VeraSol Standardized Specifications Book

Manufacturer: Zimpertec

Component Family Name: LSX Family

Date of Standardized November 30, 2024

Specifications Book Expiration:

Verify Online: https://data.verasol.org/products/sek/zim-lsxfamily

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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 componentlevel 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 requirements in IEC 62257-9-8.

Revision: 2023.12

Component-Level Standardized Specifications Sheet Zimpertec

LSX Family

Battery / Control Box								
Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (Ah)	Measured Battery Capacity (Ah)				
7.7 Ah battery	Lithium iron phosphate	12.8	7.7	8.4				
11.5 Ah battery	Lithium iron phosphate	12.8	11.5	13				
15.3 Ah battery	Lithium iron phosphate	12.8	15.3	Not tested				
19.2 Ah battery	Lithium iron phosphate	12.8	19.2	Not tested				
23 Ah battery	Lithium iron phosphate	12.8	23	25				

PV Module								
Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)						
30 W PV	30	32						
50 W PV	50	49						
80 W PV	80	72						

Light Sources*							
Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (Im)	Measured Lamp Efficacy (lm/W)				
	On	On	On				
2 W lamp	300	320	150				
3 W lamp	450	450	150				

Appliances*								
Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (Ah)	Measured Battery Capacity (Ah)			
Fan	16" diameter		10					
24" TV	24" diagonal	10	9.9					
32" TV	32" diagonal	12	11.8					

<u>NOTICE:</u> 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 requirements in IEC 62257-9-8. 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

Zimpertec LSX Family

	Number of each component included in each system												
System Name	7.7 Ah battery		15.3 Ah battery			30 W PV	50 W PV	80 W PV	2 W lamp	3W lamp	24" TV	32" TV	16" fan
LSX077-VX002	1					1			0	3	0	0	0
LSX115-VX005**		1					1		3	0	0	0	0
LSX192-VX012				1				1	6	0	0	1	1
LSX192-VL007				1				1	0	3	0	0	1
LSX077-SP030-FLEX	1					1			0-8	0-8	0-1	0-1	0-1
LSX077-SP050-FLEX	1						1		0-8	0-8	0-1	0-1	0-1
LSX077-SP080-FLEX	1							1	0-8	0-8	0-1	0-1	0-1
LSX115-SP030-FLEX		1				1			0-8	0-8	0-1	0-1	0-1
LSX115-SP050-FLEX		1					1		0-8	0-8	0-1	0-1	0-1
LSX115-SP080-FLEX		1						1	0-8	0-8	0-1	0-1	0-1
LSX153-SP030-FLEX			1			1			0-8	0-8	0-1	0-1	0-1
LSX153-SP050-FLEX			1				1		0-8	0-8	0-1	0-1	0-1
LSX153-SP080-FLEX			1					1	0-8	0-8	0-1	0-1	0-1
LSX192-SP030-FLEX				1		1			0-8	0-8	0-1	0-1	0-1
LSX192-SP050-FLEX				1			1		0-8	0-8	0-1	0-1	0-1
LSX192-SP080-FLEX				1					0-8	0-8	0-1	0-1	0-1
LSX230-SP030-FLEX					1	1		1	0-8	0-8	0-1	0-1	0-1
LSX230-SP050-FLEX					1		1		0-8	0-8	0-1	0-1	0-1
LSX230-SP080-FLEX					1			1	0-8	0-8	0-1	0-1	0-1

^{**}Tested as full system. Individual SSS available on VeraSol website.

NOTICE:

Only the LSX 11.5was fully tested as systems according to Edition 4 of IEC 62257-9-5. Individual Standardized Specifications Sheets (SSS) that report system-level performance are available for the LSX 11.5 at https.data.verasol.org/products/sek/ 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 requirements in IEC 62257-9-8.

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

Warranty Information

3 year warranty for the lights, PV, and main unit. 2 year warranty for the TVs and 1 year warranty for the fan.

Available Daily Electrical Energy and Port Information

Zimpertec LSX Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
LSX 115 VX005**	180	yes
LSX077-VX002	115	yes
LSX192-VX012	266	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 Ed. 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. Estimating Wh/day values requires making assumptions about system efficiencies, power consumption, and user behavior. As with any calculation based on multiple assumptions, there is some degree of error in the Wh/day estimate, which may be greater or less than the actual value for a given product.