

# VeraSol

## Standardized Specifications Book

**Manufacturer:** JUA Energy Co., Ltd.

**Component Family Name:** Home Mate H3 Family

**Date of Standardized Specifications Book Expiration:** September 30, 2024

**Verify Online:** <https://data.verasol.org/products/sek/jua-h3family>

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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 the applicable Lighting Global Quality Standards or to meet the requirements in IEC 62257-9-8.

**Quality Standards Framework Version:** 2022

**Revision:** 2022.11

# Component-Level Standardized Specifications Sheet

JUA Energy Co., Ltd.

Home Mate H3 Family

## Battery / Control Box

| Name / Model Number | Battery Chemistry      | Nominal Voltage (V) | Battery Capacity Rating (Ah) | Measured Battery Capacity (Ah) |
|---------------------|------------------------|---------------------|------------------------------|--------------------------------|
| 38 Wh battery       | Lithium iron phosphate | 6.4                 | 6.0                          | 5.9                            |
| 56 Wh battery       | Lithium iron phosphate | 9.6                 | 6.0                          | 5.8                            |
| 76 Wh battery       | Lithium iron phosphate | 6.4                 | 12                           | not tested                     |
| 110 Wh battery      | Lithium iron phosphate | 6.4                 | 18                           | 18                             |

## PV Module

| Name / Model Number | Peak Power at STC Rating (W) | Measured Peak Power at STC (W) |
|---------------------|------------------------------|--------------------------------|
| 12 W PV Module      | 12                           | 13                             |
| 20 W PV Module      | 20                           | 19                             |
| 30 W PV Module      | 30                           | not tested                     |
| 40 W PV Module      | 40                           | 37                             |
| 50 W PV Module      | 50                           | 48                             |

## Light Sources\*

| Name / Model Number | Luminous Flux Rating (lm) |            | Measured Luminous Flux (lm) |            | Measured Lamp Efficacy (lm/W) |            |
|---------------------|---------------------------|------------|-----------------------------|------------|-------------------------------|------------|
|                     | High                      | Low        | High                        | Low        | High                          | Low        |
| 130 lm lamp         | 130                       | Not Tested | 150                         | Not Tested | 120                           | Not Tested |
| 200 lm Round lamp   | Not Tested                |            | Not Tested                  |            | Not Tested                    |            |
| 200 lm Shaded lamp  | 200                       |            | 220                         |            | 100                           |            |
| 300 lm lamp         | 300                       |            | 440                         |            | 140                           |            |

## Appliances\*

| Name / Model Number | Description  | Rated Power (W) | Measured Power During Use (W) | Rated Battery Capacity (Ah) | Measured Battery Capacity (Ah) |
|---------------------|--|-----------------|-------------------------------|-----------------------------|--------------------------------|
| 24" TV              | 24" diagonal (11.0 W power consumption while in-use) | 12              | 11                            | --                          | --                             |

**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 the applicable Lighting Global Quality Standards or the requirements in IEC 62257-9-8. 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).

\*Light points and appliances may perform differently when used with different systems.

# List of Covered Systems

JUA Energy Co., Ltd.

Home Mate H3 Family

| System Name           | Number of each component included in each system |                   |                    |             |                |                |                |                |                |                              |                              |                              |                               |        |
|-----------------------|--|-------------------|--------------------|-------------|----------------|----------------|----------------|----------------|----------------|------------------------------|------------------------------|------------------------------|-------------------------------|--------|
|                       | Light Points                                     |                   |                    |             | PV module      |                |                |                |                | Battery                      |                              |                              |                               | 24" TV |
|                       | 130 lm lamp                                      | 200 lm Round lamp | 200 lm Shaded lamp | 300 lm lamp | 12 W PV Module | 20 W PV Module | 30 W PV Module | 40 W PV Module | 50 W PV Module | Main Unit with 38 Wh Battery | Main Unit with 56 Wh Battery | Main Unit with 76 Wh Battery | Main Unit with 110 Wh Battery |        |
| H3-38                 | 2  |                   | 1                  |             | 1              |                |                |                |                | 1                            |                              |                              |                               |        |
| H3G-38                | 2  |                   | 1                  |             | 1              |                |                |                |                | 1                            |                              |                              |                               |        |
| H3-38A                | 2  |                   | 1                  |             |                | 1              |                |                |                | 1                            |                              |                              |                               |        |
| H3G-38A               | 2  |                   | 1                  |             |                | 1              |                |                |                | 1                            |                              |                              |                               |        |
| H3-56                 | 3  |                   |                    | 1           |                | 1              |                |                |                |                              | 1                            |                              |                               |        |
| H3G-56 ***            | 3  |                   |                    | 1           |                | 1              |                |                |                |                              | 1                            |                              |                               |        |
| H3-76                 | 2  |                   | 1                  |             |                |                | 1              |                |                |                              |                              | 1                            |                               | 1      |
| H3G-76                | 2  |                   | 1                  |             |                |                | 1              |                |                |                              |                              | 1                            |                               | 1      |
| H3G-76A               | 2  |                   | 1                  |             |                |                |                | 1              |                |                              |                              | 1                            |                               | 1      |
| H3G-76B               | 2  |                   | 1                  |             |                |                |                |                | 1              |                              |                              | 1                            |                               | 1      |
| H3G-76C               |  | 3                 |                    |             |                | 1              |                |                |                |                              |                              | 1                            |                               |        |
| H3G-76C (Solektra) ** |  | 3                 |                    |             |                | 1              |                |                |                |                              |                              | 1                            |                               |        |
| H3-110                |  |                   | 3                  | 1           |                |                |                | 1              |                |                              |                              |                              | 1                             | 1      |
| H3G-110 ***           |  |                   | 3                  | 1           |                |                |                | 1              |                |                              |                              |                              | 1                             | 1      |
| H3-110A               |  |                   | 3                  | 1           |                |                |                |                | 1              |                              |                              |                              | 1                             | 1      |
| H3G-110A              |  |                   | 3                  | 1           |                |                |                |                | 1              |                              |                              |                              | 1                             | 1      |

\*\* The H3G-76C is co-branded by Solektra and is equivalent to the JUA Energy version. For more details, please visit the product's listing at:

<https://data.verasol.org/products/sek/sol-h3g>

\*\*\* Tested as full systems. Individual SSS available on VeraSol website.

**NOTICE:**

Only the H3G-110 and H3G-56 were fully tested as a system according to Edition 4 of IEC 62257-9-5. Individual Standardized Specifications Sheets (SSS) that report system-level performance are available for the H3G-110 at <https://data.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 the applicable Lighting Global Quality Standards or the requirements in IEC 62257-9-8.

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

**Warranty Information**

Two year warranty on all kits and components

# Available Daily Electrical Energy and Port Information

JUA Energy Co., Ltd.  
Home Mate H3 Family

| System Name   | Available Daily Electrical Energy (Wh/day) | Includes ports for charging? |
|---------------|--|------------------------------|
| H3G-110 **    | 120  | yes                          |
| H3G-76 SHS    | 93   | yes                          |
| H3G-76C SHS   | 93   | yes                          |
| H3G-56 SHS ** | 54   | yes                          |
| H3G-38 SHS    | 44   | yes                          |

\*\*Tested as full systems. Individual SSS available on VeraSol website.

## **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 Ed. 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. Estimating Wh/day values requires making assumptions about system efficiencies, power consumption, and user behavior. As with any calculation based on multiple assumptions, there is some degree of error in the Wh/day estimate, which may be greater or less than the actual value for a given product.