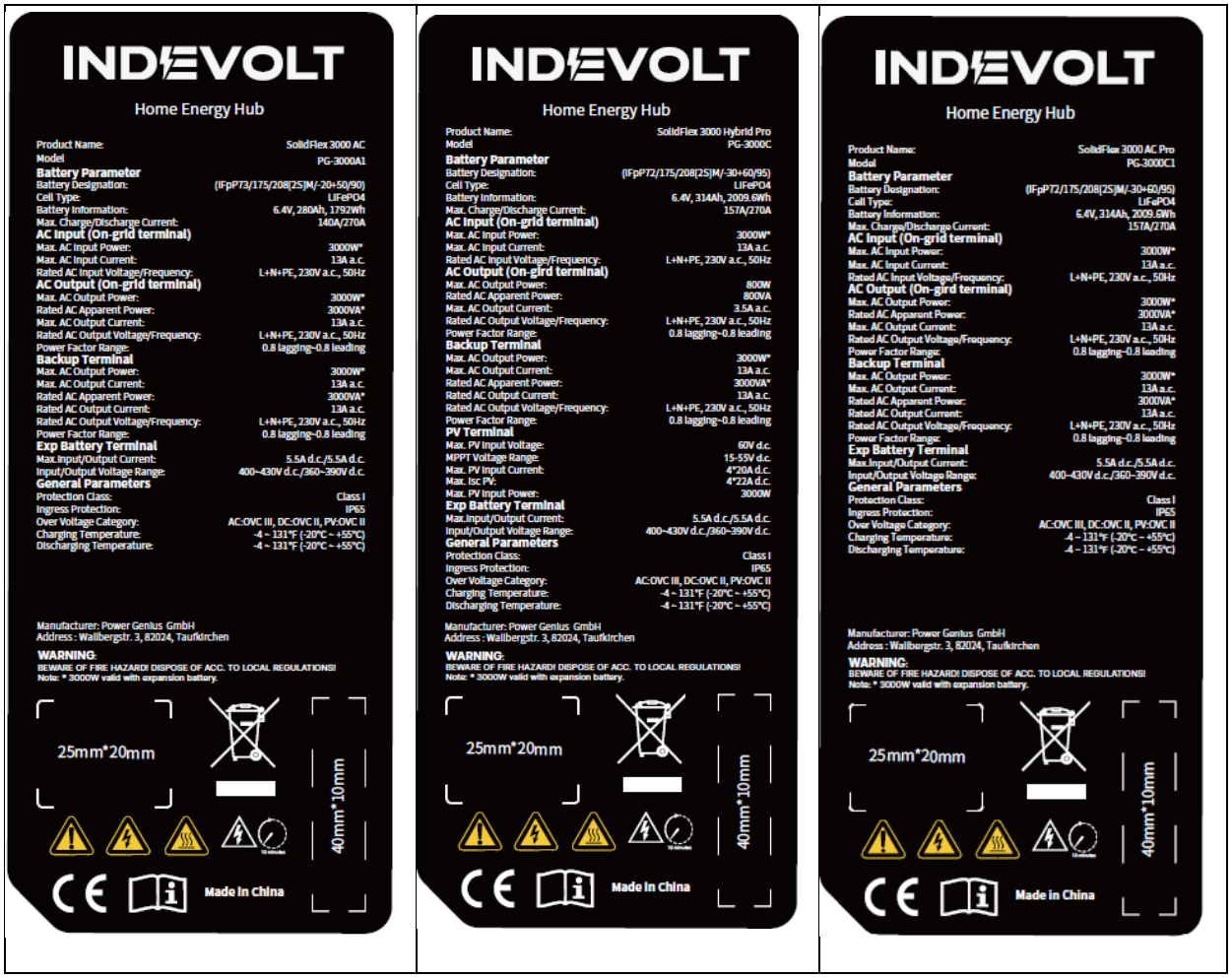
2400W

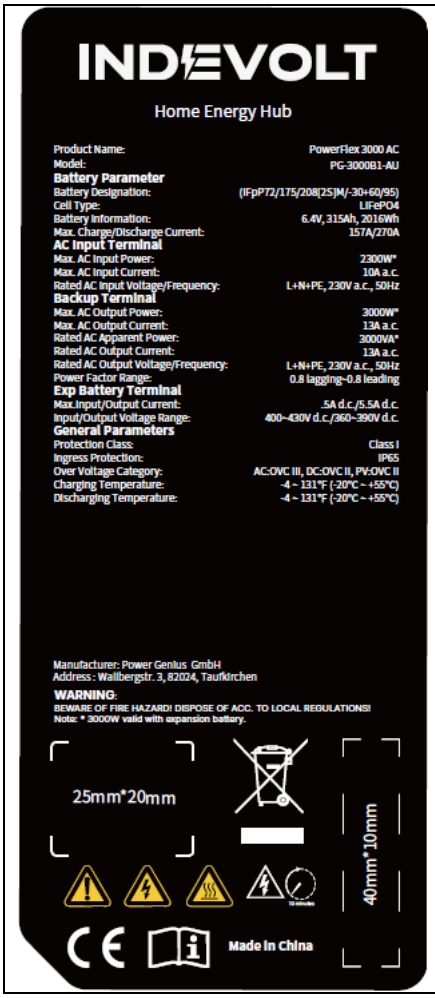

INDEVOLT
Home Energy Hub
Product Name: SolidFlex 2400 Hybrid
Model: PG-2400AH
Battery Parameter
Battery designation: (IFpP73/175/208[2S]M/-20+50/90)
Cell Type: LiFePO4
Battery Information: 6.4V, 280Ah, 1792Wh
Max. Charge/Discharge Current: 140A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-grid terminal)
Max. AC Output Power: 2400W
Rated AC Apparent Power: 2400VA
Max. AC Output Current: 10.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
PV Terminal
Max. PV Input Voltage: 60V d.c.
MPPT Voltage Range: 15-55V d.c.
Max. PV Input Current: 4*20A d.c.
Max. Isc PV: 4*22A d.c.
Max. PV Input Power: 3000W
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address: Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: PowerFlex 2400 Hybrid
Model: PG-2400BH
Battery Parameter
Battery Designation: (IFpP72/175/208[2S]M/-30+60/95)
Cell Type: LiFePO4
Battery Information: 6.4V, 315Ah, 2016Wh
Max. Charge/Discharge Current: 157A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-gird terminal)
Max. AC Output Power: 2400W
Rated AC Apparent Power: 2400VA
Max. AC Output Current: 10.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
PV Terminal
Max. PV Input Voltage: 60V d.c.
MPPT Voltage Range: 15-55V d.c.
Max. PV Input Current: 4*20A d.c.
Max. Isc PV: 4*22A d.c.
Max. PV Input Power: 3000W
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address: Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: PowerFlex 2400 AC
Model PG-2400BA
Battery Parameter
Battery Designation: (IFpP72/175/208[2S]M/-30+60/95)
Cell Type: LiFePO4
Battery Information: 6.4V, 315Ah, 2016Wh
Max. Charge/Discharge Current: 157A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-gird terminal)
Max. AC Output Power: 2400W
Rated AC Apparent Power: 2400VA
Max. AC Output Current: 10.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Exp Battery Terminal
Max.Input/Output Current: .5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address: Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China


INDEVOLT
Home Energy Hub
Product Name: SolidFlex 2400 Hybrid Pro
Model: PG-2400CH
Battery Parameter
Battery Designation: (IFpP72/175/208[2S]M/-30+60/95)
Cell Type: LIFePO4
Battery Information: 6.4V, 314Ah, 2009.6Wh
Max. Charge/Discharge Current: 157A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-gird terminal)
Max. AC Output Power: 2400W
Rated AC Apparent Power: 2400VA
Max. AC Output Current: 10.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
PV Terminal
Max. PV Input Voltage: 60V d.c.
MPPT Voltage Range: 15-55V d.c.
Max. PV Input Current: 4*20A d.c.
Max. Isc PV: 4*22A d.c.
Max. PV Input Power: 3000W
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARDI DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: SolidFlex 2400 AC Pro
Model: PG-2400CA
Battery Parameter
Battery Designation: (IFpP72/175/208[2S]M/-30+60/95)
Cell Type: LIFePO4
Battery Information: 6.4V, 314Ah, 2009.6Wh
Max. Charge/Discharge Current: 157A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-gird terminal)
Max. AC Output Power: 2400W
Rated AC Apparent Power: 2400VA
Max. AC Output Current: 10.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARDI DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: SolidFlex 2400 AC
Model: PG-2400AA
Battery Parameter
Battery Designation: (IFpP73/175/208[2S]M/-20+50/90)
Cell Type: LIFePO4
Battery Information: 6.4V, 280Ah, 1792Wh
Max. Charge/Discharge Current: 140A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-gird terminal)
Max. AC Output Power: 2400W
Rated AC Apparent Power: 2400VA
Max. AC Output Current: 10.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARDI DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China

3000W


INDEVOLT
Home Energy Hub
Product Name: SolidFlex 3000 Hybrid
Model PG-3000A
Battery Parameter
Battery designation: (IFpP73/175/208[2S]M/-20+50/90)
Cell Type: LIFePO4
Battery Information: 6.4V, 280Ah, 1792Wh
Max. Charge/Discharge Current: 140A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-grid terminal)
Max. AC Output Power: 3000W*
Rated AC Apparent Power: 3000VA*
Max. AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
PV Terminal
Max. PV Input Voltage: 60V d.c.
MPPT Voltage Range: 15-55V d.c.
Max. PV Input Current: 4*20A d.c.
Max. Isc PV: 4*22A d.c.
Max. PV Input Power: 3000W
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address: Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: PowerFlex 3000 Hybrid
Model PG-3000B
Battery Parameter
Battery Designation: (IFpP72/175/208[2S]M/-30+60/95)
Cell Type: LiFePO4
Battery Information: 6.4V, 315Ah, 2016Wh
Max. Charge/Discharge Current: 157A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-grid terminal)
Max. AC Output Power: 3000W
Rated AC Apparent Power: 3000VA
Max. AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
PV Terminal
Max. PV Input Voltage: 60V d.c.
MPPT Voltage Range: 15-55V d.c.
Max. PV Input Current: 4*20A d.c.
Max. Isc PV: 4*22A d.c.
Max. PV Input Power: 3000W
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address: Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: PowerFlex 3000 AC
Model: PG-3000B1-AU
Battery Parameter
Battery Designation: (IFpP72/175/208[2S]M/-30+60/95)
Cell Type: LIFePO4
Battery Information: 6.4V, 315Ah, 2016Wh
Max. Charge/Discharge Current: 157A/270A
AC Input Terminal
Max. AC Input Power: 2300W*
Max. AC Input Current: 10A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Exp Battery Terminal
Max.Input/Output Current: .5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address: Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China


INDEVOLT
Home Energy Hub
Product Name: SolidFlex 3000 AC
Model PG-3000A1
Battery Parameter
Battery Designation: (IFpP73/175/208(2S)M/-20+50/90)
Cell Type: LIFePO4
Battery Information: 6.4V, 280Ah, 1792Wh
Max. Charge/Discharge Current: 140A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-grid terminal)
Max. AC Output Power: 3000W*
Rated AC Apparent Power: 3000VA*
Max. AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: SolidFlex 3000 Hybrid Pro
Model PG-3000C
Battery Parameter
Battery Designation: (IFpP72/175/208(2S)M/-30+60/95)
Cell Type: LIFePO4
Battery Information: 6.4V, 314Ah, 2009.6Wh
Max. Charge/Discharge Current: 157A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-gird terminal)
Max. AC Output Power: 800W
Rated AC Apparent Power: 800VA
Max. AC Output Current: 3.5A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
PV Terminal
Max. PV Input Voltage: 60V d.c.
MPPT Voltage Range: 15-55V d.c.
Max. PV Input Current: 4*20A d.c.
Max. Isc PV: 4*22A d.c.
Max. PV Input Power: 3000W
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China
INDEVOLT
Home Energy Hub
Product Name: SolidFlex 3000 AC Pro
Model PG-3000C1
Battery Parameter
Battery Designation: (IFpP72/175/208(2S)M/-30+60/95)
Cell Type: LIFePO4
Battery Information: 6.4V, 314Ah, 2009.6Wh
Max. Charge/Discharge Current: 157A/270A
AC Input (On-grid terminal)
Max. AC Input Power: 3000W*
Max. AC Input Current: 13A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
AC Output (On-gird terminal)
Max. AC Output Power: 3000W*
Rated AC Apparent Power: 3000VA*
Max. AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Exp Battery Terminal
Max.Input/Output Current: 5.5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China


INDEVOLT
Home Energy Hub
Product Name: PowerFlex 3000 AC
Model: PG-3000B1-AU
Battery Parameter
Battery Designation: (IFpP72/175/208[25]M/-30+60/95)
Cell Type: LIFePO4
Battery Information: 6.4V, 315Ah, 2016Wh
Max. Charge/Discharge Current: 157A/270A
AC Input Terminal
Max. AC Input Power: 2300W*
Max. AC Input Current: 10A a.c.
Rated AC Input Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Backup Terminal
Max. AC Output Power: 3000W*
Max. AC Output Current: 13A a.c.
Rated AC Apparent Power: 3000VA*
Rated AC Output Current: 13A a.c.
Rated AC Output Voltage/Frequency: L+N+PE, 230V a.c., 50Hz
Power Factor Range: 0.8 lagging~0.8 leading
Exp Battery Terminal
Max.Input/Output Current: .5A d.c./5.5A d.c.
Input/Output Voltage Range: 400~430V d.c./360~390V d.c.
General Parameters
Protection Class: Class I
Ingress Protection: IP65
Over Voltage Category: AC:OVC III, DC:OVC II, PV:OVC II
Charging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Discharging Temperature: -4 ~ 131°F (-20°C ~ +55°C)
Manufacturer: Power Genius GmbH
Address : Wallbergstr. 3, 82024, Taufkirchen
WARNING:
BEWARE OF FIRE HAZARD! DISPOSE OF ACC. TO LOCAL REGULATIONS!
Note: * 3000W valid with expansion battery.
25mm*20mm
40mm*10mm
Made in China

3.3 Description of auxiliary equipment and associated equipment

N/A

3.4 Operation conditions

The EUT operating and testing at below conditions:

Ambient conditions:	Temperature	:	21.5-22.4 °C
	Relative humidity	:	48.0-60.0 %
	Atmospheric pressure	:	101.0 kPa

3.5 Photograph of sample

Refer to Appendix A

4 Test instruments

Conducted Disturbances Measurement For AC/DC Mains Power Ports					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Measuring Receiver	R&S	ESR 7	TW/C-003	2026/9/25
2	Artificial Power Network	R&S	NSLK8129	TW/C-083	2026/12/4
3	Test Software	R&S	ELEKTRA 4.20.2	--	--
Radiated Emissions					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Measuring Receiver	R&S	ESR 7	TW/C-003	2026/9/25
2	Antenna	Schwarzbeck	VULB9168	TW/C-004	2026/12/4
3	Test Software	R&S	ELEKTRA 4.20.2	--	--
Harmonic current emission & Voltage fluctuations and flicker					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	AC Power source	Kewell	G6000-18K-0450-0090	TW/T-097	2027/03/18
2	Power Analyzer	ZES ZIMMER	LMG641	TW/T-099	2027/03/18
3	Impedance network	Voltech Instruments	IES STANDARD 555	TW/C-102	2027/03/18
Electrostatic Discharge Immunity					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	ESD Simulator	HAEFELY	ONYX30	TW/C-025	2026/9/25
Radio-frequency electromagnetic field（RS）					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Signal Generator	Rohde & Schwarz	SMB100A	TW/C-017	2026/9/25
2	Power Amplifier	RFLIGHT	NTWPA-00810500E	TW/C-015	2026/9/25
3	Power Amplifier	RFLIGHT	NTWPA-1060100E	TW/C-016	2026/9/25
4	Power Meter	Rohde & Schwarz	NRP6A	TW/C-018-1	2026/9/25
5	Power Meter	Rohde & Schwarz	NRP6A	TW/C-018-2	2026/9/25
6	Antenna	Schwarzbeck	STLP9128DS	TW/C-019	--
7	Antenna	Schwarzbeck	BBHA9120D	TW/C-005	2026/12/4
8	Field probe	Narda	EP601	TW/C-037	2026/12/4
Electrical Fast Transient/burst Immunity					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Test Host	Haefely	AXOS5	TW/C-026-1	2026-09-25
Surge Immunity					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Test Host	Haefely	AXOS5	TW/C-026-1	2026-09-25
Power Frequency Magnetic Field Immunity					

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Power Frequency Magnetic Field Immunity Test System	Skylark	PFM-1000	TW/C-038	2026/9/25
Immunity To Conducted Disturbances, Induced By Radio-frequency Fields					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	CS Generator	Haefely	PCSG-100	TW/C-073	2027/5/5
2	Attenuator	Ruiming	100W6dB	TW/C-035	2026/9/25
3	CDN	CYBERTEK	EM5070A	TW/C-033	2026/9/25
Voltage dips and interruptions					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Test Host	Haefely	AXOS5	TW/C-026-1	2026-09-25
2	Voltage Dips Generator	Haefely	DIP116	TW/C-026-2	2026-09-25

5 Test procedure and results for emission

5.1 Continuous disturbances, AC mains port (150kHz – 30 MHz)

5.1.1 Test condition

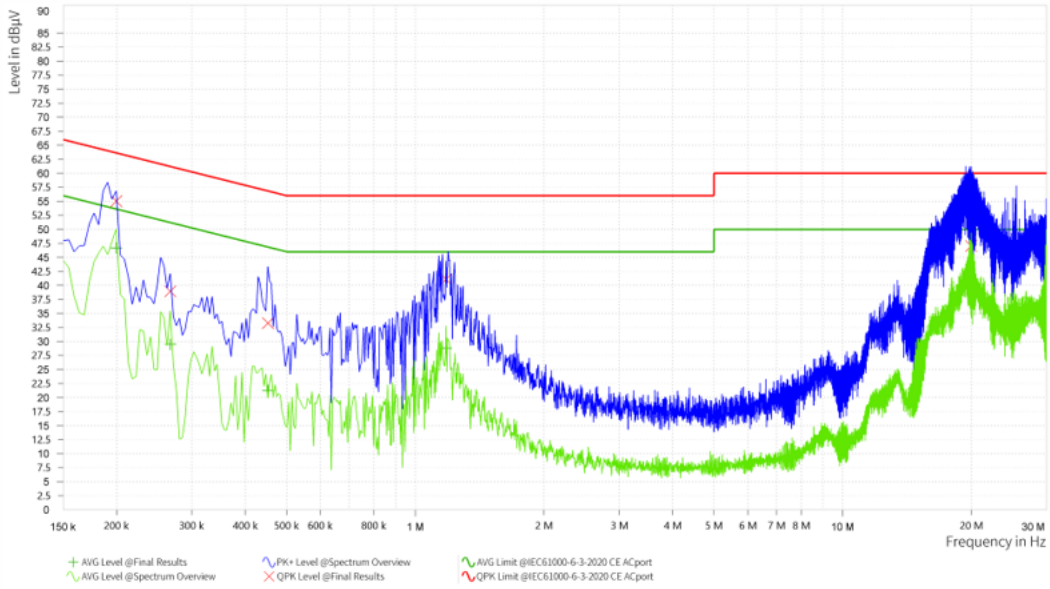
Applicable Standard:	**EN IEC 61000-6-4:2019, EN IEC 61000-6-3:2021**	
Test setup description:	☐	Setup Type A (40 cm distance to vertical ground plane, 80 cm over ground plane)
	☐	Setup Type B (40 cm distance to horizontal ground plane)
	☒	Floor standing equipment setup (10 cm over ground plane)
	☐	Other: --
	☐	Artificial hand applied
Test method applied:	☒	Artificial mains network
	☐	Other: --
Remark:	--	

Limits for conducted emissions - low voltage AC mains port		
Frequency range (MHz)	**Quasi-peak (dBµV)**	**Average (dBµV)**
0.15-0.5	79	66
0.5-30	73	60

Limits for conducted emissions - low voltage AC mains port		
Frequency range (MHz)	**Quasi-peak (dBµV)**	**Average (dBµV)**
0.15-0.5	66-56	56-46
0.5-5	56	46
5-30	60	50

5.1.2 Test results

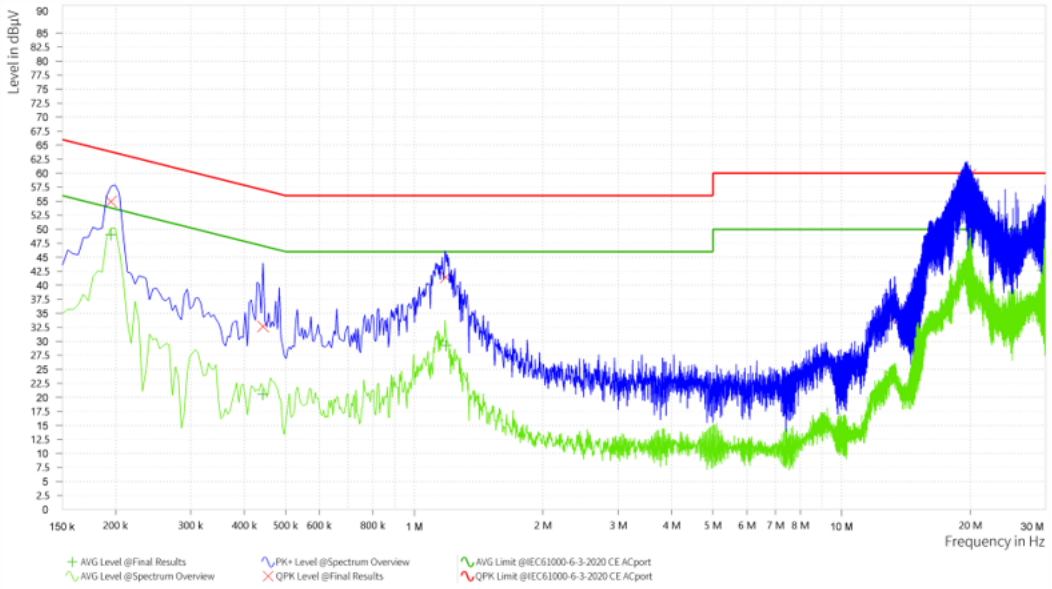
Model:	PG-3000A
Test mode:	Mode A
Test voltage:	AC 230V 50Hz
Remark:	Phase: L



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	0.200	55.04	63.63	8.59	46.69	53.63	6.94	9.000	1,000.000
1	0.267	38.98	61.21	22.24	29.50	51.21	21.71	9.000	1,000.000
1	0.452	33.25	56.85	23.60	21.25	46.85	25.60	9.000	1,000.000
1	1.181	41.09	56.00	14.91	28.83	46.00	17.17	9.000	1,000.000
1	19.986	47.02	60.00	12.98	39.41	50.00	10.59	9.000	1,000.000
1	29.868	48.01	60.00	11.99	44.47	50.00	5.53	9.000	1,000.000

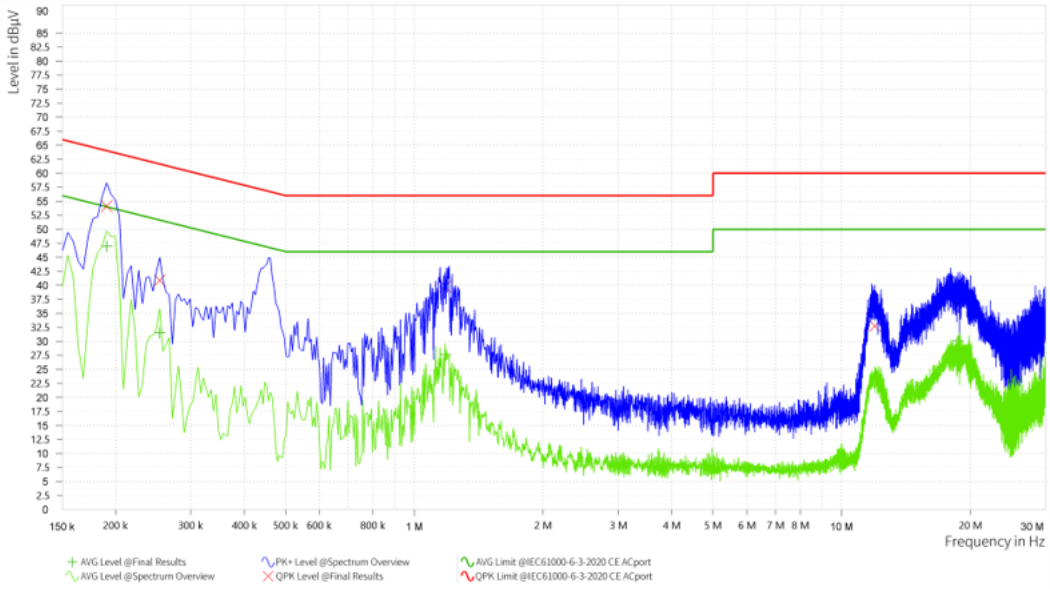
Model:	PG-3000A
Test mode:	Mode A
Test voltage:	AC 230V 50Hz
Remark:	Phase: N



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	0.195	54.96	63.82	8.86	49.05	53.82	4.78	9.000	1,000.000
1	0.443	32.66	57.01	24.35	20.57	47.01	26.45	9.000	1,000.000
1	1.185	41.46	56.00	14.54	29.25	46.00	16.75	9.000	1,000.000
1	13.092	33.99	60.00	26.01	24.50	50.00	25.50	9.000	1,000.000
1	19.977	59.74	60.00	0.26	49.83	50.00	0.17	9.000	1,000.000
1	29.589	52.28	60.00	7.72	42.70	50.00	7.30	9.000	1,000.000

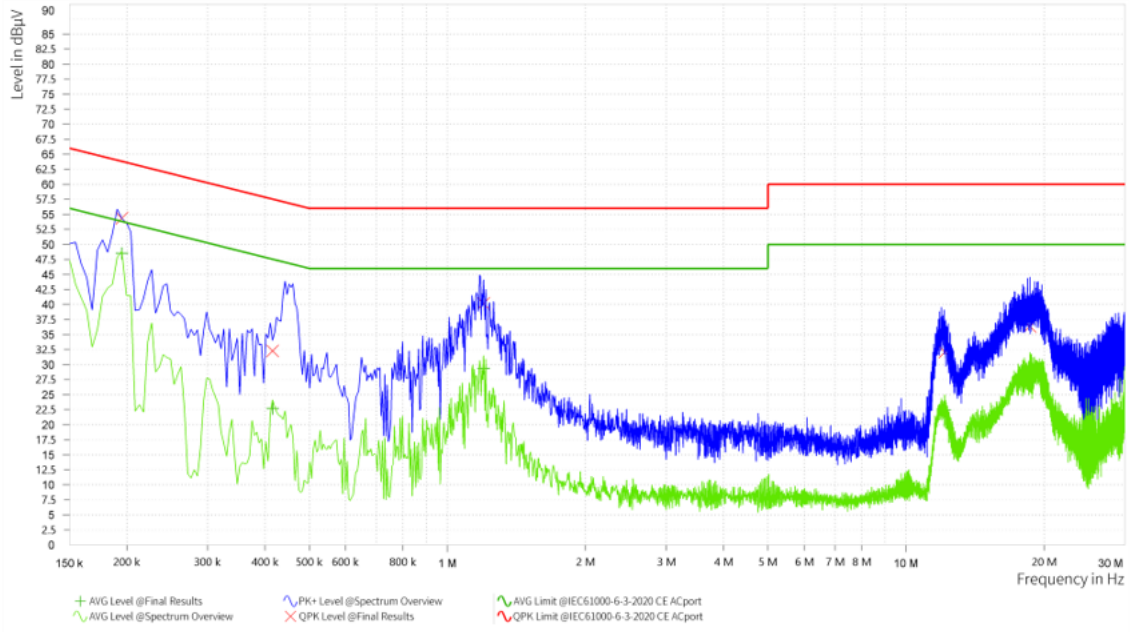
Model:	PG-3000A
Test mode:	Mode B
Test voltage:	AC 230V 50Hz
Remark:	Phase: L



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	0.191	54.15	64.01	9.86	46.96	54.01	7.05	9.000	1,000.000
1	0.254	40.85	61.64	20.79	31.51	51.64	20.13	9.000	1,000.000
1	1.181	39.77	56.00	16.23	27.67	46.00	18.33	9.000	1,000.000
1	11.963	32.70	60.00	27.30	22.98	50.00	27.02	9.000	1,000.000
1	18.717	37.41	60.00	22.59	30.07	50.00	19.93	9.000	1,000.000
1	28.442	30.91	60.00	29.09	19.24	50.00	30.76	9.000	1,000.000

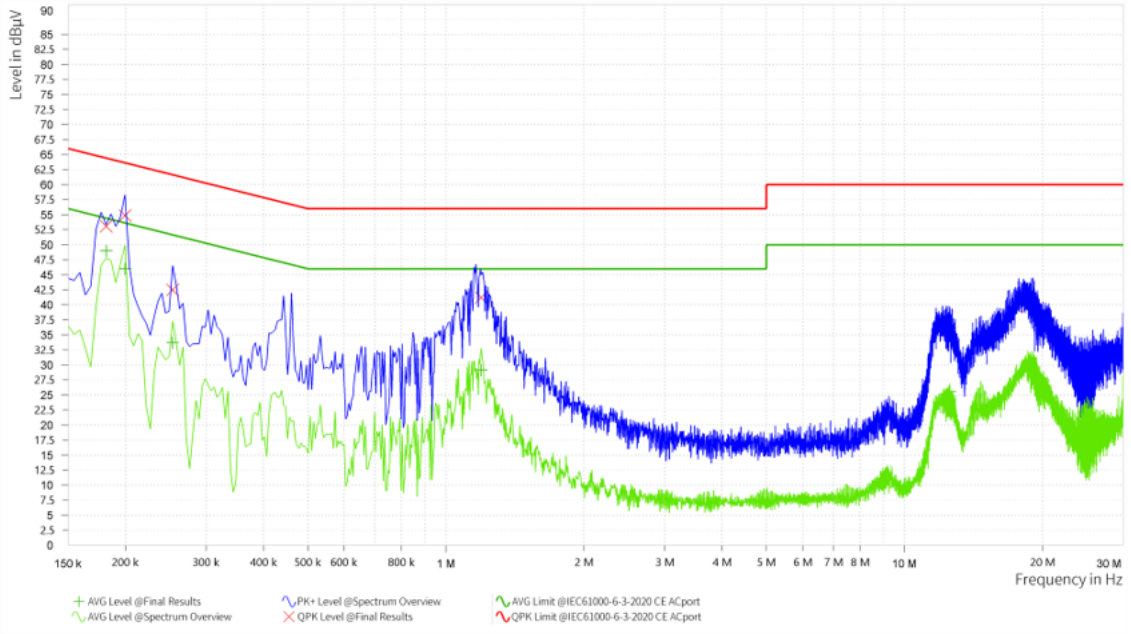
Model:	PG-3000A
Test mode:	Mode B
Test voltage:	AC 230V 50Hz
Remark:	Phase: N



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	0.195	54.37	63.82	9.45	48.51	53.82	5.31	9.000	1,000.000
1	0.416	32.28	57.54	25.26	22.71	47.54	24.83	9.000	1,000.000
1	1.199	40.17	56.00	15.83	29.38	46.00	16.62	9.000	1,000.000
1	12.147	32.09	60.00	27.91	22.47	50.00	27.53	9.000	1,000.000
1	18.623	36.41	60.00	23.59	28.14	50.00	21.86	9.000	1,000.000
1	29.112	32.07	60.00	27.93	20.41	50.00	29.59	9.000	1,000.000

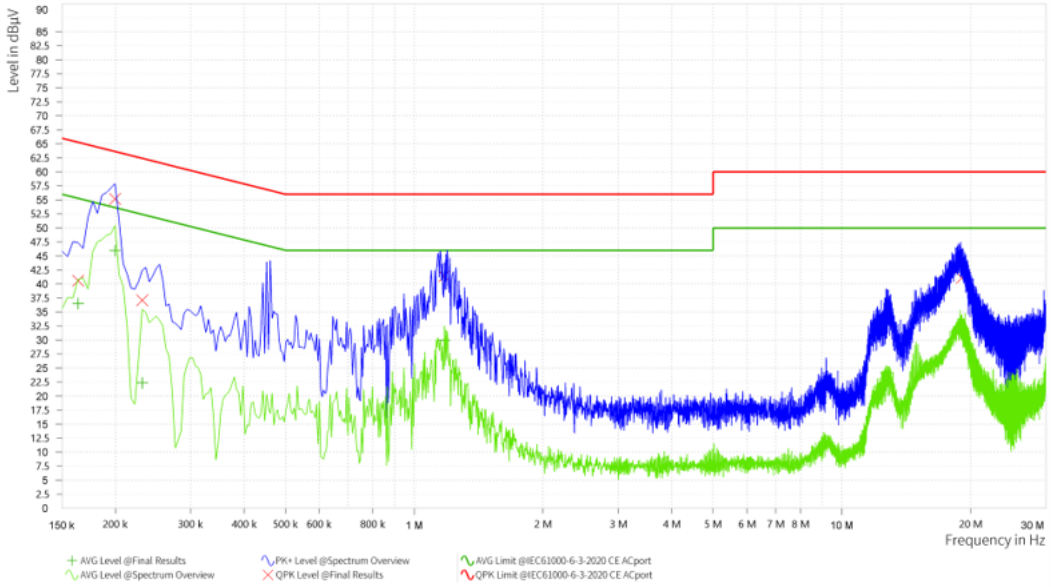
Model:	PG-3000A
Test mode:	Mode C
Test voltage:	AC 230V 50Hz
Remark:	Phase: L



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	0.182	53.08	64.42	11.33	48.98	54.42	5.43	9.000	1,000.000
1	0.200	54.89	63.63	8.75	46.01	53.63	7.62	9.000	1,000.000
1	0.254	42.49	61.64	19.15	33.68	51.64	17.97	9.000	1,000.000
1	1.194	41.23	56.00	14.77	29.13	46.00	16.87	9.000	1,000.000
1	12.566	35.12	60.00	24.88	25.54	50.00	24.46	9.000	1,000.000
1	18.582	39.68	60.00	20.32	30.62	50.00	19.38	9.000	1,000.000

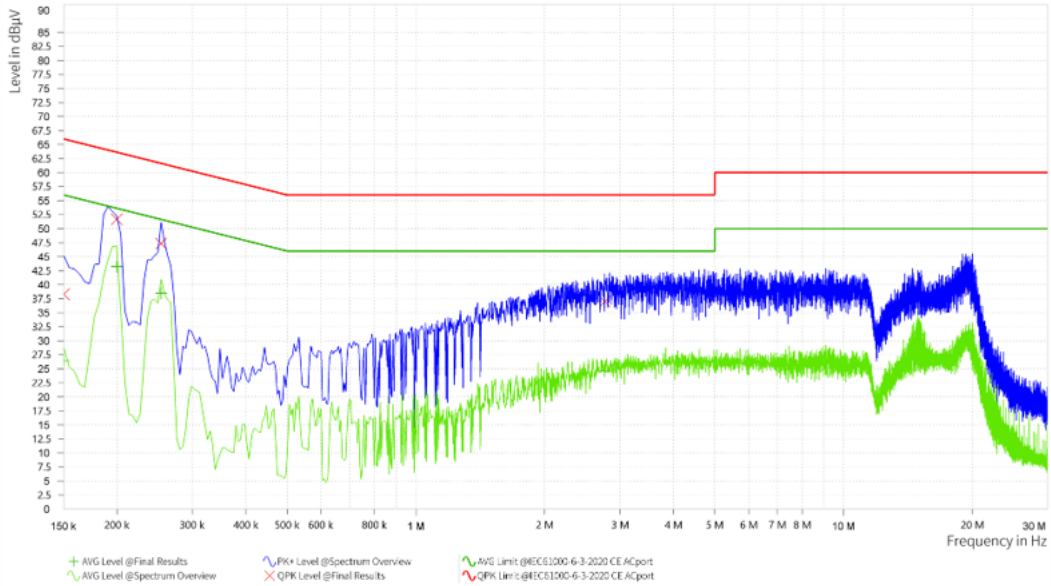
Model:	PG-3000A
Test mode:	Mode C
Test voltage:	AC 230V 50Hz
Remark:	Phase: N



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	0.164	40.61	65.28	24.68	36.51	55.28	18.78	9.000	1,000.000
1	0.200	55.19	63.63	8.44	45.96	53.63	7.67	9.000	1,000.000
1	0.231	37.10	62.41	25.31	22.37	52.41	30.04	9.000	1,000.000
1	1.176	41.43	56.00	14.57	29.95	46.00	16.05	9.000	1,000.000
1	12.696	33.30	60.00	26.70	24.14	50.00	25.86	9.000	1,000.000
1	19.095	41.09	60.00	18.91	31.69	50.00	18.31	9.000	1,000.000

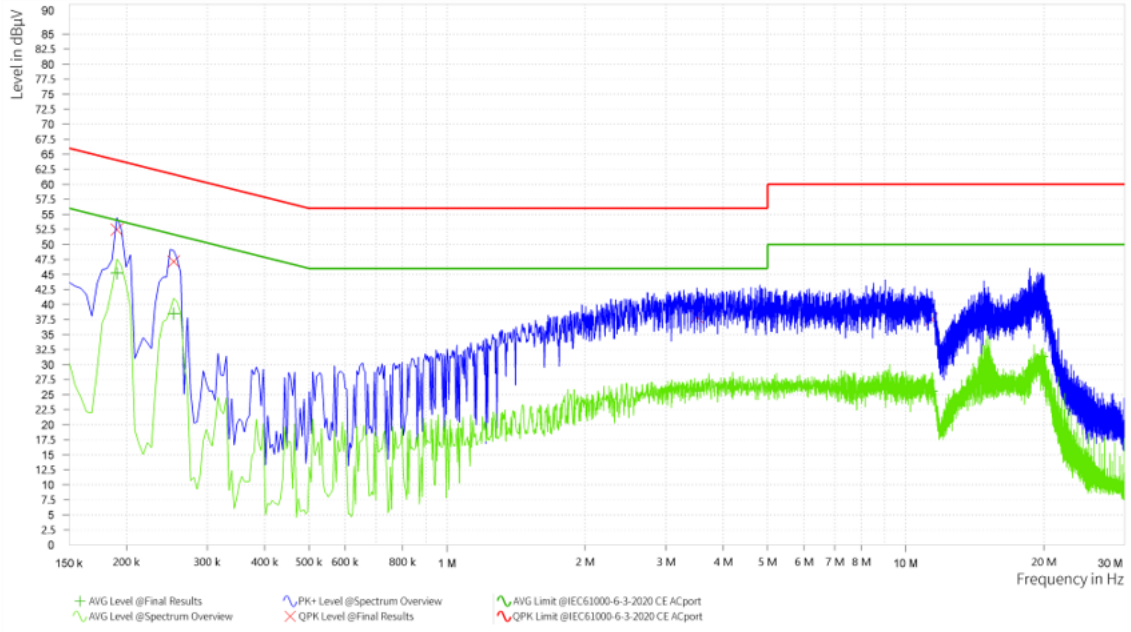
Model:	PG-3000A
Test mode:	Mode D
Test voltage:	AC 230V 50Hz
Remark:	Phase: L



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	0.150	38.29	66.00	27.71	26.47	56.00	29.53	9.000	1,000.000
1	0.200	51.66	63.63	11.97	43.25	53.63	10.39	9.000	1,000.000
1	0.254	47.34	61.64	14.31	38.49	51.64	13.15	9.000	1,000.000
1	2.765	36.95	56.00	19.05	24.56	46.00	21.44	9.000	1,000.000
1	14.942	37.94	60.00	22.06	31.21	50.00	18.79	9.000	1,000.000
1	19.730	38.89	60.00	21.11	30.66	50.00	19.34	9.000	1,000.000

Model:	PG-3000A
Test mode:	Mode D
Test voltage:	AC 230V 50Hz
Remark:	Phase: N



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	0.191	52.49	64.01	11.53	45.19	54.01	8.82	9.000	1,000.000
1	0.254	47.17	61.64	14.47	38.48	51.64	13.16	9.000	1,000.000
1	3.507	37.97	56.00	18.03	25.60	46.00	20.40	9.000	1,000.000
1	11.382	37.53	60.00	22.47	25.61	50.00	24.39	9.000	1,000.000
1	14.964	36.97	60.00	23.03	28.94	50.00	21.06	9.000	1,000.000
1	19.815	38.80	60.00	21.20	31.36	50.00	18.64	9.000	1,000.000

5.2 Continuous disturbances, DC power port (150kHz – 30 MHz)

5.2.1 Test condition

Applicable Standard:	EN IEC 61000-6-4:2019, EN IEC 61000-6-3:2021	
Test setup description:	☐	Setup Type A (40 cm distance to vertical ground plane, 80 cm over ground plane)
	☐	Setup Type B (40 cm distance to horizontal ground plane)
	☒	Floor standing equipment setup (10 cm over ground plane)
	☐	Other: --
	☐	Artificial hand applied
Test method applied:	☒	Artificial mains V-network
	☐	Artificial Δ-network
	☐	Other: --
Remark:	The PV cables whose total length according to the manufacturer's functional specification does not exceed 3 m.	

EN IEC 61000-6-4:2019 Limits for conducted emissions - DC power port		
Frequency range (MHz)	**Quasi-peak (dBμV)**	**Average (dBμV)**
0.15-0.5	89	76
0.5-30	83	70

EN IEC 61000-6-3:2021 Limits for conducted emissions - DC power port		
Measurement network: V-AN		
Frequency range (MHz)	**Quasi-peak (dBμV)**	**Average (dBμV)**
0.15-0.5	79	66
0.5-30	73	60
Measurement network: Δ-AN		
Frequency range (MHz)	**Quasi-peak (dBμV)**	**Average (dBμV)**
0.15-0.5	84-74	74-64
0.5-30	74	64

5.2.2 Test results

N/A

5.3 Continuous disturbances, other wired ports (150kHz – 30 MHz)

5.3.1 Test condition

Applicable Standard:	**EN IEC 61000-6-3:2021**	
Test setup description:	☐	Setup Type A (40 cm distance to vertical ground plane, 80 cm over ground plane)
	☐	Setup Type B (40 cm distance to horizontal ground plane)
	☐	Floor standing equipment setup (10 cm over ground plane)
	☐	Other: --
	☐	Artificial hand applied
Test method applied:	☐	Current probe
	☐	Capacitive voltage probe (CVP)
	☐	ISN
	☐	Other: --
Remark:	The Signal cables whose total length according to the manufacturer's functional specification does not exceed 3 m.	

EN IEC 61000-6-3:2021 Limits for conducted emissions - other wired ports				
Frequency range (MHz)	**Voltage limits**		**Current limits**	
	Quasi-peak (dBµV)	**Average (dBµV)**	**Quasi-peak (dBµA)**	**Average (dBµA)**
0.15-0.5	84-74	74-64	40-30	30-20
0.5-30	74	64	30	20

5.3.2 Test results

N/A

5.4 Discontinuous disturbances (9 kHz – 30 MHz)

5.4.1 Test condition

Applicable Standard:	**EN IEC 61000-6-4:2019 / EN IEC 55014-1:2021 EN IEC 61000-6-3:2021 / EN IEC 55014-1:2021**	
Test setup description:	☐	Setup Type A (40 cm distance to vertical ground plane, 80 cm over ground plane)
	☐	Setup Type B (40 cm distance to horizontal ground plane)
	☐	Floor standing equipment setup (10 cm over ground plane)
	☐	Other: --
	☐	Artificial hand applied
CDN applied:	☐	Artificial mains network
	☐	Other: --
Applied method for discontinuous disturbances:	☐	Click rate determined on base of switching operations
	☐	Click rate determined on base of clicks measurements
	☐	Other: --
Remark:	--	

5.4.2 Test results

N/A

5.5 Radiated emission (below 1GHz)

5.5.1 Test condition

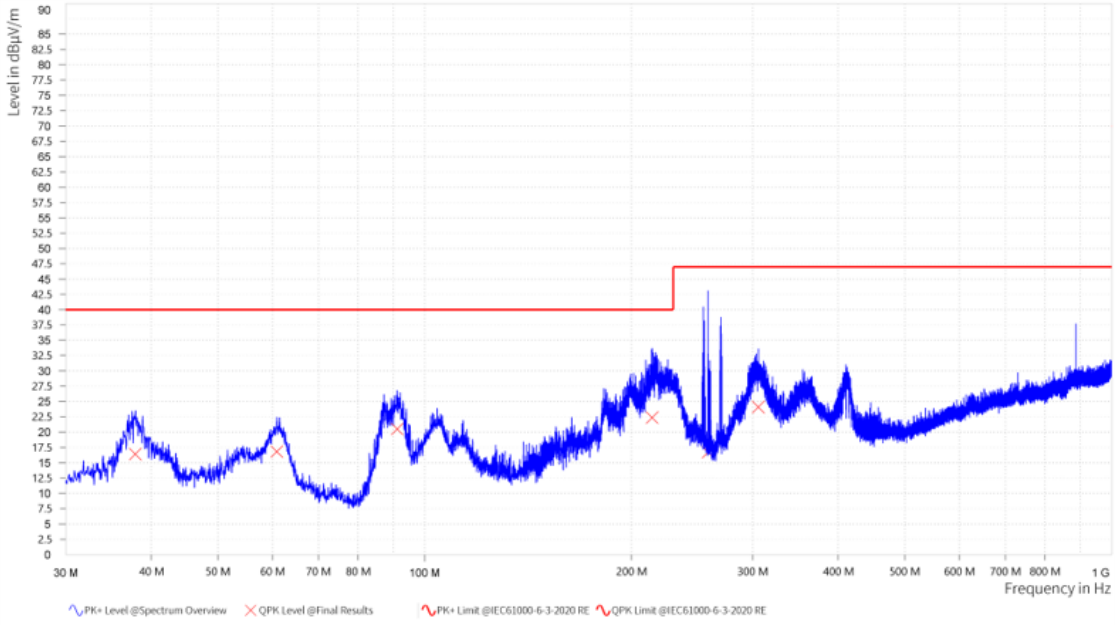
Applicable Standard:	**EN IEC 61000-6-4:2019, EN IEC 61000-6-3:2021**	
Test set up description:	☐	Equipment on a table of 80 cm height
	☒	Equipment on the floor (isolated from ground plane)
	☐	Other (e.g. height of pallet):
Supplementary test set-up description for **SAC**:	Measurements were made in semi-anechoic chamber that complies to CISPR 16. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements with quasi-peak detector for below 1GHz were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable.	
Test method applied (30 MHz to 1000 MHz):	☒	OATS or SAC with measurement distance [m]: 3 m
	☐	TEM Waveguide according to IEC 61000-4-20
	☐	FAR with measurement distance [m]: 3 m
Remark:	--	

EN IEC 61000-6-4:2019 Limits for SAC 3 m distance	
Frequency range (MHz)	**Quasi-peak (dBµV/m)**
30-230	50
230-1000	57

EN IEC 61000-6-3:2021 Limits for SAC 3 m distance	
Frequency range (MHz)	**Quasi-peak (dBµV/m)**
30-230	40
230-1000	47

5.5.2 Test results

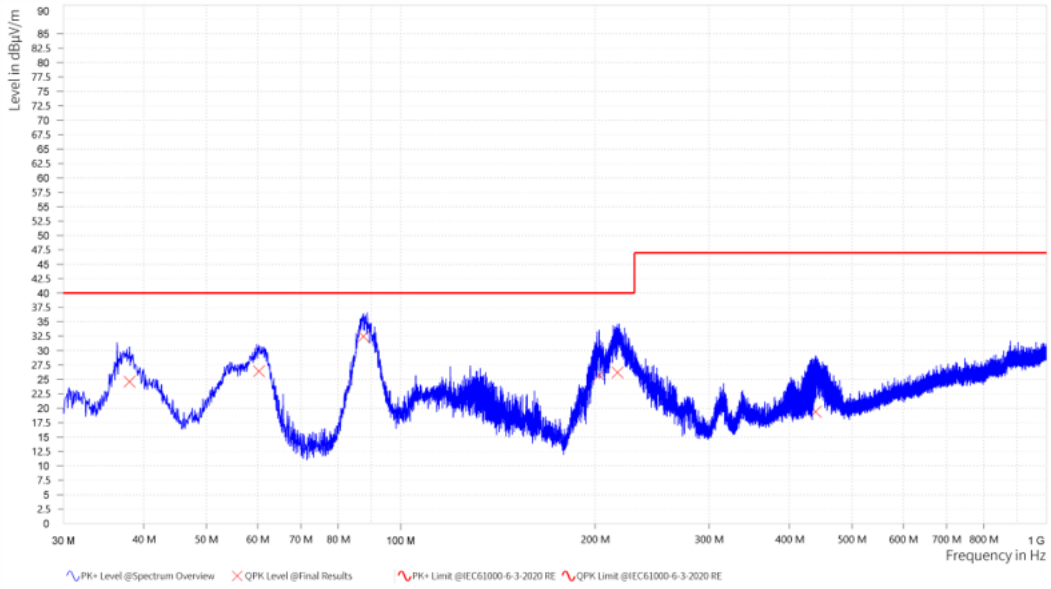
Model:	PG-3000A
Test mode:	Mode A
Test voltage:	PV + AC 230V 50Hz (on grid) + Battery charging
Remark:	Horizontal



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	37.920	16.38	40.00	23.62	120.000	1,000.000
1	60.900	16.82	40.00	23.18	120.000	1,000.000
1	91.200	20.50	40.00	19.50	120.000	1,000.000
1	214.320	22.37	40.00	17.63	120.000	1,000.000
1	258.600	16.69	47.00	30.31	120.000	1,000.000
1	305.880	24.10	47.00	22.90	120.000	1,000.000

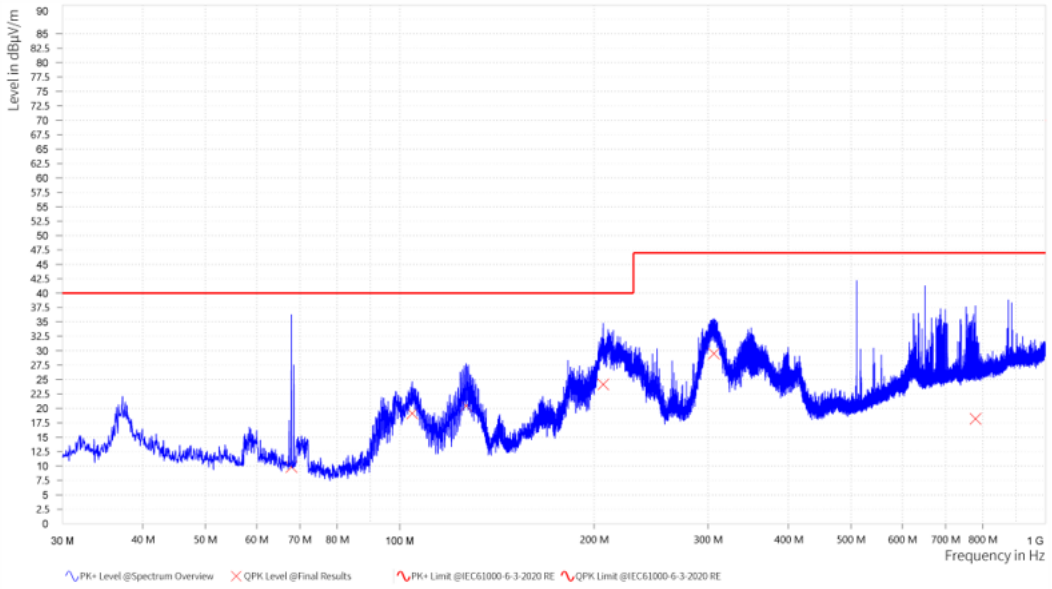
Model:	PG-3000A
Test mode:	Mode A
Test voltage:	PV + AC 230V 50Hz (on grid) + Battery charging
Remark:	Vertical



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	37.980	24.64	40.00	15.36	120.000	1,000.000
1	60.300	26.43	40.00	13.57	120.000	1,000.000
1	87.480	32.49	40.00	7.51	120.000	1,000.000
1	202.860	25.75	40.00	14.25	120.000	1,000.000
1	216.600	26.22	40.00	13.78	120.000	1,000.000
1	438.780	19.40	47.00	27.60	120.000	1,000.000

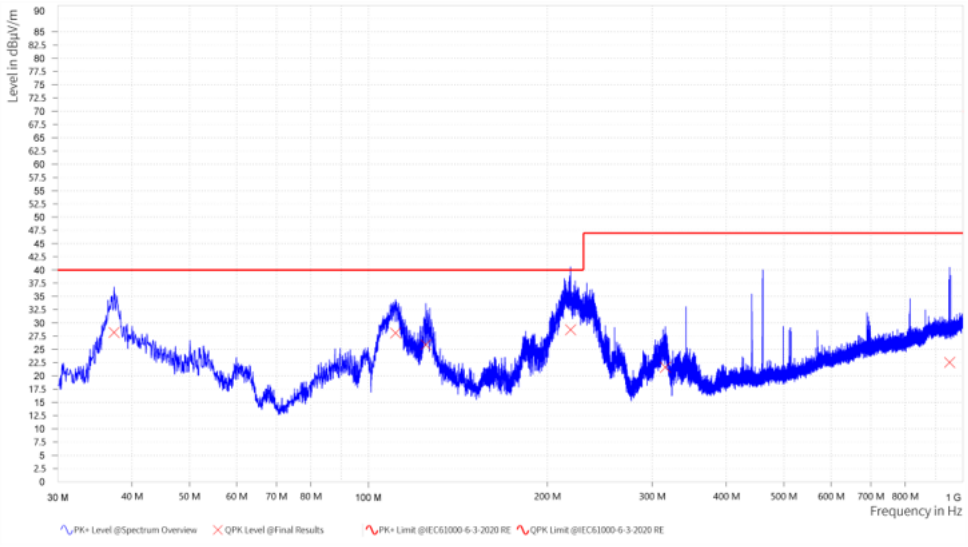
Model:	PG-3000A
Test mode:	Mode B
Test voltage:	AC Input + Battery charging
Remark:	Horizontal



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	67.920	9.82	40.00	30.18	120.000	1,000.000
1	104.460	19.10	40.00	20.90	120.000	1,000.000
1	126.660	20.45	40.00	19.55	120.000	1,000.000
1	206.520	24.17	40.00	15.83	120.000	1,000.000
1	306.420	29.50	47.00	17.50	120.000	1,000.000
1	779.280	18.19	47.00	28.81	120.000	1,000.000

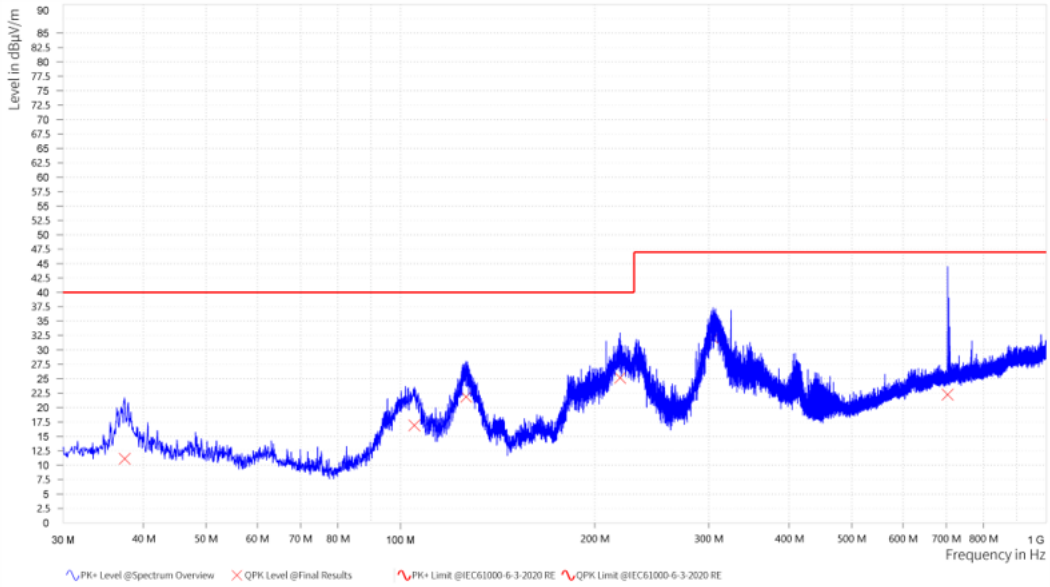
Model:	PG-3000A
Test mode:	Mode B
Test voltage:	AC Input + Battery charging
Remark:	Vertical



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	37.320	28.20	40.00	11.80	120.000	1,000.000
1	111.120	28.09	40.00	11.91	120.000	1,000.000
1	124.860	25.88	40.00	14.12	120.000	1,000.000
1	218.760	28.70	40.00	11.30	120.000	1,000.000
1	315.900	21.60	47.00	25.40	120.000	1,000.000
1	950.100	22.53	47.00	24.47	120.000	1,000.000

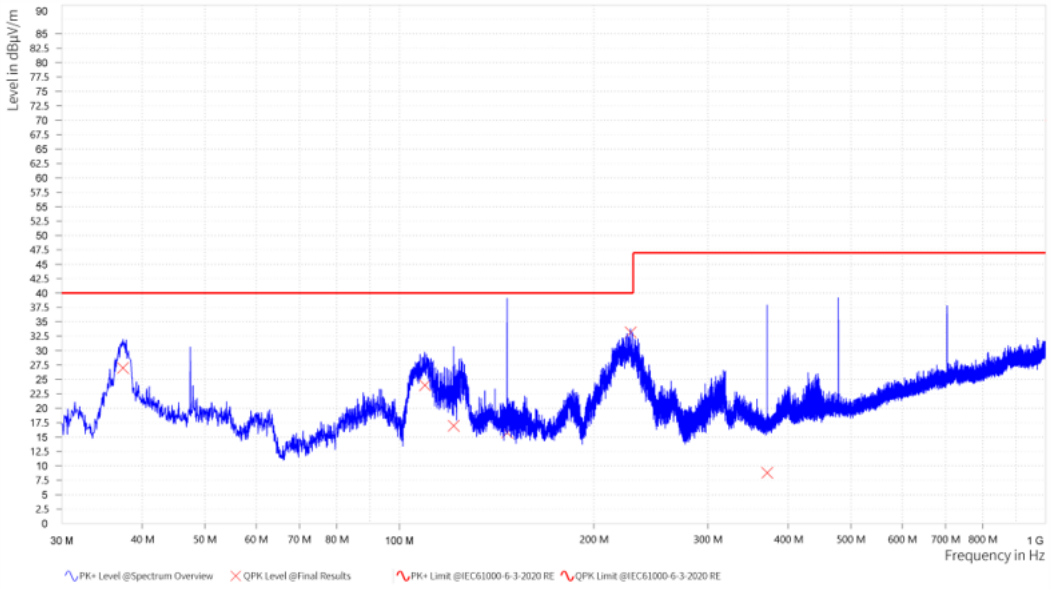
Model:	PG-3000A
Test mode:	Mode C
Test voltage:	Battery discharging + AC 230V 50Hz(on grid)
Remark:	Horizontal



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	37.380	11.09	40.00	28.91	120.000	1,000.000
1	105.060	16.92	40.00	23.08	120.000	1,000.000
1	126.360	21.87	40.00	18.13	120.000	1,000.000
1	218.700	25.16	40.00	14.84	120.000	1,000.000
1	304.800	32.01	47.00	14.99	120.000	1,000.000
1	703.740	22.26	47.00	24.74	120.000	1,000.000

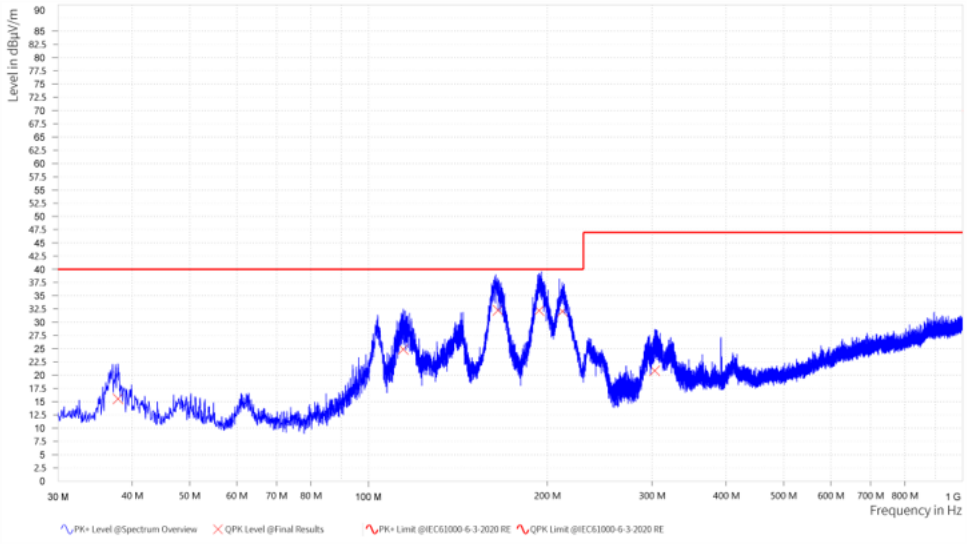
Model:	PG-3000A
Test mode:	Mode C
Test voltage:	Battery discharging + AC 230V 50Hz(on grid)
Remark:	Vertical



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	37.320	27.01	40.00	12.99	120.000	1,000.000
1	109.440	23.98	40.00	16.02	120.000	1,000.000
1	121.320	16.96	40.00	23.04	120.000	1,000.000
1	146.760	15.78	40.00	24.22	120.000	1,000.000
1	228.000	33.15	40.00	6.85	120.000	1,000.000
1	371.040	8.81	47.00	38.19	120.000	1,000.000

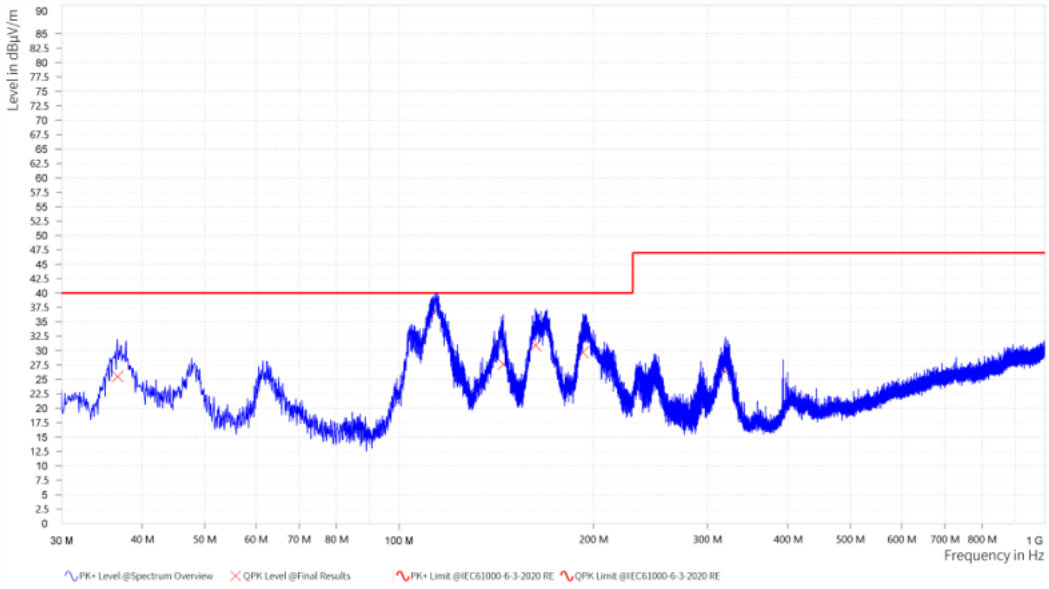
Model:	PG-3000A
Test mode:	Mode D
Test voltage:	Battery Discharging + AC Load
Remark:	Horizontal



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	37.860	15.51	40.00	24.49	120.000	1,000.000
1	114.420	24.89	40.00	15.11	120.000	1,000.000
1	165.180	32.24	40.00	7.76	120.000	1,000.000
1	193.680	32.21	40.00	7.79	120.000	1,000.000
1	212.160	32.05	40.00	7.95	120.000	1,000.000
1	303.360	20.84	47.00	26.16	120.000	1,000.000

Model:	PG-3000A
Test mode:	Mode D
Test voltage:	Battery Discharging + AC Load
Remark:	Vertical



EMI Final Results

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Meas. BW [kHz]	Meas. Time [ms]
1	36.600	25.51	40.00	14.49	120.000	1,000.000
1	113.880	36.83	40.00	3.17	120.000	1,000.000
1	144.960	27.65	40.00	12.35	120.000	1,000.000
1	162.660	30.94	40.00	9.06	120.000	1,000.000
1	192.480	29.72	40.00	10.28	120.000	1,000.000
1	320.040	26.36	47.00	20.64	120.000	1,000.000

5.6 Radiated emission (above 1GHz)

5.6.1 Test condition

Applicable Standard:	EN IEC 61000-6-4:2019, EN IEC 61000-6-3:2021	
Test set up description:	☐	Equipment on a table of 80 cm height
	☐	Equipment on the floor (isolated from ground plane)
	☐	Other:
Supplementary test set-up description for **SAC**:	Measurements were made in semi-anechoic chamber with RF absorber on the RGP which complies to CISPR 16. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements with peak and average detector were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable.	
Test method applied (1000 MHz to 6000 MHz):	☐	FSOATS with measurement distance [m]: 3 m
	☐	OATS with measurement distance [m]: 3 m
	☐	FAR with measurement distance [m]: 3 m
	☐	SAC with measurement distance [m]: 3 m
Remark:	The highest operation frequency is below 108MHz.	

EN IEC 61000-6-4:2019 Limits for 3 m distance		
Frequency range (MHz)	**Peak (dBμV/m)**	**Average (dBμV/m)**
1000 – 3000	76	56
3000 – 6000	80	60

EN IEC 61000-6-3:2021 Limits for 3 m distance		
Frequency range (MHz)	**Peak (dBμV/m)**	**Average (dBμV/m)**
1000 – 3000	70	50
3000 – 6000	74	54

5.6.2 Test results

N/A

5.7 Harmonics current emissions

5.7.1 Test condition

Applicable Standard:	**EN IEC 61000-6-3:2021 (EN 61000-3-12:2011)**	
Test set up description:	Floor standing equipment set-up (10 cm over ground plane)	
Test method:	☒	Direct measurement
	☐	Calculation by validated simulation
Limit classification in accordance with the standard:	☒	Nonsymmetrical equipment (Table 2)
	☐	Symmetrical 3-phase equipment (Table 3)
	☐	Symmetrical 3-phase equipment under special conditions (Table 4)
		☐ Condition a)
		☐ Condition b)
		☐ Condition c)
	☐	Symmetrical 3-phase equipment under special conditions (Table 5)
		☐ Condition d)
		☐ Condition e)
		☐ Condition f)
Observation period	2.5 min	
Remark:	--	

5.7.2 Test results

Table 1 Harmonic Current Test (61000-3-2) [L1]	OK		
POHC Test	satisfied	24.0 %	
H2 Test	OK		
100 % Average Test	OK		No test required (0.016 A ≤ 0.016 A)
150 % Smoothed Test	OK	1.1 %	Limit met (0.018 A ≤ 1.620 A)
H3 Test	OK		
100 % Average Test	OK	13.9 %	Limit met (0.319 A ≤ 2.300 A)
150 % Smoothed Test	OK	9.4 %	Limit met (0.324 A ≤ 3.450 A)
H4 Test	OK		
100 % Average Test	OK	11.0 %	Limit met (0.047 A ≤ 0.430 A)
150 % Smoothed Test	OK	8.1 %	Limit met (0.052 A ≤ 0.645 A)
H5 Test	OK		
100 % Average Test	OK	10.6 %	Limit met (0.120 A ≤ 1.140 A)
150 % Smoothed Test	OK	7.3 %	Limit met (0.125 A ≤ 1.710 A)
H6 Test	OK		
100 % Average Test	OK	8.2 %	Limit met (0.025 A ≤ 0.300 A)
150 % Smoothed Test	OK	6.2 %	Limit met (0.028 A ≤ 0.450 A)
H7 Test	OK		
100 % Average Test	OK	22.7 %	Limit met (0.174 A ≤ 0.770 A)
150 % Smoothed Test	OK	15.4 %	Limit met (0.178 A ≤ 1.155 A)
H8 Test	OK		
100 % Average Test	OK	10.0 %	Limit met (0.023 A ≤ 0.230 A)
150 % Smoothed Test	OK	7.4 %	Limit met (0.026 A ≤ 0.345 A)
H9 Test	OK		
100 % Average Test	OK	11.2 %	Limit met (0.045 A ≤ 0.400 A)
150 % Smoothed Test	OK	8.3 %	Limit met (0.050 A ≤ 0.600 A)
H10 Test	OK		
100 % Average Test	OK	14.1 %	Limit met (0.026 A ≤ 0.184 A)
150 % Smoothed Test	OK	11.2 %	Limit met (0.031 A ≤ 0.276 A)
H11 Test	OK		

100 % Average Test	OK	16.8 %	Limit met (0.056 A ≤ 0.330 A)
150 % Smoothed Test	OK	12.7 %	Limit met (0.063 A ≤ 0.495 A)
H12 Test	OK		
100 % Average Test	OK	13.6 %	Limit met (0.021 A ≤ 0.153 A)
150 % Smoothed Test	OK	10.6 %	Limit met (0.024 A ≤ 0.230 A)
H13 Test	OK		
100 % Average Test	OK	14.3 %	Limit met (0.030 A ≤ 0.210 A)
150 % Smoothed Test	OK	10.5 %	Limit met (0.033 A ≤ 0.315 A)
H14 Test	OK		
100 % Average Test	OK	19.7 %	Limit met (0.026 A ≤ 0.131 A)
150 % Smoothed Test	OK	14.5 %	Limit met (0.029 A ≤ 0.197 A)
H15 Test	OK		
100 % Average Test	OK	20.3 %	Limit met (0.030 A ≤ 0.150 A)
150 % Smoothed Test	OK	15.2 %	Limit met (0.034 A ≤ 0.225 A)
H16 Test	OK		
100 % Average Test	OK	20.5 %	Limit met (0.024 A ≤ 0.115 A)
150 % Smoothed Test	OK	15.0 %	Limit met (0.026 A ≤ 0.172 A)
H17 Test	OK		
100 % Average Test	OK	15.3 %	Limit met (0.020 A ≤ 0.132 A)
150 % Smoothed Test	OK	11.3 %	Limit met (0.023 A ≤ 0.199 A)
H18 Test	OK		
100 % Average Test	OK	20.4 %	Limit met (0.021 A ≤ 0.102 A)
150 % Smoothed Test	OK	15.0 %	Limit met (0.023 A ≤ 0.153 A)
H19 Test	OK		
100 % Average Test	OK	19.7 %	Limit met (0.023 A ≤ 0.118 A)
150 % Smoothed Test	OK	14.5 %	Limit met (0.026 A ≤ 0.178 A)
H20 Test	OK		
100 % Average Test	OK	21.9 %	Limit met (0.020 A ≤ 0.092 A)
150 % Smoothed Test	OK	15.9 %	Limit met (0.022 A ≤ 0.138 A)
H21 Test	OK		

100 % Average Test	OK	21.0 %	Limit met (0.023 A ≤ 0.107 A)
150 % Smoothed Test	OK	15.3 %	Limit met (0.025 A ≤ 0.161 A)
H22 Test	OK		
100 % Average Test	OK	20.8 %	Limit met (0.017 A ≤ 0.084 A)
150 % Smoothed Test	OK	15.5 %	Limit met (0.019 A ≤ 0.125 A)
H23 Test	OK		
100 % Average Test	OK		No test required (0.016 A ≤ 0.016 A)
150 % Smoothed Test	OK	12.2 %	Limit met (0.018 A ≤ 0.147 A)
H24 Test	OK		
100 % Average Test	OK	24.2 %	Limit met (0.019 A ≤ 0.077 A)
150 % Smoothed Test	OK	17.8 %	Limit met (0.021 A ≤ 0.115 A)
H25 Test	OK		
100 % Average Test	OK	24.5 %	Limit met (0.022 A ≤ 0.090 A)
150 % Smoothed Test	OK	17.5 %	Limit met (0.024 A ≤ 0.135 A)
H26 Test	OK		
100 % Average Test	OK	26.4 %	Limit met (0.019 A ≤ 0.071 A)
150 % Smoothed Test	OK	19.1 %	Limit met (0.020 A ≤ 0.106 A)
H27 Test	OK		
100 % Average Test	OK	19.5 %	Limit met (0.016 A ≤ 0.083 A)
150 % Smoothed Test	OK	14.3 %	Limit met (0.018 A ≤ 0.125 A)
H28 Test	OK		
100 % Average Test	OK	25.1 %	Limit met (0.016 A ≤ 0.066 A)
150 % Smoothed Test	OK	18.4 %	Limit met (0.018 A ≤ 0.099 A)
H29 Test	OK		
100 % Average Test	OK	24.0 %	Limit met (0.019 A ≤ 0.078 A)
150 % Smoothed Test	OK	17.4 %	Limit met (0.020 A ≤ 0.116 A)
H30 Test	OK		
100 % Average Test	OK		No test required (0.016 A ≤ 0.016 A)
150 % Smoothed Test	OK	19.8 %	Limit met (0.018 A ≤ 0.092 A)
H31 Test	OK		

100 % Average Test	OK	22.3 %	Limit met (0.016 A ≤ 0.073 A)
150 % Smoothed Test	OK	16.2 %	Limit met (0.018 A ≤ 0.109 A)
H32 Test	OK		
100 % Average Test	OK		No test required (0.015 A ≤ 0.016 A)
150 % Smoothed Test	OK	19.4 %	Limit met (0.017 A ≤ 0.086 A)
H33 Test	OK		
100 % Average Test	OK	25.3 %	Limit met (0.017 A ≤ 0.068 A)
150 % Smoothed Test	OK	18.4 %	Limit met (0.019 A ≤ 0.102 A)
H34 Test	OK		
100 % Average Test	OK		No test required (0.016 A ≤ 0.016 A)
150 % Smoothed Test	OK	22.1 %	Limit met (0.018 A ≤ 0.081 A)
H35 Test	OK		
100 % Average Test	OK	27.3 %	Limit met (0.018 A ≤ 0.064 A)
150 % Smoothed Test	OK	20.4 %	Limit met (0.020 A ≤ 0.096 A)
H36 Test	OK		
100 % Average Test	OK		No test required (0.016 A ≤ 0.016 A)
150 % Smoothed Test	OK	22.5 %	Limit met (0.017 A ≤ 0.077 A)
H37 Test	OK		
100 % Average Test	OK	29.9 %	Limit met (0.018 A ≤ 0.061 A)
150 % Smoothed Test	OK	21.5 %	Limit met (0.020 A ≤ 0.091 A)
H38 Test	OK		
100 % Average Test	OK		No test required (0.014 A ≤ 0.016 A)
150 % Smoothed Test	OK	20.9 %	Limit met (0.015 A ≤ 0.073 A)
H39 Test	OK		
100 % Average Test	OK	39.7 %	Limit met (0.023 A ≤ 0.058 A)
150 % Smoothed Test	OK	28.5 %	Limit met (0.025 A ≤ 0.087 A)
H40 Test	OK		
100 % Average Test	OK		No test required (0.014 A ≤ 0.016 A)
150 % Smoothed Test	OK		No test required (0.015 A ≤ 0.016 A)

5.8 Voltage fluctuation and flicker

5.8.1 Test condition

Applicable Standard:	**EN IEC 61000-6-3:2021 (EN IEC 61000-3-11:2019)**	
Test set up description:	Floor standing equipment set-up (10 cm over ground plane)	
Test method:	☐	4.2.2 Flickermeter according to IEC 61000-4-15
	☐	4.2.3 Simulation
	☐	4.2.4 Analytical method
	☐	4.2.5 Use of P_{st} = 1 curve
	☒	4.3 Long-Term flicker value P_{lt}
Observation time selected:	☐	10 Minutes
	☒	120 Minutes
	☐	24 times switching
	☐	Other: --
Limit for d_{max} applied:	☒	4 %
	☐	6 %
	☐	7 %
Remark:	--	

5.8.2 Test results

Test Name	Test Result	Limit Usage	Info
dc Test [L1]	OK	0.5 %	0.02 % ≤ 3.30 %
dmax Test [L1]	OK	0.4 %	0.02 % ≤ 4.00 %
Pst Test [L1]	OK	2.2 %	0.022 ≤ 1.000
Plt Test [L1]	OK	3.2 %	0.021 ≤ 0.650
tmax Test [L1]	OK		

6 Test condition and results for immunity

6.1 General information

Performance criteria as defined by the standard EN IEC 61000-6-2:2019, EN IEC 61000-6-1:2019	
Criterion	**Description from standard**
A	The EUT shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the EUT is used as intended. If the performance level is not specified by the manufacturer, this may be derived from the product description and documentation and what the user may reasonably expect from the equipment if used as intended.
B	The EUT shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the EUT is used as intended. The performance level may be replaced by a permissible loss of performance. However, during the test degradation of performance is allowed but no change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the equipment if used as intended.
C	Temporary loss of function is allowed during the test, provided the function is self-recoverable or can be restored by the operation of the controls.
Other:	--

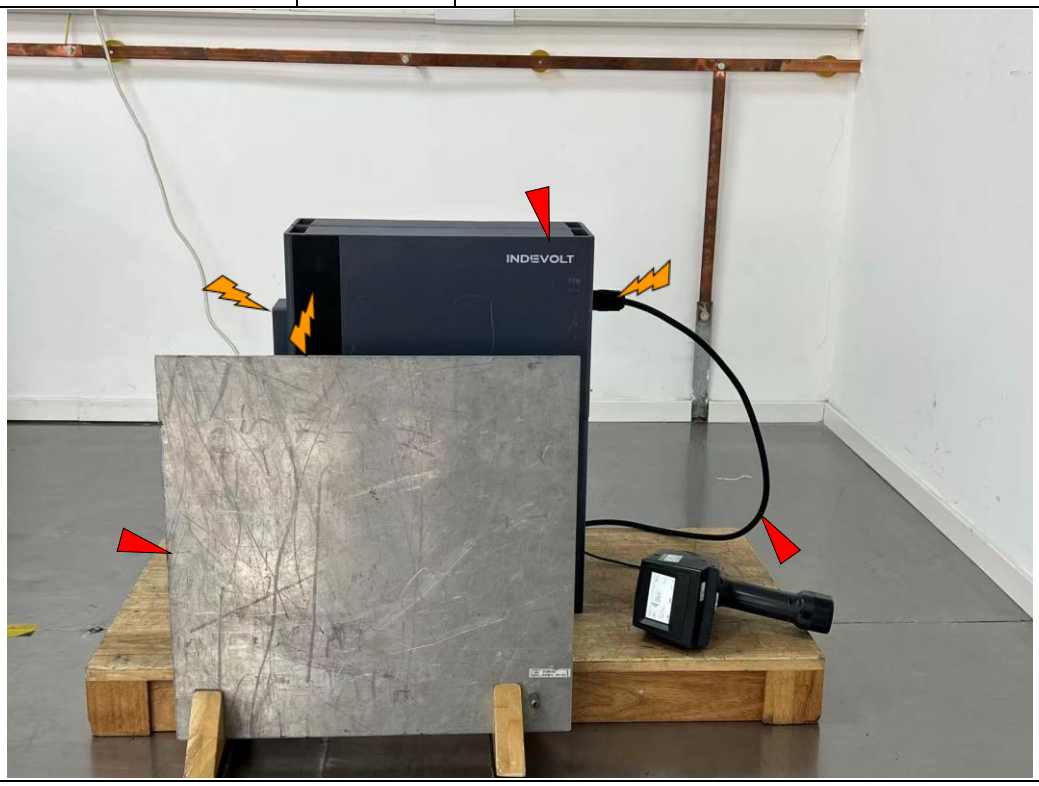
6.2 Electrostatic discharge immunity test (ESD)

6.2.1 Test condition

Basic standard:	**IEC 61000-4-2:2008 / EN 61000-4-2:2009**	
Test set up:	☐	Table-top equipment
	☒	Floor standing equipment
	☐	Wall or ceiling mounted equipment (Treated as table top)
Supplementary test set up description:	Measurements were made on a ground plane that extends 0.5 m minimum beyond all sides of the system under test and the minimum distance between the equipment under test and any laboratory walls or any other metallic surfaces shall be at least 1 m. Air discharges were applied to non-metallic parts of the system. Contact discharges were applied to all accessible metallic parts. Discharges were also applied to the Horizontal and Vertical Coupling Planes, where applicable.	
Discharge impedance:	330 ohm / 150 pF	
Size of horizontal coupling plate:	1.6 x 0.8 m	
Size of vertical coupling plate:	0.5 x 0.5 m	
Number of discharges for each test point:	10	
Discharge interval:	1 s	
Performance criterion:	B	
Remark:	--	

6.2.2 Test results

Operating mode:	Mode B			
Ambient temperature:	24.5 ℃			
Relative humidity:	47 %			
Atmospheric pressure:	101.6 kPa			
Supplementary information:	--			
Location of discharge	**Test level (kV)**	**Polarity**	**Type**	**Observations**
VCP	2,4	+/-	Contact discharge	Note 1
Points on conductive surface as indicated in the picture below	2,4	+/-	Contact discharge	Note 1
Points on non-conductive surface as indicated in the picture below	2, 4, 8	+/-	Air discharge	Note 1
Note 1: EUT worked as intended during and after test.				
Photos of test points:				
Symbols identifying discharge applied:		Contact discharge		
		Air discharge		



6.3 Radiated, Radio-frequency, Electromagnetic field immunity test (RS)

6.3.1 Test condition

Basic standard:	**IEC 61000-4-3:2020 / EN IEC 61000-4-3:2020**	
Test setup:	☐	Table-top equipment
	☒	Floor standing equipment
	☐	Other: --
Supplementary test set up description:	Measurements were made in a semi or full anechoic chamber or TEM or reverberation chamber and the indicated field strength was pre-calibrated prior to placement of the system under test. For semi or full anechoic chamber the tests were performed in both the horizontal and vertical polarities, where applicable. The antenna was placed between 1 and 3 m from the product under test.	
Antenna height:	1.5 m	
Distance antenna to EUT:	3 m	
Modulation:	80 % AM with 1 kHz	
Dwell time:	3 s	
Step size:	1%	
Applied testing method:	☒	IEC 61000-4-3 Radiated Field with Antenna
	☐	IEC 61000-4-22 Radiated emission and immunity measurements in fully anechoic rooms (FARs)
	☐	IEC 61000-4-20 Emission and immunity testing in transverse electromagnetic (TEM) waveguides
Performance criterion:	A	
Remark:	--	

6.3.2 Test results

Operating mode:	Mode B				
Supplementary information:	--				
Frequency range	**Test level (V/m)**	**Polarization**	**Azimuth**	**Modulation**	**Observations**
80 MHz – 1000 MHz	3 & 10	Horizontal/ Vertical	0°	AM 1 kHz, 80 %	Note 1
			90°		
			180°		
			270°		
1.4 GHz – 6 GHz	3	Horizontal/ Vertical	0°	AM 1 kHz, 80 %	Note 1
			90°		
			180°		
			270°		
Note 1: EUT worked as intended during and after test.					

6.4 Electrical fast transient/Burst immunity test (EFT)

6.4.1 Test condition

Basic standard:	**IEC 61000-4-4:2012 / EN 61000-4-4:2012**
Test setup:	☐ Table-top equipment
	☒ Floor standing equipment
	☐ Artificial hand applied
Supplementary test set up description:	The ground reference plane shall project beyond the EUT by at least 0.1 m on all sides. The minimum distance between the EUT and all other conductive structures (including the generator, AE and the walls of a shielded room), except the ground reference plane, shall be more than 0.5 m. All cables to the EUT shall be placed on the insulation support 0.1 m above the ground reference plane. Cables not subject to test shall be routed as far as possible from the cable under test to minimize the coupling between the cables. Either a direct coupling network or a capacitive clamp shall be used for the application of the test voltages.
Test time:	1 min
Repetition frequency:	5 kHz
Impulse wave shape:	5/50 ns
Burst duration:	15 ms for 5kHz repetition frequency
Burst period:	300 ms
Performance criterion:	B
Remark:	--

6.4.2 Test results

Operating mode:	Mode B			
Supplementary information:	--			
Port	**Test level (kV)**	**Polarity**	**Coupling method**	**Observations**
PV power port	0.5, 1	+/-	CDN	Note 1
AC power port	1,2	+/-	CDN	Note 1
Note 1: EUT worked as intended during and after test.				

6.5 Surges

6.5.1 Test condition

Basic Standard:	**IEC 61000-4-5:2014+A1:2017 / EN 61000-4-5:2014+A1:2017**
Test set up description:	Floor standing equipment set-up (10 cm over ground plane)
Supplementary test set up description:	Tests were conducted with the product connected to a Coupling/Decoupling Network (CDN)
Wave-Shape:	1.2/50 μs open circuit voltage, 8/20 μs short circuit current
Repetition rate:	60 s
Number of pulses for each coupling:	5 positive and 5 negative
Performance criterion:	B
Remark:	The signal cables whose total length according to the manufacturer's functional specification does not exceed 3 m.

6.5.2 Test results

Operating mode:	Mode B				
Supplementary information:	--				
Port	**Coupling**	**Test level in kV**	**phase in degrees**	**Polarity**	**Observations**
AC power port	Line to Line	0.5, 1	0°, 90°, 180°, 270°,	+/-	Note 1
	Line to Earth	1, 2	0°, 90°, 180°, 270°	+/-	Note 1
PV power port	Line to Line	0.5, 1	--	+/-	Note 1
	Line to Earth	1, 2	--	+/-	Note 1
Note 1: EUT worked as intended during and after test.					

6.6 Immunity to conducted disturbances induced by RF fields (CS), 0.15 MHz to 80 MHz

6.6.1 Test condition

Basic Standard:	**IEC 61000-4-6:2013 / EN 61000-4-6:2014**	
Test setup:	☒	Equipment located (0,1 ± 0,05) m above ground plane
	☐	Elevated ground plane.
	☐	Artificial hand applied.
Supplementary test set up description:	Measurements were made on a ground plane that extends 0.5 m minimum beyond all sides of the system under test. The EUT was located 0.1 m above the reference ground plane and any associated cables attached to the EUT were located between 30 - 50mm above the ground plane. The indicated field was pre-calibrated prior to placement of the system under test.	
Modulation:	80 % AM with 1 kHz	
Dwell time:	3 s	
Step size:	1%	
Performance criterion:	A	
Remark:	The signal cables whose total length according to the manufacturer's functional specification does not exceed 3 m.	

6.6.2 Test results

Operating mode:	Mode B				
Supplementary information:	--				
Frequency range	**Port**	**Test line**	**Test level (V)**	**CDN type**	**Observations**
0.15 MHz – 80 MHz	AC power port	L+N+PE	3 & 10	CDN	Note 1
Note 1: EUT worked as intended during and after test.					

6.7 Power frequency magnetic field

6.7.1 Test condition

Basic standard:	**IEC 61000-4-8:2009 / EN IEC 61000-4-8:2010**	
Test setup:	☒	Single Coil. Dimensions: 1 x 1 m
	☐	Single Coil. Dimensions: 1 x 2.6 m
	☐	0,1 m above metal surface
	☐	Homogeneous field (Helmholtz coil). Dimensions:
	☐	Radiating loop swept along test item surface
Supplementary test set up description:	All cables shall be exposed to the magnetic field for 1 m of their length.	
Performance criterion:	A	
Remark:	--	

6.7.2 Test results

Operating mode:	Mode B			
Supplementary information:	--			
Axis	**Test frequency (Hz)**	**Test level (A/m)**	**Duration (s)**	**Observations**
X	50	3 & 30	60	Note 1
Y	50	3 & 30	60	Note 1
Z	50	3 & 30	60	Note 1
Note 1: EUT worked as intended during and after test.				

6.8 Voltage dips and short interruptions

6.8.1 Test condition

Basic Standard:	**IEC 61000-4-11:2020 / EN IEC 61000-4-11:2020**
Test set up description:	Floor standing equipment set-up (10 cm over ground plane)
Supplementary test set up description:	Testing was performed with the product connected directly to a generator capable of simulating the voltage drops.
Repetition rate:	10 s
Number of dips or interruptions:	3
Performance criterion:	B for voltage dips C for voltage interruptions
Remark:	--

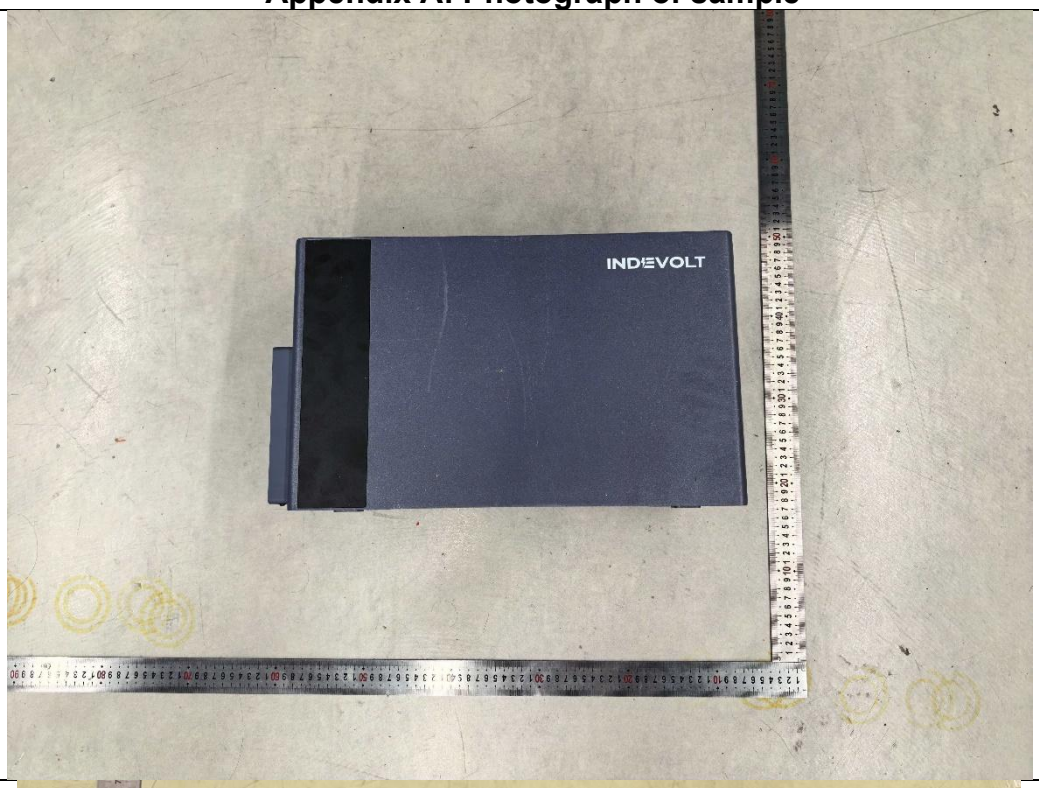
6.8.2 Test results

Operating mode:	Mode B		
Supplementary information:	--		
Applied mains voltage / frequency (U_N)	**Test level in % of U_N**	**Duration in cycles**	**Observations**
AC 230V, 50Hz	0	1	*Note 1*
AC 230V, 50Hz	10	10	*Note 1*
AC 230V, 50Hz	70	25	*Note 1*
AC 230V, 50Hz	0	250	*Note 2*
Note 1: During test, no change of operation state Note 2: EUT stops charging during the testing process. After the testing is completed, the EUT can resume normal operation.			

7 Conclusion

The apparatus Home Energy Huband models See model name list are in compliance with the requirements of the standards EN IEC 61000-6-4:2019, EN IEC 61000-6-3:2021, EN IEC 61000-6-2:2019 and EN IEC 61000-6-1:2019.

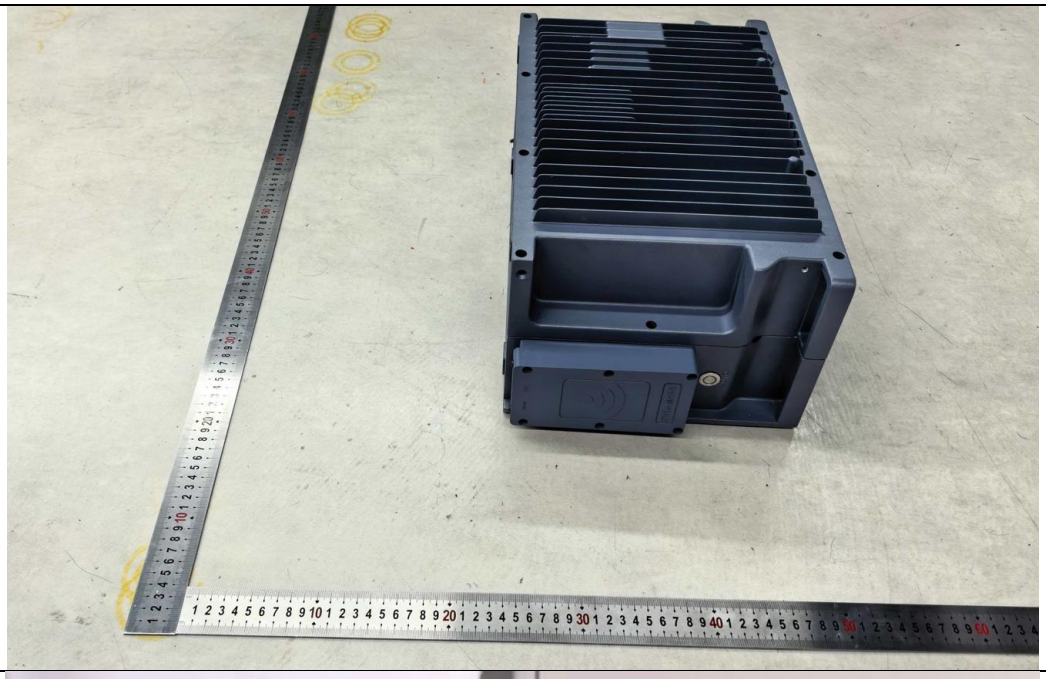
Appendix A: Photograph of sample

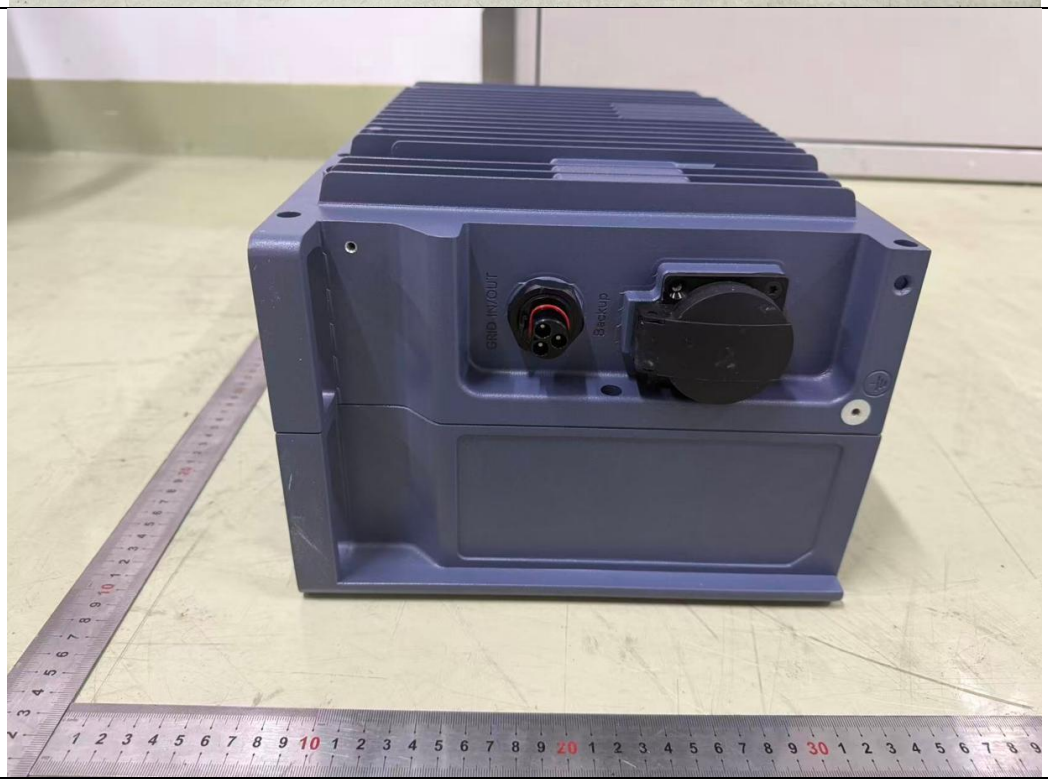


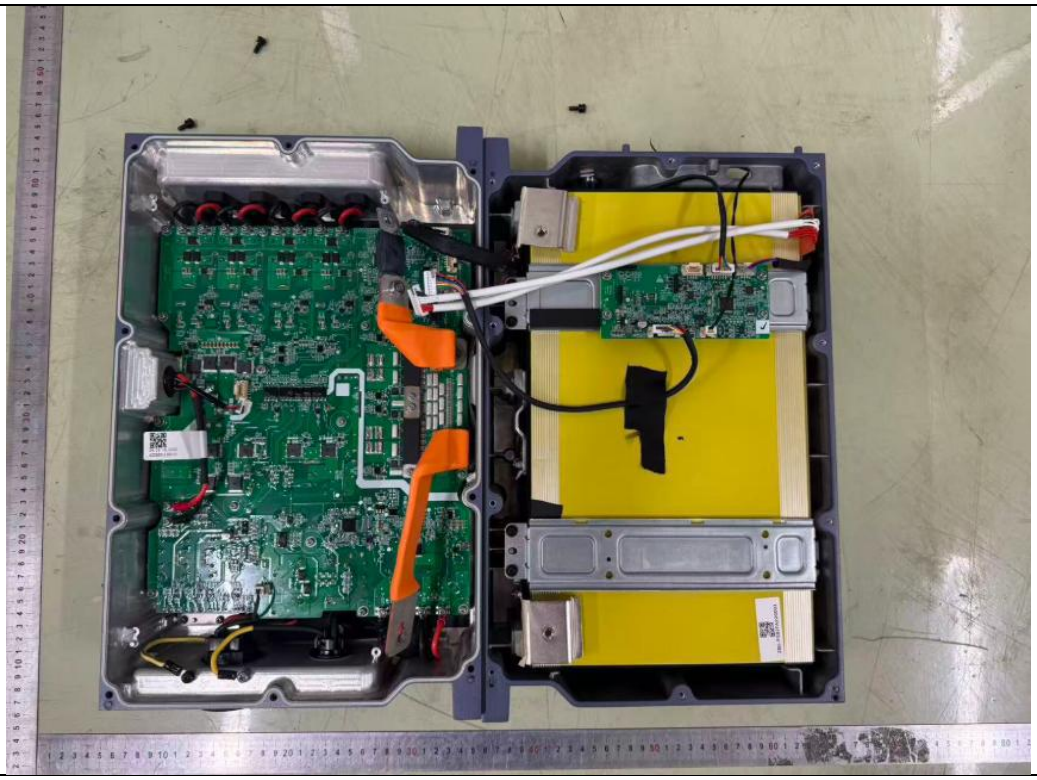




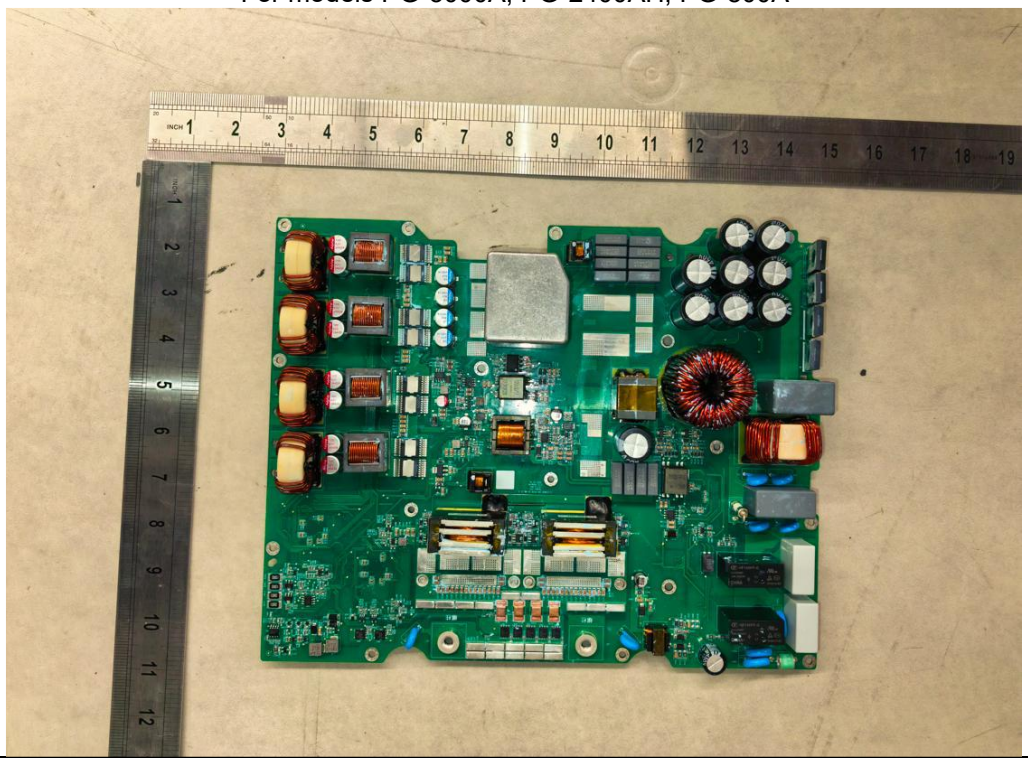

PV4-
PV3-
PV2-
PV1-
PV4+
PV3+
PV2+
PV1+



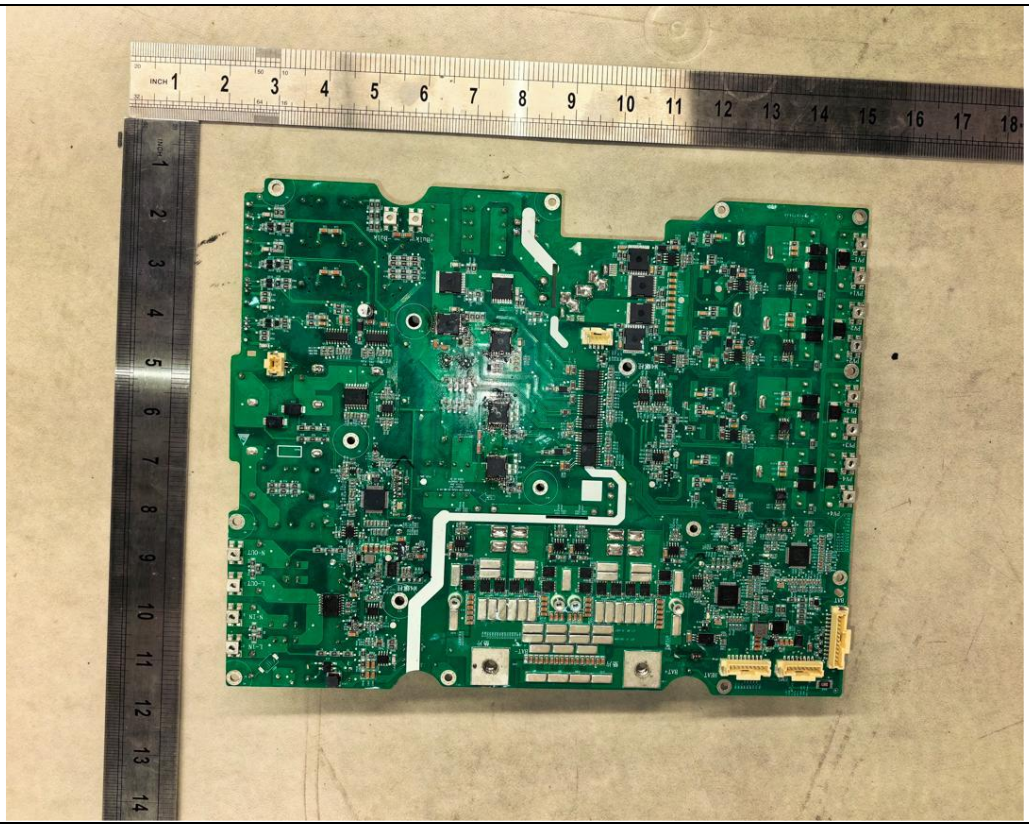

GRID IN/OUT
Backup



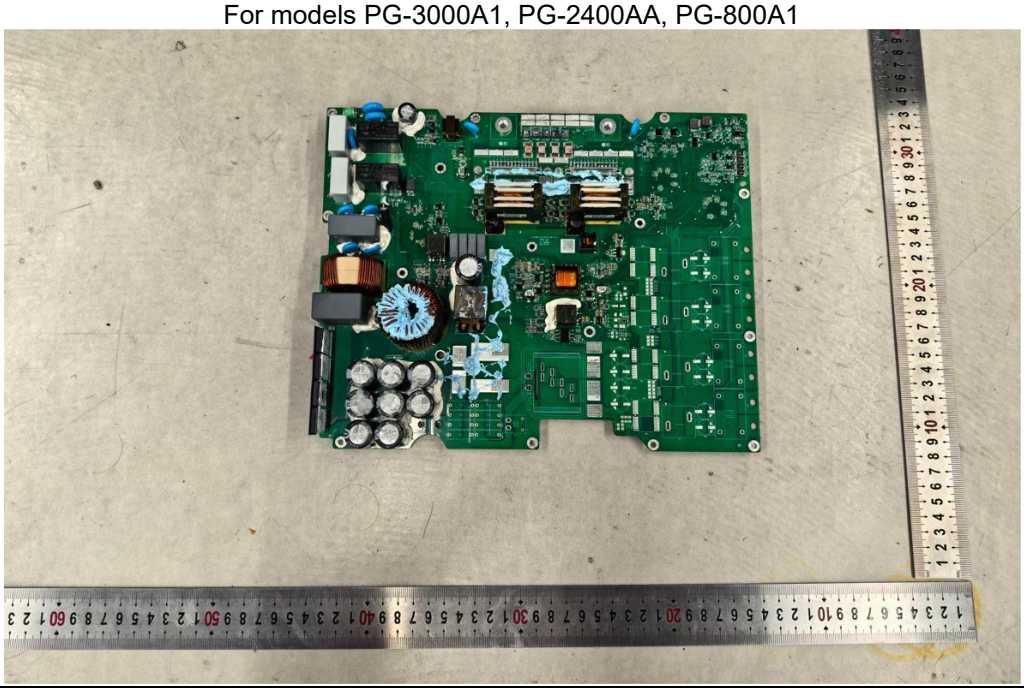
For models PG-3000A, PG-2400AH, PG-800A



For models PG-3000A, PG-2400AH, PG-800A



For models PG-3000A1, PG-2400AA, PG-800A1



For models PG-3000A1, PG-2400AA, PG-800A1

