

VeraSol

Standardized Specifications Book

Company Name: Amped Innovation PBC

Brand Name: Amped Innovation PBC

Component Family Name: WowSolar Family

Date of Standardized Specifications Book Expiration: April 30, 2025

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

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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: 2024

Revision: 2024.08

Component-Level Standardized Specifications Sheet

Amped Innovation PBC

WowSolar Family

Batteries / Control Boxes

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
WowSolar™ 20Whr G1 Controller (1.5Ah)	Lithium iron phosphate	12.8	1500	1500
WowSolar™ 25Whr G1 Controller (2Ah)	Lithium iron phosphate	12.8	2000	Not tested
2 Ah radio/torch battery	Lithium ion	3.7	2000	2100
WowSolar™ 40Whr G1 Controller (3Ah)	Lithium iron phosphate	12.8	3000	Not tested
WowSolar™ 80Whr G2 Controller (6Ah)	Lithium iron phosphate	12.8	6000	Not tested
WowSolar™ 80Whr G1 External Battery (6Ah)	Lithium iron phosphate	12.8	6000	5900
160Whr G2 Controller (12Ah)	Lithium iron phosphate	12.8	12000	11900

PV Modules

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
50 W PV module	50	50

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 (120 lm)	120	--	Not tested		Not tested	
Round lamp (160 lm)	160	80	160	77	150	150
Round lamp (210 lm)	210	80	210	80	150	150

Appliances*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
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WOW 24" TV	24" diagonal television (10 W power consumption while in use)	9.4	8.3	--	--
WOW 32" TV	32" diagonal television (10 W power consumption while in use)	10	12	--	--
16" Stand fan	16 " stand fan (10 W power)	10	10	--	--
Radio	Portable radio (Li-ion battery: 2.1 Ah, 3.7 V), with a power consumption of 0.43 W while in use	0.55	0.43	2000	2100

* 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

Amped Innovation PBC

WowSolar Family

Number of each component included in each system																					
System Name	Round lamp (210 lm)	Round lamp (120 lm)	Round lamp (160 lm)	6 W PV module	10 W PV module	15 W PV module	20 W PV module	40 W PV module	50 W PV module	20Whr G1 Controller (1.5Ah)	25Whr G1 Controller (2Ah)	40Whr G1 Controller (3Ah)	6 Ah external battery	80Whr G2 Controller (6Ah)	120Whr G2 Controller (1 x 6 Ah + 1x 3 Ah battery)	160Whr G2 Controller (12Ah)	WOW 24" TV	WOW 32" TV	16" stand fan	Radio	Torch
WowSolar™ Lighting 60	0-2	--	0-3	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
WowSolar™ Lighting 100	--	--	2-4	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	0-1	--
WowSolar™ Lighting 250	0-4	--	0-4	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--	0-1	0-1
WowSolar™ Lighting 250 Rwanda	--	3	--	--	--	0-1	0-1	--	--	--	1	--	--	--	--	--	--	--	--	1	0-1
WowSolar™ Lighting 400	0-4	--	0-4	--	--	0-1	0-1	--	--	--	--	1	--	--	--	--	--	--	--	0-1	0-1
WowSolar™ G2 Lighting 400	0-4	--	0-4	--	--	0-1	0-1	--	--	--	--	1	--	--	--	--	--	--	--	0-1	0-1
WowSolar™ G2 Lighting 800	0-6	--	0-6	--	--	0-1	0-1	--	--	--	--	--	--	1	--	--	--	--	--	0-1	0-1
WowSolar™ G2 Fan 16 - 80	0-3	--	0-3	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	--	0-1	0-1
WowSolar™ G2 Fan 16 - 120	0-6	--	0-6	--	--	--	--	1	--	--	--	--	--	1	1	--	--	--	1	0-1	0-1
WowSolar™ G2 Fan 16 - 160	0-6	--	0-6	--	--	--	--	--	1	--	--	--	1	--	--	--	1	--	0-1	0-1	0-1
WowSolar™ Television 24 - 100	0-6	--	0-6	--	--	--	--	1	--	1	--	--	1	--	--	--	--	1	--	0-1	0-1
WowSolar™ Television 24 - 120	0-6	--	0-6	--	--	--	--	1	--	--	--	1	1	--	--	--	--	1	--	--	--
A24-24-120-1	0-6	--	0-6	--	--	--	--	1	--	--	--	1	1	--	--	--	--	--	0-1	0-1	0-1
WowSolar™ Television 32 - 120	0-6	--	0-6	--	--	--	--	1	--	--	--	1	1	--	--	--	1	--	0-1	0-1	0-1
WowSolar™ G2 Television 24 - 120	0-6	--	0-6	--	--	--	--	1	--	--	--	--	--	--	1	1	--	1	0-1	0-1	0-1
WowSolar™ G2 Television 24 - 160	0-6	--	0-6	--	--	--	--	--	1	--	--	--	1	--	--	--	1	-	--	0-1	0-1
WowSolar™ G2 Television 32 - 120	0-6	--	0-6	--	--	--	--	1	--	--	--	--	1	--	1	--	--	1	--	0-1	0-1
WowSolar™ TV 32 G2 Solar Home System **	--	--	6	--	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	1
WowSolar™ TV 32 G2 Solar Home System (variable lights)	--	--	0-6	--	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	1
WowSolar™ TV 32 G2 Solar Home System (with 210 lm bulbs)	0-6	--	--	--	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	1
WowSolar™ Upgrade: Television 24 - 80	0-6	--	0-6	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--
WowSolar™ Upgrade: Television 32 - 80	0-6	--	0-6	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--

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

° Kit has PAYG function.

NOTICE:

Only the kits denoted with ** were tested as full systems

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

Warranty Information

A 2-year warranty covering manufacturing defects for the system and a 1-year warranty for accessories

Available Daily Electrical Energy and Port Information

Amped Innovation PBC

WowSolar Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
WOWsolar 60 °	18	yes
WOWsolar 100 °	18	yes
WowSolar™ Lighting 250 °	25	yes
WowSolar™ Lighting 250 Rwanda °	25	yes
WowSolar™ G2 Lighting 800 °	39	yes
WowSolar™ G2 Lighting 800 °	71	yes
WowSolar™ G2 Television 24 - 120 °	125	yes
WowSolar™ TV 32 G2 Solar Home System**	150	yes

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

° Kit has PAYG function.

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.