

VeraSol

Standardized Specifications Book

Company Name: A4&T Power Solutions Limited

Brand Name: A4&T

Component Family Name: A4T77 Family

Family Expiration Date: December 31, 2026

Verify Online: <https://data.verasol.org/products/sek/a4t-a4t77family>

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Co-brand of: SR27 Family
(Shenzhen Solar Run Energy Co., Ltd.)



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: 2025

Revision: 2025.09

Component-Level Standardized Specifications Sheet

A4&T Power Solutions Limited

A4T77 Family

Starred components below (⋆) are co-branded by A4&T Power Solutions Limited

Batteries / Control Boxes				
Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
6 Ah main unit battery	Lithium iron phosphate	6.4	6000	6000
12 Ah main unit battery⋆	Lithium iron phosphate	6.4	12000	12000
Torch battery⋆	Lithium iron phosphate	3.2	400	520
Radio battery⋆	Lithium ion	3.7	1500	2000

PV Modules		
Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
15 W monocrystalline PV module	15	15
21 W monocrystalline PV module⋆	21	20

Light Sources^												
Name / Model Number	Luminous Flux Rating (lm)				Measured Luminous Flux (lm)				Measured Lamp Efficacy (lm/W)			
	High	Low	On	Front Light	High	Low	On	Front Light	High	Low	On	Front Light
2 W bulb⋆	240	120	-	-	300	Not tested	-	-	160	Not tested	-	-
3 W bulb	-	-	360	-	-	-	380	-	-	-	140	-
1 W bulb	-	-	120	-	-	-	140	-	-	-	170	-
Torch (SR03)⋆	-	-	-	50	-	-	-	59	-	-	-	100
3 W tubelight	-	-	360	-	-	-	400	-	-	-	130	-

Appliances^					
Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
Torch (SR03)⋆	59 lumens torch, (LiFePO4 battery: 0.52 Ah, 3.2 V)	0.4	0.35	400	520
Radio (F170)⋆	Portable radio with 3.7 V internal battery	3	0.33	1500	2000

^ 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

A4&T Power Solutions Limited

A4T77 Family

Number of each component included in each system										
Originally tested system name included in the SR27 Family	6 Ah main unit	12 Ah main unit	15 W Monocrystalline PV module	21 W Monocrystalline PV module	2 W bulb	3 W bulb	1 W bulb	Torch	3 W tubelight	Radio
Solar Home System (SR27B42G) **	--	1	--	1	4	--	--	--	--	--
Number of each component included in each system										
Co-branded system name	6 Ah main unit	12 Ah main unit	15 W Monocrystalline PV module	21 W Monocrystalline PV module	2 W bulb	3 W bulb	1 W bulb	Torch	3 W tubelight	Radio
21W Solar Home System with Paygo (A4T77)†	--	1	--	1	4	--	--	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 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 TS 62257-9-8:2020..

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

Warranty Information
A 2-year warranty covering manufacturing defects in the solar module control box lights and torch and 1-year warranty for the charging cales and radio.

Available Daily Electrical Energy and Port Information

A4&T Power Solutions Limited

A4T77 Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
Solar Home System (SR27B42G) ^o **	43	yes
21W Solar Home System with Paygo (A4T77) [†]	43	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 Edition 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.