

Certificate Number: SGSNA/23/SH/00381

Contract Number: 802329

Certificate Project Number: SH-CERT230905366

Certified Product: High Voltage Hybrid ESS / L3 Series LimitLess Lithium™

Trademarks: Sol-Ark

Model(s): L3 HV-60KWH-60K, L3 HV-XKWH-60K-Y

(X=20,25,30,35,40,45,50,55,60, which means the capacity

of each battery rack, and unit is kWh; Y=2,3,4,5,6......,11,12,13,14,15,16 which

means the number of battery racks), L3 HV-40KWH-30K, L3 HV-XKWH-30K-Y

(X=20,25,30,35,40, which means the capacity of each battery rack, and unit is kWh; Y=2,3,4,5,6.....,11,12,13,14,15,16 which means the number of battery

racks

Technical Data: See page 2-5

Certificate Holder: Portable Solar LLC d/b/a Sol-Ark

805 Central Expwy S Allen, TX 75013, USA

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, 2nd Ed. Rev. April 9, 2021

Authorized by:

Mark Lohmann Certifier Effective date: 27 December 2023

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Certification Body

Connectivity & Products, a division of SGS North America Inc. 620 Old Peachtree Road, Ste. 100, Suwanee, GA 30024, USA t +1 770 570 1800 f +1 770 277 1240 www.sgs.com





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Additional Information:

Technical Data:

There are various battery configurations possible for both the L3 HV-XKWH-60K-Y and the L3 HV-40KWH-30K system models. In a single battery and PCS (power conversion system) configuration, up to 16 battery racks can be connected in parallel to increase the system capacity. Since the system can use different amounts of battery modules in each rack, ratings are provided for a single PCS and a range of 4 to 12 modules per rack in the report. Connecting multiple battery and PCS systems in parallel does not change the ratings of an individual battery rack and PCS.

For L3 HV-60KWH-60K and L3 HV-XKWH-60K-Y series

PCS part:

AC Connection

AC Input/Output Voltage: 3L/N/PE 277/480Va.c.

AC Input/Output Frequency: 60Hz

AC Input/Output Rated Current: 72.3Aa.c. Max. AC Input/Output Current: 72.3Aa.c. AC Input/Output Rated Power: 60000W

Max. Active Input/ Output Power: 60000W

Max. Continuous AC Passthrough current: 200Aa.c.

Battery Connection

Battery Voltage Range: 160~800 Vd.c

PV Connection

Max. PV Input Voltage: 1000Vd.c MPPT Input Range: 150Vd.c.-850Vd.c.

Max. PV Input Current: 36Ad.c.+36Ad.c.+36Ad.c.+36Ad.c.

Max. PV Input Power: 78000W

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Battery Part

L3 HV-X (X=20,25,30,35,40,45,50,55,60)

General ratings:

Nominal Charge/Discharge Current: 100Ad.c.

Charge Temperature: 0°C~55°C

Discharge Temperature: -20°C~55°C

IP Rating of Enclosure: IP20

Other ratings:

L3 HV-20: Rated voltage: 204.8Vdc, Rated capacity: 20.48kWh;

L3 HV-25: Rated voltage: 256.0Vdc, Rated capacity: 25.60kWh;

L3 HV-30: Rated voltage: 307.2Vdc, Rated capacity: 30.72kWh;

L3 HV-35: Rated voltage: 358.4Vdc, Rated capacity: 35.84kWh;

L3 HV-40: Rated voltage: 409.6Vdc, Rated capacity: 40.96kWh;

L3 HV-45: Rated voltage: 460.8Vdc, Rated capacity: 46.08kWh;

L3 HV-50: Rated voltage: 512.0Vdc, Rated capacity: 51.20kWh;

L3 HV-55: Rated voltage: 563.2Vdc, Rated capacity: 56.32kWh;

L3 HV-60: Rated voltage: 614.4Vdc, Rated capacity: 61.44kWh



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For L3 HV-40KWH-30K and L3 HV-XKWH-30K-Y series

PCS part:

AC Connection

AC Input/Output Voltage: 3L/N/PE 120/208Va.c.

AC Input/Output Frequency: 60Hz

AC Input/Output Rated Current: 83.4Aa.c. Max. AC Input/Output Current: 83.4Aa.c.

AC Input/Output Rated Power: 30000W

Max. Active Input/ Output Power: 30000W

Max. Continuous AC Passthrough current: 200Aa.c.

Battery Connection

Battery Voltage Range: 160~500Vd.c.

PV Connection

Max. PV Input Voltage: 550Vd.c.

MPPT Input Range: 150Vd.c.-500Vd.c.

Max. PV Input Current: 36Ad.c.+36Ad.c.+36Ad.c.+36Ad.c

Max. PV Input Power: 39000W





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Technical Data:

For L3 HV-40KWH-30K and L3 HV-XKWH-30K-Y series Battery Part

L3 HV-X (X=20,25,30,35,40)

General ratings:

Nominal Charge/Discharge Current: 100Ad.c.

Charge Temperature: 0°C~55°C

Discharge Temperature: -20°C~55°C

IP Rating of Enclosure: IP20

Other ratings:

L3 HV-20: Rated voltage: 204.8Vdc, Rated capacity: 20.48kWh; L3 HV-25: Rated voltage: 256.0Vdc, Rated capacity: 25.60kWh; L3 HV-30: Rated voltage: 307.2Vdc, Rated capacity: 30.72kWh; L3 HV-35: Rated voltage: 358.4Vdc, Rated capacity: 35.84kWh; L3 HV-40: Rated voltage: 409.6Vdc, Rated capacity: 40.96kWh;