

VeraSol

Standardized Specifications Book

Manufacturer: Zigong Xingchuan Photoelectric Co., Ltd

Component Family Name: ZSPD Family

Date of Standardized

Specifications Book Expiration: July 31, 2024

Verify Online: <https://data.verasol.org/products/sek/zon-zspd-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 the applicable Lighting Global Quality Standards or to meet the requirements in IEC 62257-9-8.

Revision: 2022.08

Component-Level Standardized Specifications Sheet

Zigong Xingchuan Photoelectric Co., Ltd

ZSPD Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (Ah)	Measured Battery Capacity (Ah)
4 Ah Battery	Lithium Iron Phosphate	12.8	4	4.1
6 Ah Battery	Lithium Iron Phosphate	12.8	6	not tested
12 Ah Battery	Lithium Iron Phosphate	12.8	12	12
18 Ah Battery	Lithium Iron Phosphate	12.8	18	not tested
20 Ah Battery	Lithium Iron Phosphate	12.8	20	20
28 Ah Battery	Lithium Iron Phosphate	12.8	28	not tested
40 Ah Battery	Lithium Iron Phosphate	12.8	40	43
Radio Battery	Lithium-ion	3.7	2	1.9

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
10 W PV Module	10	11
20 W PV Module	20	not tested
30 W PV Module	30	30
50 W PV Module	50	not tested
60 W PV Module	60	52
80 W PV Module	80	not tested
100 W PV Module	100	97

Light Sources*

Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)
	On	On	On
2.2 W LED Lamp	210	260	110
3 W LED Lamp	310	not tested	not tested
5 W LED Lamp	480	510	96

Appliances*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (Ah)	Measured Battery Capacity (Ah)
Table Fan	16" table fan (15W power)	15	15	--	--

Standing Fan	16" standing fan (15W power)	15	15	--	--
LCD TV 19 inch	19" diagonal (14W power consumption while in-use)	30	14	--	--
LCD TV 22 inch	22" diagonal (18W power consumption while in-use)	30	18	--	--
Radio	portable Li-ion battery: 2 Ah, 3.7 V)	5	0.29	2	1.9

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 or the requirements in IEC 62257-9-8. 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

Zigong Xingchuan Photoelectric Co., Ltd
ZSPD Family

System Name	Number of each component included in each system																						
	2.2 W LED Lamp	3 W LED Lamp	5 W LED Lamp	4 Ah Battery	6 Ah Battery	12 Ah Battery	18 Ah Battery	20 Ah Battery	28 Ah Battery	40 Ah Battery	10 W PV Module	20 W PV Module	30 W PV Module	50 W PV Module	60 W PV Module	80 W PV module	100 W PV Module	Table fan	Stand fan	LCD TV 19 inch	LCD TV 22 inch	Radio	
ZSPD-LFP0010B04	3	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	0-1
ZSPD-LFP0020B06	3	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	0-1
ZSPD-LFP0030B12	--	3	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	0-1	0-1	0-1	0-1	0-1	0-1
ZSPD-LFP0050B18	--	3	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	0-1	0-1	0-1	0-1	0-1	0-1
ZSPD-LFP0060B20	--	3	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	0-1	0-1	0-1	0-1	0-1	0-1
ZSPD-LFP0080B18	--	3	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	0-1	0-1	0-1	0-1	0-1	0-1
ZSPD-LFP0080B20	--	3	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	0-1	0-1	0-1	0-1	0-1	0-1
ZSPD-LFP0080B28	--	--	4	--	--	--	--	--	1	--	--	--	--	--	--	1	--	0-1	0-1	0-1	0-1	0-1	0-1
ZSPD-LFP0100B40**	--	--	4	--	--	--	--	--	--	1	--	--	--	--	--	--	1	0-1	0-1	0-1	0-1	0-1	0-1
ZSPD-LFP****B**-2.2(*)3(*)5(*)	0-4	0-4	0-4	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1

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

**** stands for the power of PV module, including 0010(10W), 0020(20W), 0030(30W), 0050(50W), 0060(60W), 0080(80W), 0100(100W).

** stands for the capacity of Li-ion battery, including 04(4Ah), 06(6Ah), 12(12Ah), 18(18Ah), 20(20Ah), 28(28Ah), 40(40Ah).

2.2 stands for 2.2W LED lamp, 3 stands for 3W LED lamp, 5 stands for 5W LED lamp.

(*) stands for the quantity of LED lamps.

0-4 stands for 0 to 4 LED lamps

NOTICE:

Only the Solar Home System ZSPD-LFP0100B40 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 Solar Home System ZSPD-LFP0100B40 at <https://data.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 the applicable Lighting Global Quality Standards or the requirements in IEC 62257-9-8.

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

Warranty Information

A 2-year warranty covering entire system and included appliances

Available Daily Electrical Energy and Port Information

Zigong Xingchuan Photoelectric Co., Ltd

ZSPD Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
ZSPD-LFP0010B04	39	yes
ZSPD-LFP0050B18	180	yes
ZSPD-LFP0100B40**	350	yes

**Tested as full system. 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. Estimating Wh/day values requires making assumptions about system efficiencies, power consumption, and user behavior. As with any calculation based on multiple assumptions, there is some degree of error in the Wh/day estimate, which may be greater or less than the actual value for a given product.