

# VeraSol

## Standardized Specifications Book

**Manufacturer:** Engie Mobisol GmbH

**Component Family Name:** Mobisol SHS Family

**Date of Standardized Specifications Book Expiration:** November 30, 2020

**Verify Online:** <https://data.verasol.org/products/sek/mb-shs>

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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:** 2020.09

# Component-Level Standardized Specifications Sheet

Engie Mobisol GmbH

Mobisol SHS Family

## Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
50 Ah Solar Battery and Controller*	Sealed lead-acid	12	50000	54000
100 Ah Solar Battery and Controller*	Sealed lead-acid	12	100000	130000
Sun King Pico 50 Portable Lantern	Lithium iron phosphate	3.3	610	600

\*The Mobisol systems are pay-as-you-go (PAYG) enabled.

## PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
80 Wp Solar Panel	80	79
100 Wp Solar Panel	100	not tested
120 Wp Solar Panel	120	110
200 Wp Solar Panel	200	200

## Light Sources\*

Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)
	On	On	On
3.5 W bulb	350	480	130
2 W bulb	200	200	100
<b>Portable Lamps</b>	<b>Turbo</b>	<b>Turbo</b>	<b>Turbo</b>
Sun King Pico 50 Portable Lantern	Not stated	45	130

## Appliances\*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
Mobisol Television - 24"	24" DC flat screen	15	--	--	--
Mobisol Television - 32"	32" DC flat screen	24	21	--	--
Mobisol Television - 43"	43" DC flat screen	29	--	--	--

### 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

Engie Mobisol GmbH

Mobisol SHS Family

Number of each component included in each system

System Name	Primary Light Source			Sun King Pico 50 Portable Lantern	Televisions			Battery		PV Module			
	3.5 W Bulbs	*See Note	2 W Bulbs		24" TV	32" TV	43" TV	50 Ah Battery	100 Ah Battery	80 Wp Solar Panel	100 Wp Solar Panel	120 Wp Solar Panel	200 Wp Solar Panel
80 W Mobisol SHS Basic	3 to 12	or	3 to 12	1				1		1			
80 W Mobisol Family SHS - 24" TV	4 to 12	or	4 to 12	1	1			1		1			
100 W Mobisol SHS Basic	3 to 12	or	3 to 12	1				1			1		
100 W Mobisol Family SHS - 24" TV	4 to 12	or	4 to 12	1	1			1			1		
120 W Mobisol SHS Basic	3 to 12	or	3 to 12					1				1	
120 W Mobisol Family SHS - 24" TV	4 to 12	or	4 to 12		1			1				1	
120 W Mobisol Family SHS - 32" TV	4 to 12	or	4 to 12			1		1				1	
120 W Mobisol Family SHS - 43" TV	4 to 12	or	4 to 12				1	1				1	
200 W Mobisol SHS Basic	3 to 12	or	3 to 12						1				1
200 W Mobisol Family SHS - 24" TV	4 to 12	or	4 to 12		1				1				1
200 W Mobisol Family SHS - 32" TV	4 to 12	or	4 to 12			1			1				1
200 W Mobisol Family SHS - 43" TV	4 to 12	or	4 to 12				1		1				1
200 W Bright Future SHS - 32" TV**	6	and	6	1		1			1				1
200 W Bright Future SHS - 43" TV	12	or	12	1			1		1				1
240 W Mobisol SHS Basic	3 to 12	or	3 to 12						1			2	
240 W Mobisol Family SHS - 24" TV	4 to 12	or	4 to 12		1				1			2	
240 W Mobisol Family SHS - 32" TV	4 to 12	or	4 to 12			1			1			2	
240 W Mobisol Family SHS - 43" TV	4 to 12	or	4 to 12				1		1			2	

\*\*Tested as a full system. Individual SSS available on VeraSol website.

\*Note: Kits will have up to 12 units of a Primary Light Source in each kit

## NOTICE:

Only the Bright Future 200 W SHS 32" TV 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 Bright Future 200 W SHS 32" TV 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 Lighting Global Quality Standards.

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

#### **Warranty Information**

A 4-year warranty for the PV module and battery , 3-year warranty for the light points and cables and extension packs, 2-year warranty for the TV and parts sold with the kit, and 1 -year warranty for the Pico 50 lamp covering manufacturing defects in the system.

