

Lighting Global Standardized Specifications Book

Manufacturer: Smarter Grid International Ltd.

Component Family Name: Smarter Home

Date of Standardized Specifications Book Expiration: September 30, 2019

Verify Online: <http://www.lightingglobal.org/products/sgi-ovCamp>

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Co-Brand of: ovCamp Family, Omnivoltaic Energy Solutions Ltd.



This Lighting Global Standardized Specifications Book presents a **component-level Standardized Specifications Sheet** listing the available components in the product family by component type, each individual component's performance rating, and performance results for each component tested according to the latest version of the Quality Test Method (QTM) in IEC 62257-9-5 or the Lighting Global Quality Assurance Protocol for Solar Home System Kits, as applicable. Following the component-level Standardized Specifications Sheet is a **list of the systems** covered by this Specifications Book that use combinations of these components.

NOTICE: Systems or kits developed using components from the component family will each perform differently and have not all been evaluated on a system-level basis. All systems listed in this Specifications Book are regarded to have passed the applicable Lighting Global Quality Standards.

Revision: 2018.04

Component-Level Standardized Specifications Sheet

Smarter Grid International Ltd.

Smarter Home Family

Battery / Control Box

| Name / Model Number | Battery Capacity Rating (mAh) | Measured Battery Capacity (mAh) |
|---------------------|-------------------------------|---------------------------------|
| 41 Wh battery | 3200 | 3200 |
| 82 Wh battery | 6400 | Not Tested |
| 123 Wh battery | 9600 | Not Tested |
| 164 Wh battery | 13000 | 13000 |
| 205 Wh battery | 17000 | 17000 |

PV Module

| Name / Model Number | Peak Power at STC Rating (W) | Measured Peak Power at STC (W) |
|---------------------|------------------------------|--------------------------------|
| 12 Wp Solar Panel | 12 | 12 |
| 20 Wp Solar Panel | 20 | Not Tested |
| 28 Wp Solar Panel | 28 | Not Tested |
| 35 Wp Solar Panel | 35 | 36 |
| 54 Wp Solar Panel | 55 | 52 |
| 75 Wp Solar Panel | 75 | 72 |

Light Sources

| Name / Model Number | Luminous Flux Rating (lm) | Measured Luminous Flux (lm) | Measured Lamp Efficacy (lm/W) |
|---------------------|---------------------------|-----------------------------|-------------------------------|
| | On | On | On |
| 1 W bulb* | 100 | -- | -- |
| 2 W bulb | 200 | 210 | 108 |
| 4 W bulb | 390 | 410 | 104 |
| Torch | -- | 33 | 24 |
| | | High | High |
| L190 | 190 | 190 | 140 |

*The luminous flux and lamp efficacy were not measured directly for the 1 W bulb. A total light output of 603 lumens was measured when two 1W bulbs and two 2W bulbs were measured simultaneously. The 1 W bulbs were tested for mechanical durability, light distribution, and lumen maintenance according to IEC 62257-9-5.

Appliances

| Name / Model Number | Description | Rated Power (W) | Measured Power (W) | Rated Battery Capacity (mAh) | Measured Battery Capacity (mAh) |
|---------------------------------|--|-----------------|--------------------|------------------------------|---------------------------------|
| Solar Powered Radio (RD/SPRD-A) | portable radio with internal battery charges via USB | 3 | 0.63* | 1000 | 750 |
| 24" TV | 12 V Televison | 15 | 10.4 | -- | -- |
| 32" TV | 12 V Televison | 15 | 13.9 | -- | -- |

*The power test is conducted according to IEC 62087-6:2015 (test procedure) and IEC 62087-1:2015 (test equipment requirement)

NOTICE: As indicated, not all components listed were tested according to the Quality Test Method (QTM) in IEC 62257-9-5 or the Lighting Global Quality Assurance Protocols for Solar Home System Kits. However, based on the satisfactory performance of the tested components in the family, the components that were not tested are regarded to have passed the applicable Lighting Global Quality Standards. In addition, all tested components passed an internal inspection, the full array of *applicable* QTM durability tests, as well as ingress protection testing (where applicable).

List of Covered Systems

Smarter Grid International Ltd.

Smarter Home Family

| System Name | Number of each component included in each system | | | | | | | | | | | | | | | | 24" TV | 32" TV |
|---|--|----------|----------|-------|-------|-------|---------------|---------------|----------------|----------------|----------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------|--------|
| | 1 W Bulb | 2 W Bulb | 4 W Bulb | Torch | L-190 | Radio | 41 Wh Battery | 82 Wh Battery | 123 Wh Battery | 164 Wh Battery | 205 Wh Battery | 12 Wp Solar Panel | 20 Wp Solar Panel | 28 Wp Solar Panel | 35 Wp Solar Panel | 55 Wp Solar Panel | | |
| HS2-36_LB1122** | 2 | 2 | -- | 1 | | | 1 | | | | 1 | | | | | | | |
| HS2-36_LBxxxxx* | -- | -- | -- | 1 | | | 1 | | | | 1 | | | | | | | |
| HS2-72_LBxxxxxx | -- | -- | -- | 1 | | | | 1 | | | | 1 | | | | | | |
| HS2-108_LBxxxxxx | -- | -- | -- | 1 | | | | | 1 | | | | 1 | | | | | |
| HS2-144_LB2244** | -- | 2 | 2 | 1 | | | | | 1 | | | | | | 1 | | | |
| HS2-144_LBxxxxxx | -- | -- | -- | 1 | | | | | 1 | | | | | | 1 | | | |
| HS2-180_LBxxxxxx | -- | -- | -- | 1 | | | | | | 1 | | | | | | 1 | | |
| HS2A-36_LBxxxxxx | -- | -- | -- | | | | 1 | | | | 1 | | | | | | | |
| HS2A-72_LBxxxxxx | -- | -- | -- | | | | | 1 | | | | 1 | | | | | | |
| HS2A-108_LBxxxxxx | -- | -- | -- | | | | | | 1 | | | | 1 | | | | | |
| HS2A-144_LBxxxxxx | -- | -- | -- | | | | | | | 1 | | | | | 1 | | | |
| HS2A-180_LBxxxxxx | -- | -- | -- | | | | | | | | 1 | | | | | 1 | | |
| HS2B-36_LBxxxxxx | -- | -- | -- | 1 | | | 1 | | | | | 1 | | | | | | |
| HS2B-72_LBxxxxxx | -- | -- | -- | 1 | | | | 1 | | | | | 1 | | | | | |
| HS2B-108_LBxxxxxx | -- | -- | -- | 1 | | | | | 1 | | | | | 1 | | | | |
| HS2B-144_LBxxxxxx | -- | -- | -- | 1 | | | | | | 1 | | | | | | 1 | | |
| HS2C-36_LBxxxxxx | -- | -- | -- | | | | 1 | | | | | 1 | | | | | | |
| HS2C-72_LBxxxxxx | -- | -- | -- | | | | | 1 | | | | | 1 | | | | | |
| HS2C-108_LBxxxxxx | -- | -- | -- | | | | | | 1 | | | | | 1 | | | | |
| HS2C-144_LBxxxxxx | -- | -- | -- | | | | | | | 1 | | | | | | 1 | | |
| HS2D-36_LBxxxxxx | -- | -- | -- | 1 | | | 1 | | | | | | 1 | | | | | |
| HS2D-72_LBxxxxxx | -- | -- | -- | 1 | | | | 1 | | | | | | 1 | | | | |
| HS2D-108_LBxxxxxx | -- | -- | -- | 1 | | | | | 1 | | | | | | 1 | | | |
| HS2E-36_LBxxxxxx | -- | -- | -- | | | | 1 | | | | | | 1 | | | | | |
| HS2E-72_LBxxxxxx | -- | -- | -- | | | | | 1 | | | | | | 1 | | | | |
| HS2E-108_LBxxxxxx | -- | -- | -- | | | | | | 1 | | | | | | 1 | | | |
| HS2C-72_LB224_RD | -- | 2 | 1 | | | 1 | 1 | | | | | | 1 | | | | | |
| HS2D-144_LBxxxxxx | -- | -- | -- | 1 | | | | | | 1 | | | | | | | 1 | |
| HS2E-144_LBxxxxxx | -- | -- | -- | -- | | | | | | 1 | | | | | | | 1 | |
| HS2B-180_LBxxxxxx | -- | -- | -- | 1 | | | | | | | 1 | | | | | | 1 | |
| HS2C-180_LBxxxxxx | -- | -- | -- | -- | | | | | | | 1 | | | | | | 1 | |
| HS2D-108_LB2222_RD_TV24_SRF_EX3_TC3 | | 4 | -- | 1 | | | | | 1 | | | | | | | 1 | | 1 |
| HS2D-144_LB222222_RD_TV32_SRF_EX333_TC333 | | 6 | 2 | 1 | | | | | | 1 | | | | | | | 1 | 1 |

**Tested as full systems. Individual SSS available on Lighting Global website. Individual SSS for the Omnivoltaic L190 is also available on the Lighting Global website.

*These SKUs are interpreted as follows. In **HS2y-ZZ_LBxxxxxx_P_PAYG_Q**,

- **y**: can be blank or A, B, C, D or E;
blank, B, and D are used to represent a torch is included in the kit;
A, C and E are used to represent a torch is not included in the kit.
Each letter represents a different combination of battery and solar module; please reference the examples in the table above.
- **ZZ**: can be 36, 72, 108, 144 or 180 and is used to represent different battery capacity;
- **xxxxxx**: each x can be either 1, 2, 4 or blank, and is used to represent the type and number of light bulbs (1 W, 2 W or 4 W) included with the kit. For example, LB1122 includes two 1 W bulbs and two 2 W bulbs.
- **P**: can be Lighting Global verified products like L190 or RD (radio) or TV24 or TV24_SRF or TV32 or TV32_SRF or blank
- **PAYG**: can be KEYP or GSMP, which are options for pay-as-you-go code inputs
- **Q**: can be TCx, EXx or PEx and indicates T-type connector (TC); 3 m extension cable (EX) ;3 m. panel extension cable (PE) and x indicates the number of connectors or cables.

NOTICE:

Only the HS2-36_LB1122 and HS2-144_LB2244 were fully tested as systems according to the Quality Test Method (QTM) in IEC 62257-9-5 or the Lighting Global Quality Assurance Protocol for Solar Home System Kits, as applicable. Individual Standardized Specifications Sheets (SSS) that report system-level performance are available for the HS2-36_LB1122 and the HS2-144_LB2244 at www.lightingglobal.org/products. Systems that were not tested, but that were developed using components from the component family will perform differently than the system(s) shown in the individual system-level SSS. All systems listed above are regarded to have passed the applicable Lighting Global Quality Standards.

Unless otherwise noted, the following information applies to all listed systems and components:

Warranty Information

All Smarter Home systems are covered by a 2-year warranty on the battery, solar panel and LED bulbs and a one-year warranty on all other components.

Marks and Certifications

| | |
|-----------------------|----------|
| Factory certification | ISO 9001 |
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