

TEST REPORT

Applicant : Shenzhen Growatt New Energy Co., Ltd.
Address : 4-13/F, Building A, Sino-German (Europe) Industrial Park,
Hangcheng Ave, BAO'AN DISTRICT, Shenzhen

Report No : 211011127GZU-002 **Issue Date** : 21 Mar 2022

Sample Description

Name of Sample : Solar Grid-tied Inverter
Model Number : SYN 200-XH-US-10, SYN 200-XH-US-11,
SYN 200-XH-US-12, SYN 200-XH-US-13
Quantity of Sample(s) : 1
Date of Receival : 29 Sep 2021
Date of test Conducted : 21 Nov 2021

Test

Test Requested : IP65
Test Method : Refer to IEC/EN 60529: Edition 2.2
Test Observation: : See appendix test condition for details
Test Conclusion: : **Pass**
Other information : --
Remark :

- This test report is only for evaluation of the specified standard clauses listed in Test Requested.
- When determine the test result, measurement uncertainty has been considered.

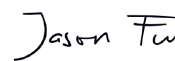
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Tested by:



Rex Liu
Engineer

Approved by:



Jason Fu
Supervisor

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Rating

| Model no. | SYN 200-XH-US-10 | SYN 200-XH-US-11 | SYN 200-XH-US-12 | SYN 200-XH-US-13 |
|---|----------------------------|------------------|------------------|------------------|
| Normal grid voltage | 240Vac | | | |
| Range of grid voltage | 180~270Vac | | | |
| Max. grid current | 200Aac | | | |
| Max. continuous grid current | 160Aac | | | |
| Normal grid frequency | 60Hz | | | |
| Max. continuous inverter input current (per inverter) | 48Aac | | | |
| Nominal split phase output voltage | 240Vac/120Vac | | | |
| Nominal split phase output current | 48Aac/25Aac | | | |
| Normal generator voltage | -- | | 240Vac | |
| Range of generator voltage | -- | | 180~270Vac | |
| Max. continuous generator input current | -- | | 100Aac | |
| Operating ambient temperature | -13°F~+122°F (-20°C~+50°C) | | | |

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Difference of the models:

All models have identical mechanical and electrical construction except the grid breaker and generator function

SYN 200-XH-US-10 is basic version, no grid breaker, no generator function

SYN 200-XH-US-11 integrated grid breaker, no generator function

SYN 200-XH-US-12 integrated generator function, no grid breaker

SYN 200-XH-US-13 integrated grid breaker and generator function.

Appendix test condition:

| Number | Test items | Test condition | Test result |
|----------|------------|---|--|
| <u>1</u> | IP6X | The enclosure under test is supported inside the test chamber and the pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump, The suction connection shall be made to a hole specially provided for the test. | No deposit of dust is observable inside the enclosure. |
| <u>2</u> | IPX5 | Internal diameter of the nozzle: 6.3 mm Delivery rate: 12.5 L/min Core of the substantial stream: circle of approximately 40 mm diameter at 2.5 m distance from nozzle Test duration: 3 min Distance from nozzle to enclosure surface: between 2.5 m and 3 m. | No water inside the enclosure |

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Appendix Photos:



Test setup of IP6X



Test setup of IPX5

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Appendix Photos:



Checked after test finish

*****End of report*****