# Multi 300 XL

**Multi 300 XL**
**Niwa - Next Energy Products Ltd.**
Results based on test procedures detailed in IEC 62257-9-5 v.4

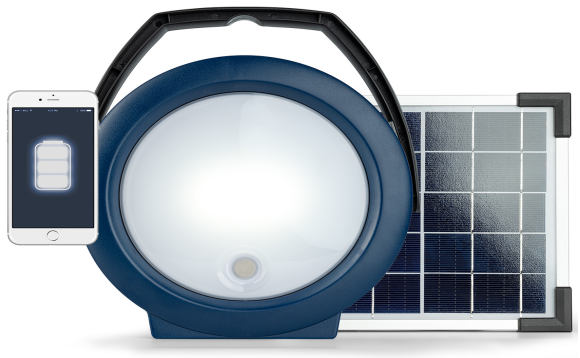
*Verify online:*
*https://data.verasol.org/products/sek/niwa-multi300xl*
*Valid until:* August 31, 2022

**Meets the Lighting Global Pico-PV Quality Standards**

**Mobile charging**

1 **Light point(s)**

**Plug-and-play**



## WARRANTY INFORMATION

A two-year warranty covering manufacturing and material defects

## PERFORMANCE DETAILS

| | Appliance[a] | Description | Run time after a typical day of solar charging (assuming 5kWh/m²/day) Used alone[b] | Used in combination[c] |
|---|---|---|---|---|
| included in kit | Main lighting unit | One light on high (ultra) with 290 lumens and 4.2 W power | 3.3 hours | 1.5 hours |
| | | One light on bedlight setting with 10 lumens and 0.1 W power | 89 hours | -- |
| sold separately | Mobile phone | Smart phone (5.7 Wh battery) | 0.7 full charge(s) | 0.4 full charge(s) |

| | |
|---|---|
| Available daily electrical energy[c] (Wh/day) | 6 |

| Performance measure | Brightness setting: Ultra |
|---|---|
| Lighting full battery run time[d] for main unit (hours) | 4.3 |
| Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any auxiliary lights included with the product) | 960 |

[a] Only included appliances were tested. Run times and power ratings for appliances sold separately come from manufacturer ratings or standard estimates.
[b] Without any other loads used during the run time
[c] Based on an example use profile with all of the appliances listed in the "Used in combination" column used simultaneously.
[d] 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.

## LIGHTING DETAILS

| Lamp name | Number of lamps | Number of settings | Setting | Light output (lm) | Lumen efficacy[e] (lm/W) | CRI[f] | CCT[g] | Distribution type | Lumen maintenance[h] |
|---|---|---|---|---|---|---|---|---|---|
| Integrated lamp | 1 | 5 | Ultra | 290 | 110 | 86 | 5200 | Wide | 100% |
| | | | High | 190 | 110 | 86 | 5200 | -- | -- |
| | | | Mid | 91 | 120 | 86 | 5200 | -- | -- |
| | | | Low | 44 | 120 | 86 | 5200 | -- | -- |
| | | | Bedlight | 10 | 110 | 86 | 5200 | -- | -- |

[e] Lumen efficacy is the power consumption at a light point during the light output test.
[f] Color Rendering Index. An index of 100 is equivalent to vieiwing objects in daylight; above 80 is considered good.
[g] Correlated Color Temperature in degrees Kelvin. Describes color appearance as warm (2700-3000 K), cool (3000-5000 K), or daylight (>5000 K)
[h] Percent of the original light output that remains after 2,000 hours of run time

| SPECIAL FEATURES | | |
|---|---|---|
| **Settings** | | **5 brightness settings (Ultra, High, Mid Low, Bed Light)** |
| **Solar Powered Radio - sold separately** | | **1000 mAh Li-Ion Battery with .34 W power consumption while in use** |

| PORTS | | | |
|---|---|---|---|
| 1 | **USB 2.0 type A** |  | Mobile phones can be charged. Adapters are included. |

| DURABILITY | | |
|---|---|---|
| Overall durability and workmanship | | Pass |
| Durability tests passed | | Switch test, Drop test, physical ingress protection (IP6X). |
| Level of water protection | Main Lighting Unit | has protection from permanent outdoor exposure; met IPX5 |
| | PV module | Has protection from permanent outdoor exposure |

| SOLAR DETAILS | |
|---|---|
| PV module type | Polycrystalline silicon |
| PV maximum power | 3 watts |

| BATTERY DETAILS | |
|---|---|
| Battery replaceability | Not easily replaceable with common tools. |
| Battery chemistry | Lithium iron phosphate |
| Battery package type | 1 x 26650 |
| Battery capacity | 3.5 Ah |
| Battery nominal voltage | 3.2 V |
| Battery status indication | One indicator on the integrated lamp displays battery charge state |

| MARKS AND CERTIFICATIONS | |
|---|---|
| Factory certification | ISO 9001 |

| PRODUCT DETAILS | |
|---|---|
| Manufacturer name | Niwa - Next Energy Products Ltd. |
| Product name | Multi 300 XL |
| Product model / ID number | Multi 300 XL |
| Contact information | sales@niwasolar.com |
| Website | www.niwasolar.com |
| Dimensions (entire product in package) | 240 x 90 x 277 cm |
| Mass | 1450 g |

| SSS INFORMATION | |
|---|---|
| Specs sheet expiration date | August 31, 2022 |
| Quality standards framework version | 2020 |
| Revision | 2020.04 |