



CERTIFICATE OF COMPLIANCE

Certificate Number: SGSNA/25/GZ/00397X

Contract Number: 802330

Certificate Project Number: GZ-CERT250903931

Certified Product: Solar Home Energy Storage System

Trademarks:

GSL ENERGY

Model(s):

HESS-SW-ZKX-Y-IP20, HESS-SW-ZKX-Y-IP65, HESS-SF-ZKX-Y-IP65
(X=1, 2, 3, 4, 5, 6 which means the QTY of inverter for the system, Y=1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 which means the QTY of battery in parallel of the system, Z=8, 10, 12 which means the power of system)

Technical Data: See Page 2

Certificate Holder: Shenzhen GSL Energy Co., Ltd.
A601-602, Building 1, Tianan Cyber Park, Long Gang Central City, Shenzhen, Guangdong, China

This certificate supercedes previous certificates issued with the same certificate number. Certification is valid when products are indicated on the SGS directory of certified products at www.sgs.com or using the QR code below. The product is certified according to ISO/IEC Guide 17067, Conformity assessment - Fundamentals of product certification, System 3, and in accordance with:

ANSI/CAN/UL 9540:2023, Third Edition, Dated June 28, 2023

Certification Condition

The Solar Home Energy Storage System is to be installed in accordance with the National Electrical Code NFPA 70 (National Electric Code or CSA C22.1 (Canadian Electric Code) and Installation of Stationary Energy Storage Systems, NFPA 855 by end user.

Authorized by:

Effective date: 31 October 2025



Mark Lohmann
Certifier



Certification Body

Connectivity & Products, a division of SGS North America Inc.
620 Old Peachtree Road, Ste. 100, Suwanee, GA 30024, USA
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Technical Data:

HESS-SW-ZKX-Y-IP20

HESS-SW-ZKX-Y-IP65

HESS-SF-ZKX-Y-IP65

Z=8

PV input ratings:

Vmax PV (Vdc) (Absolute Max.):550Vdc

MPPT Voltage Range (Vdc):125-450Vdc

Vdc Range @ Full Power (Vdc):275-450Vdc

Isc PV (Absolute Max.) (A):40*2

Max. PV Input Current / Strings(A):32*2

Max Input Power:6.6kW

AC input/output (on-grid) of each unit:

Grid Voltage Range (Vac): 106-132/211-264 Vac (Split Phase),106-132/183-228Vac (Three Phase)

Max. cont. input/output Current (Aac): @240V 36.6A, @208V 42.3A

Max. cont. input/output Power (kW):8.8kW

Max. cont. Apparent Power (kVA):8.8kVA

Power Factor (Adjustable): 1.0(-0.8~+0.8)

Frequency (Hz):60Hz

AC Load output (Stand-alone) of each unit:

Normal Voltage (L-L) (VAC):240/208Vac

Normal Voltage (L-N) (VAC): 120Vac

Nominal Current (A): @240V 36.6A, @208 42.3A

Max. cont. Power (kW): 8.8kW

Max. cont. Apparent Power (kVA): 8.8kVA

Power factor (adjustable):1.0

Frequency (Hz):60Hz

Battery:46-56V

Nominal Voltage/Nominal Capacity: 51.2V/280Ah

Max. Energy storage capacity: 229.44kWh

Configuration: Covers inverters up to 6pcs in parallel, batteries up to 16pcs in parallel.

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Technical Data:

HESS-SW-ZKX-Y-IP20

HESS-SW-ZKX-Y-IP65

HESS-SF-ZKX-Y-IP65

Z=10

PV input ratings:

V_{max} PV (V_{dc}) (Absolute Max.):550V_{dc}

MPPT Voltage Range (V_{dc}):125-450V_{dc}

V_{dc} Range @ Full Power (V_{dc}):275-450V_{dc}

I_{sc} PV (Absolute Max.) (A):40*2

Max. PV Input Current / Strings(A):32*2

Max Input Power:7.5kW

AC input/output (on-grid) of each unit:

Grid Voltage Range (V_{ac}): 106-132/211-264 V_{ac} (Split Phase),106-132/183-228V_{ac} (Three Phase)

Max. cont. input/output Current (A_{ac}): @240V 41.7A, @208V 48.1A

Max. cont. input/output Power (kW):10kW

Max. cont. Apparent Power (kVA):10kVA

Power Factor (Adjustable): 1.0(-0.8~+0.8)

Frequency (Hz):60Hz

AC Load output (Stand-alone) of each unit:

Normal Voltage (L-L) (V_{AC}):240/208V_{ac}

Normal Voltage (L-N) (V_{AC}): 120V_{ac}

Nominal Current (A): @240V 41.7A, @208 48.1A

Max. cont. Power (kW): 10kW

Max. cont. Apparent Power (kVA): 10kVA

Power factor (adjustable):1.0

Frequency (Hz):60Hz

Battery:46-56V

Nominal Voltage/Nominal Capacity: 51.2V/280Ah

Max. Energy storage capacity: 229.44kWh

Configuration: Covers inverters up to 6pcs in parallel, batteries up to 16pcs in parallel.

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HESS-SW-ZKX-Y-IP20

HESS-SW-ZKX-Y-IP65

HESS-SF-ZKX-Y-IP65

Z=12

PV input ratings:

V_{max} PV (V_{dc}) (Absolute Max.):550V_{dc}

MPPT Voltage Range (V_{dc}):125-450V_{dc}

V_{dc} Range @ Full Power (V_{dc}):275-450V_{dc}

I_{sc} PV (Absolute Max.) (A):40*2

Max. PV Input Current / Strings(A):32*2

Max Input Power:9kW

AC input/output (on-grid) of each unit:

Grid Voltage Range (V_{ac}): 106-132/211-264 V_{ac} (Split Phase),106-132/183-228V_{ac} (Three Phase)

Max. cont. input/output Current (A_{ac}): 50A

Max. cont. input/output Power (kW): @240V 12kW, @208V 10.4kW

Max. cont. Apparent Power (kVA): @240V 12kVA, @208V 10.4kVA

Power Factor (Adjustable): 1.0(-0.8~+0.8)

Frequency (Hz):60Hz

AC Load output (Stand-alone) of each unit:

Normal Voltage (L-L) (V_{AC}):240/208V_{ac}

Normal Voltage (L-N) (V_{AC}): 120V_{ac}

Nominal Current (A): 50A

Max. cont. Power (kW): @240V 12kW, @208V 10.4kW

Max. cont. Apparent Power (kVA): @240V 12kVA, @208V 10.4kVA

Power factor (adjustable):1.0

Frequency (Hz):60Hz

Battery:46-56V

Nominal Voltage/Nominal Capacity: 51.2V/280Ah

Max. Energy storage capacity: 229.44kWh

Configuration: Covers inverters up to 6pcs in parallel, batteries up to 16pcs in parallel.

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