

VeraSol Standardized Specifications Book

Manufacturer: Amped Innovation PBC

Component Family Name: WowSolar Family

Date of Standardized Specifications Book Expiration: October 31, 2024

Verify Online: <https://data.verasol.org/products/sek/ai-family>

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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 IEC TS 62257-9-8.

Quality Standards Framework Version: 2021

Revision: 2024.04

Component-Level Standardized Specifications Sheet

Amped Innovation PBC

WowSolar Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (Ah)	Measured Battery Capacity (Ah)
1.5 Ah control unit	Lithium iron phosphate	12.8	1.5	1.5
2 Ah control unit	Lithium iron phosphate	12.8	2	2.1
3 Ah control unit	Lithium iron phosphate	12.8	3	Not tested
6 Ah control unit	Lithium iron phosphate	12.8	6	6
12 Ah control unit	Lithium iron phosphate	12.8	12	12
6 Ah external battery	Lithium iron phosphate	12.8	6	5.9

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
6 W PV module	6	6.1
10 W PV module	10	not tested
15 W PV module	15	not tested
20 W PV module	20	not tested
40 W PV module	40	35

Light Sources*

Name / Model Number	Luminous Flux Rating (lm)		Measured Luminous Flux (lm)		Measured Lamp Efficacy (lm/W)	
	High	Low	High	Low	High	Low
Round lamp	160	50	160	77	150	150

Appliances*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
WOW22	WowSolar TV 22"	10	9.2	--	--
WOW24	WowSolar TV 24"	9.4	8.3	--	--
WOW32	WowSolar TV 32"	13	10	--	--
16" Fan	16" Standing Fan	11	10	--	--

*Light points and appliances may perform differently when used with different systems.

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 IEC TS 62257-9-8:2020. 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

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WowSolar Family

System Name	Number of each component included in each system																
	Round Lamp	G1: Control Unit with 1.5 Ah battery	G1: Control Unit with 2 Ah battery	G1: Control Unit with 2 x 1.5 Ah battery	6 Ah external battery	G2: Control Unit with 1 x 3 Ah battery	G2: Control Unit with 1 x 6 Ah battery	G2: Control Unit with 1 x 3 Ah battery + 1 x 6 Ah battery	6 W PV module	10 W PV module	15 W PV module	20 W PV module	40 W PV module	16" Stand Fan	WOW 22 TV	WOW 24 TV	WOW 32 TV
WowSolar Lighting 60	2-3	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
WowSolar Lighting 100	2-4	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
WowSolar Lighting 250	2-4	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--
WowSolar Lighting 400, 15 W	3-5	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--
WowSolar G2 Lighting 400, 15 W	3-5	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--
WowSolar Lighting 400, 20 W	3-5	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--
WowSolar G2 Lighting 800, 20 W	3-5	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--
WowSolar G2 Fan 16 - 80, 40 W	3-5	--	--	--	--	--	1	--	--	--	--	--	1	1	--	--	--
WowSolar Television 22 **	4	1	--	--	1	--	--	--	--	--	--	--	1	--	1	--	--
WowSolar Television 22 - 100, 40 W	4-6	1	--	--	1	--	--	--	--	--	--	--	1	--	1	--	--
WowSolar Television 24 - 100, 40 W	4-6	1	--	--	1	--	--	--	--	--	--	--	1	--	--	1	--
A24-24-120-1	4-6	--	--	1	1	--	--	--	--	--	--	--	1	--	--	1	--
WowSolar Television 24 - 120, 40 W	4-6	--	--	1	1	--	--	--	--	--	--	--	1	--	--	1	--
WowSolar Television 32 - 120, 40 W	4-6	--	--	1	1	--	--	--	--	--	--	--	1	--	--	--	1
WowSolar G2 Television 24 - 120, 40 W	4-6	--	--	--	--	--	--	1	--	--	--	--	1	--	--	1	--
WowSolar Upgrade: Television 22 - 80	4-6	--	--	--	1	--	--	--	--	--	--	--	1	--	1	--	--
WowSolar Upgrade: Television 24 - 80	4-6	--	--	--	1	--	--	--	--	--	--	--	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 4 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 62257-9-8.

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

Warranty Information

2-year warranty on the system and a 1-year warranty on accessories. The WowSolar 400 and WowSolar 100 sold in Rwanda has a 3-year warranty on the system and 1-year warranty on accessories.

Available Daily Electrical Energy and Port Information

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WowSolar Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
WowSolar Lighting 60	18	yes
WowSolar Lighting 100	18	yes
WowSolar Lighting 400, 15 W	37	yes
WowSolar Television 22**	110	yes
WowSolar Television 22 - 100, 40 W	110	yes
WowSolar Television 32 - 120, 40 W	120	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.