# Certificate of Conformity

## Certificate Number: CN-PVES-240331

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture(s). The manufacturer(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

| | |
|---|---|
| **Applicant:** | Shandong Dahai New Energy Development Co. LTD<br>North of Qi Road, west of Xikang Road, Guangrao Economic Development Zone, Dongying City, Shandong Province, China |
| **Product:** | Hybrid Inverter |
| **Ratings & Principle Characteristics:** | See appendix of Certificate of Conformity |
| **Model:** | HyS3K, HyS3.6K, HyS4K, HyS5K |
| **Brand Name<s>:** | DAHAI |
| **Product Complies with:** | IEC 62116 :2014 |
| **Certificate Issuing Office Name & Address:** | Intertek Testing Services Ltd. Shanghai<br>West Area, 2nd Floor, No. 707, Zhangyang Road<br>China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China<br>Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012 |
| **Test Report No.<s>:** | 2406B0983SHA-001 |

Additional information in Appendix.

**Signature**

**Certification Manager: Qiao Qiao**
**Date: 01 August 2024**

PRD N° 306B

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

# APPENDIX: Certificate of Conformity

**This is an Appendix to Certificate of Conformity Number: CN-PVES-240331**

**Ratings & Principle Characteristics:**

| Specifications table | | | | |
|---|---|---|---|---|
| **Model** | HyS3K | HyS3.6K | HyS4K | HyS5K |
| ***PV input*** | | | | |
| Vmax PV (Vdc) (absolute Max.) | 500 | | | |
| Isc PV (absolute Max.) (A) | 22.5 | 22.5*2 | 22.5*2 | 22.5*2 |
| Max. PV input current / strings (A) | 18 | 18*2 | 18*2 | 18*2 |
| Number MPP trackers | 1 | 2 | 2 | 2 |
| Number input strings | 1 | 1/1 | 1/1 | 1/1 |
| PV Input voltage range (Vdc) | 100~500 | | | |
| MPPT Range (Vdc) | 150~450 | | | |
| Vdc range @ full power (Vdc) | 240~425 | 240~425 | 240~425 | 240~425 |
| ***Battery (***charge/discharge***)*** | | | | |
| Battery type | Li-ion/Lead-acid | | | |
| Battery Norma Voltage (Range) (Vdc) | 48V (40-60V) | | | |
| Max charge/discharge Current(A) | 75 | 90 | 100 | 120 |
| Max charge/discharge Power(kW) | 3.3 | 3.96 | 4.4 | 5.5 |
| ***AC Grid (input and output)*** | | | | |
| Normal AC Voltage (VAC) | 230(single phase) | | | |
| Frequency (Hz) | 50 | | | |
| Max. cont. input/output current (A) | 15 | 18 | 20 | 25 |
| Max. cont. input/output Power (kW) | 3.3 | 3.96 | 4.4 | 5.5 |
| Max. cont. Apparent Power (kVA) | 3.3 | 3.96 | 4.4 | 5.5 |
| Power factor(adjustable) | 1.0( -0.8~ +0.8) | | | |
| **AC Load output (stand alone)** | | | | |
| Normal Voltage (VAC) | 230(single phase) | | | |
| Frequency (Hz) | 50 | | | |
| Nominal Current(A) | 15 | 18 | 20 | 25 |
| Max. cont. Power (kW) | 3 | 3.6 | 4 | 5 |
| Overload Capability (off grid) | >200% for 15 sec | | | |
| Output Power Factor(off grid) | 1.0 | | | |
| Output Current Harmonic Distortion | THD<3%(Nonlinear load); THD<1.5%(Linear load) | | | |
| **Others** | | | | |
| Ingress protection (IP) | IP66 | | | |
| Protective class | Class I | | | |
| Temperature (℃) | -25℃ to +60℃ (Derating 45℃) | | | |
| Inverter Isolation | ☒Non-isolated PV- AC<br>☐High frequency isolated (Battery Side) | | | |
| Overvoltage category | OVC III (AC Main), OVC II (PV) | | | |
| Dimensions, D*W*H (mm) | 198*427*554 | 198*427*554 | 198*427*554 | 198*427*554 |
| Weight (kg) | 20 | 20 | 20 | 20 |

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