VeraSol Standardized Specifications Book

Manufacturer: ShenZhen Solar Run Energy Co., Ltd

Component Family Name: Mbox Family

Date of Standardized

March 31, 2024

Specifications Book Expiration:

Verify Online: https://data.verasol.org/products/sek/ssr-mboxfamily

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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 or to meet the requirements in IEC 62257-9-8*.

Quality Standards Framework Version: 2021

Revision: 2024.02

Component-Level Standardized Specifications Sheet

ShenZhen Solar Run Energy Co., Ltd Mbox Family

Battery / Control Box							
Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (Ah)	Measured Battery Capacity (Ah)			
Main unit with 18 Ah battery	Lithium iron phosphate	12.8	18	18			
Main unit with 24 Ah battery	Lithium iron phosphate	12.8	24	24			
Main unit with 30 Ah battery	Lithium iron phosphate	12.8	not tested	not tested			
Main unit with 36 Ah battery	Lithium iron phosphate	12.8	not tested	not tested			
Main unit with 48 Ah battery	Lithium iron phosphate	12.8	not tested	not tested			
Main unit with 60 Ah battery	Lithium iron phosphate	12.8	60	60			
Solar Torch with Integrated PV	Lithium iron phosphate	3.2	0.6	0.6			

PV Module		
Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
60 W PV module	60	58
80 W PV module	80	78
100 W PV module	not tested	not tested
120 W PV module	not tested	not tested
150 W PV module	150	150

Light Sources*									
Name / Model Number	Luminous Flux Rating (Im)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (Im/W)						
	On	On	On						
2 W LED Lamp	165	190	130						
3 W LED Lamp	275	280	110						
300 lm Tubelight	300	320	140						
500 lm Tubelight	500	500	110						
Solar Torch with Integrated PV - front light	50	56	95						

Appliances*								
Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (Ah)	Measured Battery Capacity (Ah)			
Radio (F170)	Portable radio		0.44	1.5	1.2			
24" TV	24" diagonal		8.7	-				
32" TV	32" diagonal		12					

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 or the 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

ShenZhen Solar Run Energy Co., Ltd Mbox Family

				Nur	mbe	r of (each	con	npor	nent	incl	uded	l in e	ach	sys	tem			
System Name	2 W LED Lamp	3 W LED Lamp	300 lm Tubelight	500 lm Tubelight	60 W PV	80 W PV	100 W PV	120 W PV	150 W PV	Main Unit with 18 Ah	Main Unit with 24 Ah	Main Unit with 30 Ah	Main Unit with 36Ah	Main Unit with 48Ah	Main Unit with 60Ah	Solar Torch with Integrated PV	Radio	24" TV	32" TV'
SR32B33 **		4					1					1				1	1	1	
SR32A*****/***XG	0-5	0-5	0-5	0-5	1					1						0-1	0-1	0-1	0-1
SR32B*****/***XG	0-5	0-5	0-5	0-5		1					1					0-1	0-1	0-1	0-1
SR32C*****/***XG	0-5	0-5	0-5	0-5			1					1				0-1	0-1	0-1	0-1
SR32D*****/***XG	0-5	0-5	0-5	0-5				1					1			0-1	0-1	0-1	0-1
SR32E*****/***XG	0-5	0-5	0-5	0-5					1					1		0-1	0-1	0-1	0-1
SR32F*****/***XG	0-5	0-5	0-5	0-5					1						1	0-1	0-1	0-1	0-1

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

******represents: Lamp quantity and type/***represents torch, radio, TV quantity, X represents 32 inch TV/ No X represents 24inch TV, G: PAYG Mode/No G: No-PAYG

Example: 221315/1110X: 2 pcs 2W, 1 pcs3W, 1 pcs 5w tubelight, 1 pcs torch, 1 pcs radio, 1 pcs 32 inch TV

NOTICE:

Only the Mbox Solar Home System (SR32B33) 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 Mbox Solar Home System (SR32B33) at https://data.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 the applicable Lighting Global Quality Standards or the requirements in IEC 62257-9-8.

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

Warranty Information

There is a 2-year warranty for the main units, lamps, TVs and torch, and a 1-year warranty for the radio, fan and other accessories.

Available Daily Electrical Energy and Port Information

ShenZhen Solar Run Energy Co., Ltd

Mbox Family

	Available Daily Electrical Energy	
System Name	(Wh/day)	Includes ports for charging?
SR32B33**	290	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.