VeraSol Standardized Specifications Book

Company Name: Venus Energy Limited

Brand Name: VENUS

Component Family Name: VEK Family

Family Expiration Date: August 31, 2028

Verify Online: https://data.verasol.org/products/sek/cvs-vekfamily

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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 5 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 IEC TS 62257-9-8.

Quality Standards Framework Version: 2025

Revision: 2025.08

Component-Level Standardized Specifications Sheet

Venus Energy Limited
VEK Family

Batteries / Control Boxes				
Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
16 Ah main unit	Lithium ion	3.7	16000	16000
8 Ah main unit	Lithium ion	3.7	8000	8100

PV Modules				
Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)		
10 W PV	10	11		
5 W PV	5	5.9		

Light Sources^				
Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)	
	on	on	on	
2 W bulb	240	350	130	

NOTICE: As indicated, not all components listed on this page were tested according to the Quality Test Method (QTM) in Edition 5 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 IEC TS 62257-9-8:2025. 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).

List of Covered Systems

Venus Energy Limited
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Number of each component included in each system					
System Name	2 W bulb	16 Ah main unit	8 Ah main unit	10 W PV	5 W PV
VEK-8L	2	1		1	
VEK-4L	2		1		1

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

NOTICE:

Only the kits denoted with ** were tested as full systems according to Edition 5 of IEC 62257-9-5 and passed IEC 62257-9-8 standards. An Individual Standardized Specification Sheet (SSS) that reports system-level performance is available for these systems at 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 IEC TS 62257-9-8:2025.

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

Warranty Information

A 2-year warranty covering manufacturing defects in the system.

Available Daily Electrical Energy and Port Information

Venus Energy Limited
VEK Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
VEK-8L**	29	yes
VEK-4L	15	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 Edition 5. 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.