# Lighting Global Standardized Specifications Book

Manufacturer: Niwa- Next Energy Products Ltd.

Component Family Name: Energy 50

Date of Standardized Specifications Book Expiration: July 31, 2021

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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 verison 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: 2020.04** 

## Component-Level Standardized Specifications Sheet

Niwa- Next Energy Products Ltd.

### Energy 50

Battery / Control Box		
Name /	Battery Capacity Rating	Measured Battery Capacity
Model Number	(mAh)	(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										
	Lur	ninous	Flux		easured		Measured Lamp Efficacy			
	R	ating (li	m)	Lumino	us Flux	(lm)	(lm/W)			
	High	Medium	Low	High	Medium	Low	High	Medium	Low	
Name / Model Number		Σ			V			Σ		
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								
Radio	3.7 V Li-Ion Battery		0.34	1000	1000						

**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

	Number of each component included in each system															
System Name/ Item #	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	Radio
<b>Energy 50/ 3333</b> (Energy 20W)	0-10	0-4	1			1			0-1				0-1			0-1
<b>Energy 50/ 3335</b> (Energy 40 W)	0-10	0-4		1			1			0-1	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	0-1
<b>Energy 50/ 3355</b> (Energy 50W)	0-10	0-4			1			1		0-1	0-1	0-1	0-1	0-1	0-1	0-1

<sup>\*</sup> 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 and up to 10 Home 100 Lamps and a radio. 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.