VeraSol
Standardized Specifications Book

Manufacturer: fosera Group

Component Family Name: LSHS Family

Date of Standardized Specifications Book Expiration: July 31, 2022

Verify Online: https://data.verasol.org/products/sek/fs-lshsfamily

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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 the applicable Lighting Global Quality Standards.

Quality Standards Framework Version: 2020
Revision: 2020.07

Component-Level Standardized Specifications Sheet
fosera Group
LSHS Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
LSHS 1500 Battery	Lithium iron phosphate	13	1500	1400
LSHS 3000 Battery	Lithium iron phosphate	--	3000	not tested
LSHS 4500 Battery	Lithium iron phosphate	--	4500	not tested
LSHS 7500 Battery	Lithium iron phosphate	--	7500	8000
LSHS 10500 Battery	Lithium iron phosphate	13	10500	10000

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
7 W PV module	7	6.9
10 W PV module	10	not tested
15 W PV module	15	not tested
20 W PV module	20	23
25 W PV module	25	not tested
30 W PV module	30	not tested
35 W PV module	35	34
50 W PV module	50	51

Light Sources*

Name / Model Number	Luminous Flux Rating (lm)		Measured Luminous Flux (lm)		Measured Lamp Efficacy (lm)	
	High	Low	High	Low	High	Low
Lamp 12V x 100	100	--	110	49	140	140
Lamp 12V x 200	200	--	220	42	110	110
Lamp 12V x 400	400	--	390	--	120	--
Tubelight 400	400	--	390	41	100	100

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 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).

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

List of Covered Systems
fosera Group
LSHS Family

System Name	Battery					PV Module								Lamps			
	LSHS 1500 mAh Battery	LSHS 3000 mAh Battery	LSHS 4500 mAh Battery	LSHS 7500 mAh Battery	LSHS 10500 mAh Battery	7 W module	10 W module	15 W module	20 W module	25 W module	30 W module	35 W module	50 W module	Lamp 12V x 100	Lamp 12V x 200	Lamp 12V x 400	Tubelight 400
LSHS 1500	1					1								2			
LSHS 3000		1					1							2	1		
LSHS 4500			1					1						3	1		
LSHS 7500 (20 W)				1					1								
LSHS 7500 (25 W)				1						1				2	2		
LSHS 7500 (30 W)				1							1						
LSHS 10500 **					1							1		1			1
LSHS 10500 (50 W)					1								1	1			1

Additional individual kits can be configured from any of the components listed above

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

All systems are available with or without Pay-As-You-Go technology. PAYG versions have either Angaza or Lumeter systems.

NOTICE:

Only the LSHS 10500 was fully tested as a system according to Edition 4 of IEC 62257-9-5. Individual Standardized Specifications Sheets (SSS) that report system-level performance are available for the LSHS 10500 at https://data.verasol.org/products/sek/fs-lshs10500. 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

A 3-year warranty covering manufacturing defects in the system and the battery. The PAYG Remote has a 1-year warranty.

Marks and Certifications

Factory certification	ISO 9001:2015; ISO 14001:2015; ISO 45001:2018