

VeraSol

Standardized Specifications Book

Company Name: Biolite, Inc.

Brand Name: Biolite

Component Family Name: Solar Home 5000+ Family

Family Expiration Date: December 31, 2026

Verify Online: <https://data.verasol.org/products/sek/bio-shs5000plusfam>

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This VeraSol 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 Edition 4 of IEC 62257-9-5. 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 IEC TS 62257-9-8.

Quality Standards Framework Version: 2025

Revision: 2025.07

Component-Level Standardized Specifications Sheet

Biolite, Inc.

Solar Home 5000+ Family

Batteries / Control Boxes

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
Control Unit with 97.3 Wh battery	Lithium ion	12.8	7.6	8.3

PV Modules

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
50 W PV module	50	49

Light Sources^

Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)
	high	high	high
Hanging Light	200	200	140
Motion Sensor Light	200	200	140

Appliances^

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
24" TV	24" diagonal screen (8.0 W power consumption while in-use)	8.4	8	--	--
32" TV	32" diagonal screen (8.3 W power consumption while in-use)	8.4	8.3	--	--
16" Standing Fan	16" table fan (8.5 W power)	8.5	7.4	--	--

^ Light points and appliances may perform differently when used with different systems.

NOTICE: As indicated, not all components listed on this page were tested according to the Quality Test Method (QTM) in Edition 4 of IEC 62257-9-5. However, based on the satisfactory performance of the tested components in the family, the components that were not tested are regarded to have passed IEC TS 62257-9-8:2020. 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

Biolite, Inc.

Solar Home 5000+ Family

Number of each component included in each system							
System Name	Hanging Lamp	Motion Sensor Lamp	50 W PV Module	Control Unit with 97.3 Wh battery	24" TV	32" TV	16" Standing Fan
SH5000+ 24" TV - 1 light **	1	--	1	1	1	--	--
SH5000+ 32" TV - 4 lights	3	1	1	1	--	1	--
SH5000+ 32" TV - 1 light	1	--	1	1	--	1	--
SH5000+ 16" Fan- 4 lights	3	1	1	1	--	--	1
SH5000+ 16" Fan	--	--	1	1	--	--	1

**Tested as full systems. Individual SSS available on VeraSol website.

NOTICE:

Only the kits denoted with ** were tested as full systems according to Edition 4 of IEC 62257-9-5 and passed IEC 62257-9-8 standards. An Individual Standardized Specification Sheet (SSS) that reports system-level performance is available for these systems at VeraSol.org. 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 IEC TS 62257-9-8:2020.

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

Warranty Information

A 2-year warranty covering manufacturing defects in the system

Available Daily Electrical Energy and Port Information

Biolite, Inc.
Solar Home 5000+ Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
SH5000+ 24" TV - 4 lights**	120	yes
SH5000+ 24" TV - 1 light	120	yes
SH5000+ 32" TV - 4 lights	120	yes
SH5000+ 32" TV - 1 light	120	yes

**Tested as full systems. Individual SSS available on VeraSol website.

NOTICE:

The available daily electrical energy (Wh/day) is calculated for fully tested systems following the energy service calculations as described in IEC/TS 62257-9-5 Edition 4. For products in a family that are not tested as a full system, estimations of available daily electrical energy (Wh/day) are calculated according to an alternative method using data from the test reports of fully-tested products and components.