

Lighting Global Standardized Specifications Book

Manufacturer: Niwa- Next Energy Products Ltd.

Component Family Name: Energy 50

Date of Standardized Specifications Book Expiration: September 30, 2020

Verify Online: <http://www.lightingglobal.org/products/niwa-E50family>

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This Lighting Global 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 latest version of the Quality Test Method (QTM) in IEC 62257-9-5 or the Lighting Global Quality Assurance Protocol for Solar Home System Kits, as applicable. 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.

Quality Standards Framework Version: 2018

Revision: 2018.09

Component-Level Standardized Specifications Sheet

Niwa- Next Energy Products Ltd.

Energy 50

Battery / Control Box

Name / Model Number	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
3.3 Ah battery	3300	3500
6.6 Ah battery	6600	not tested
9.9 Ah battery	9900	10,000

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
20 W PV Module	20	21
40 W PV Module	40	not tested
48 W PV Module	50	48

Light Sources

Name / Model Number	Luminous Flux Rating (lm)			Measured Luminous Flux (lm)			Measured Lamp Efficacy (lm/W)		
	High	Medium	Low	High	Medium	Low	High	Medium	Low
Home 100	100	--	50	92	--	--	150	--	--
Home 300	300	100	50	290	--	--	150	--	--

Appliances

Name / Model Number	Description	Rated Power (W)	Measured Power (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
Solar LED TV 15.6	12 V 15.6" TV	12	9.8	--	--
Solar LED TV 19	12 V 19" TV	--	not tested	--	--
Solar LED TV 24	12 V 24" TV	15	11.7	--	--
Solar LED TV 32	12 V 32" TV	35	14	--	--
Eco Air 9	12 V 9" table fan	6	6.2	--	--
Eco Air 16	12 V 16" table fan	9	9.6	--	--
Eco Air 16 Up	12 V 16" stand fan	9	9.6	--	--

NOTICE: As indicated, not all components listed on this page were tested according to the Quality Test Method (QTM) in IEC 62257-9-5 or the Lighting Global Quality Assurance Protocols for Solar Home System Kits. 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. 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

Niwa- Next Energy Products Ltd.

Energy 50

System Name/ Item #	Number of each component included in each system														
	Home 100 Lamp	Home 300 Lamp	3.3 Ah battery	6.6 Ah battery	9.9 Ah battery	20 W PV module	40 W PV Module	48 W PV Module	15.6" TV	19" TV	24" TV	32" TV	9" table fan	16" table fan	16" stand fan
Energy 50/ 3333 (Energy 20W)	0-4	0-4	1			1			0-1				0-1		
Energy 50/ 3335 (Energy 40 W)	0-4	0-4		1			1			0-1	0-1	0-1	0-1	0-1	0-1
Energy 50/ 3356* (Energy 50W)	2	1			1			1		0-1	0-1	0-1	0-1	0-1	0-1
Energy 50/ 3355 (Energy 50W)	0-4	0-4			1			1		0-1	0-1	0-1	0-1	0-1	0-1

* Tested as a full system with a 32" TV and a 16" stand fan. Individual SSS available on Lighting Global website. This kit is also available with 3 Home 300 lamps.

All kits are available in PAYGO and non-PAYGO versions

NOTICE:

Only the Energy 50 3356 was fully tested as a system according to the Quality Test Method (QTM) in IEC 62257-9-5 or the Lighting Global Quality Assurance Protocol for Solar Home System Kits, as applicable. Individual Standardized Specifications Sheets (SSS) that report system-level performance are available for the Energy 50 3356 at www.lightingglobal.org/products. 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.

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

Warranty Information

Two year warranty on all kits and components except the TV and fan, which have a one-year warranty.