Lighting Global
Standardized Specifications Book

Manufacturer: Roofstar Technology Co., Ltd.

Component Family Name: Roofstar Flex e Family

Date of Standardized Specifications Book Expiration: November 30, 2022

Verify Online: https://data.verasol.org/products/sek/rs-flex3e

Website: http://roofstartech.com/

Co-Brand of: Roofstar Flex e Family, Mango Energy Technologies Company Limited

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: 2021.06

Component-Level Standardized Specifications Sheet
Roofstar Technology Co., Ltd.
Roofstar Flex e Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
LED Lantern	LiFePO4	3.2	3300	3400
Torch	LiFePO4	3.2	400	450
Radio	Li-Ion	3.7	1500	1800

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
PV module	3	3.4
PV module	8	7.6

Light Sources*

Name / Model Number	Luminous Flux Rating (lm)		Measured Luminous Flux (lm)		Measured Lamp Efficacy (lm/W)	
	High	Low	High	Low	High	Low
LED Lantern	150	50	160	54	82	110
Torch	--	--	28	--	110	--

Appliances*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
Radio	Rated power consumption of 0.4 W Li-ion battery: 1500 mAh, 3.7 V)	3	0.4	1500	1800

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
Roofstar Technology Co., Ltd.
Roofstar Flex e Family

System Name	Number of each component included in each system				
	LED Lantern	Torch/Remote	Radio	3 W Solar Module	8 W Solar Module
Flex 3e**	3	1	1	1	1
Flex 3	3	1		1	1
Flex 2e	2	1	1		1
Flex 2	2	1			1
Flex 1	1	1		1	

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

NOTICE:

Only the Flex 3e Roofstar Solar Home System 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 Flex 3e Roofstar Solar Home System 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
Two year warranty on all kits, and a one year warranty on all components

List of Covered Systems
Roofstar Technology Co., Ltd.
Roofstar Flex e Family

System Name	Light Bulb	Tube Light	3 W PV Module	5 W PV Module	8 W PV Module	10 W PV Module	3.7 V/4000mAh (Lithium Ion)	3.7 V/4400mAh (Lithium Ion)	3.7 V/6000mAh (Lithium Ion)	3.7 V/8100mAh (Lithium Ion)	Torch TK002	Radio TK002
Home Sunshine**	2	1				1					1	1
Home Sunshine TK002-03-00	2		1									
Home Sunshine TK002-03-01	2		1									
Home Sunshine TK002-03-02	2		1					1			1	
Home Sunshine TK002-03-03	2		1					1				1
Home Sunshine TK002-03-04	1	1	1					1				
Home Sunshine TK002-05-01	2			1				1				
Home Sunshine TK002-05-02	2			1				1				1
Home Sunshine TK002-05-03	2			1				1			1	
Home Sunshine TK002-05-04	1	1		1				1				
Home Sunshine TK002-05-05	2			1					1			
Home Sunshine TK002-05-06	2			1					1			1
Home Sunshine TK002-05-07	2			1					1		1	
Home Sunshine TK002-05-08	2			1					1		1	1
Home Sunshine TK002-05-09	1	1		1					1			
Home Sunshine TK002-05-10	2	1		1					1			
Home Sunshine TK002-05-11	2	1		1					1		1	
Home Sunshine TK002-05-12	2	1		1					1			1
Home Sunshine TK002-05-13		2		1					1			
Home Sunshine TK002-05-14	1	2		1					1			
Home Sunshine TK002-05-15	3			1					1			

Home Sunshine TK002-05-16	3		1				1		1																		
Home Sunshine TK002-05-17	3		1				1			1																	
	1	3			1			1																			

****Tested as full systems. Individual SSS available on Lighting Global website.

NOTICE:

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Marks and Certifications	
Factory certification	0