

# X850

d.light design

Verify online:

[www.lightingglobal.org/products/dl-x850](http://www.lightingglobal.org/products/dl-x850)

Results based on test procedures detailed in Lighting Global Solar Home System Test Method, Ed. 2.0

Valid Until: April 30, 2019



## Available Daily Electrical Energy (Wh/day)

100

Lumens

1200



Meets Lighting Global Quality Standards



Mobile Charging

**PAYG**

Pay-As-You-Go Option Available

6 Light Points

3 5-volt USB Ports



3 12-volt Ports



### Warranty Information

The product carries a 2-year warranty with the exception of the following for which the warranty is 1 year: TV remote, solar radio, solar torch

### Performance Details\*

Appliance <sup>b</sup>	Description	Included with kit?	Power <sup>b</sup> (W)	Run Time After a Typical Day of Solar Charging <sup>a</sup>		
				Used Alone <sup>c</sup>	Used In Combination <sup>d</sup>	Run Time Units
Main lighting	5 light points on totaling 1200 lumens	included	11	7.6	4.3	hours
Torch	75 lumens	included	--	10	4.7	hours
Television	19" diagonal	not included	10	10	2.4	hours
Radio	portable (3.7 Wh battery)	included	--	210	3.8	hours
Mobile Phone	Smart phone (5.7 Wh battery)	not included	--	20	1.4	number of full charges

Available daily electrical energy<sup>d</sup> (Wh/day): 100

Performance Measure	Brightness Setting: 4 lamps on high and 1 tubelight on high
Lighting full battery run time <sup>e</sup> (hours)	6.2
Total light output in lumens <sup>f</sup>	1200

\*The X850 may initially be sold with 50% battery capacity; units will have lower runtimes until the full battery capacity is unlocked.

<sup>a</sup> A typical day of solar charging assumes 5 kWh/m<sup>2</sup>/day

<sup>b</sup> Only included appliances were tested. Run times and power ratings for appliances sold separately come from manufacturer ratings or standard estimates.

<sup>c</sup> Without any other loads used during the run time

<sup>d</sup> Based on an example use profile with all of the appliances listed above used in combination

<sup>e</sup> Lighting full battery run time estimates do not account for mobile phone charging or other auxiliary loads; the run time is defined as the time until the output is 70% of the initial, stabilized output.

<sup>f</sup> 1 candle or kerosene wick lamp = approximately 10 lumens

**Lighting Details**

Lamp Name	Type	Number of Settings	Light Output (lm)	Lumen Efficacy (lm/W)	CRI <sup>g</sup>	CCT <sup>h</sup>	Distribution Type	Lumen Maintenance <sup>i</sup>
Hanging lamp	LED	unlimited, dimmable	200	110	85	Cool (5000-7000 K)	Wide	>100%
Tube light	LED	unlimited, dimmable	410	110	85	Cool (5000-7000 K)	Wide	>100%

<sup>g</sup> Color Rendering Index. An index of 100 is equivalent to viewing objects in daylight; above 80 is considered good.

<sup>h</sup> Correlated Color Temperature in degrees Kelvin. Describes color appearance as warm, near daylight, or cool.

<sup>i</sup> Percent of the original light output that remains after 2,000 hours of run time

**Special Features**

Mobile charging and appliances	USB and 12 V ports available to charge devices and power appliances; d.light television available for purchase separately
Pay-as-you-go	PAYG-enabled

**Durability**

Overall durability and workmanship	Pass
Durability tests passed	Switch and connector cycling, strain relief test, physical ingress protection test. Drop test (applies to torch and radio). Water ingress protection not tested; meant for indoor use only. Torch and radio meet water ingress requirements with a warning label.

**Solar Details**

PV module type	Polycrystalline silicon
PV maximum power	38 watts

**Battery Details**

Battery replaceability	Not easily replaceable with common tools
Battery chemistry	Lithium iron phosphate
Battery package type	4x IFR 26650
Battery capacity	6 Ah
Battery nominal voltage	12.8 V
Battery Status Indication	One display shows the charging battery level and lock status

**Marks and Certifications**

Factory certification	ISO 9001:2008; ISO 14001:2004
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**Product Details**

Manufacturer name	d.light design
Product name	X850
Product model / ID number	X850
Contact information	testing@dlight.com
Website	www.dlight.com
Dimensions (entire product in package)	Main unit and appliances: 38.2 cm x 28.2 cm x 13.5 cm PV module: 82 cm x 35 cm
Weight	6770 g

**SSS Information**

Specs sheet expiration date	April 30, 2019
Quality Standards Framework Version	2017
Revision	2017.06