# VeraSol
# Standardized Specifications Book

**Manufacturer:** Bboxx Ltd.

**Component Family Name:** Flexx TV Family

**Date of Standardized Specifications Book Expiration:** October 31, 2025

**Verify Online:** https://data.verasol.org/products/sek/bb-flxtvfam

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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.

<u>**NOTICE**</u>: 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 IEC TS 62257-9-8.

**Quality Standards Framework Version:** 2023
**Revision:** 2023.10

# Component-Level Standardized Specifications Sheet

## Bboxx Ltd.

## Flexx TV Family

### Battery / Control Box

| Name / Model Number | Battery Chemistry | Nominal Voltage (V) | Battery Capacity Rating (Ah) | Measured Battery Capacity (Ah) |
|---|---|---|---|---|
| 12.8 V 6 Ah Battery (Flexx80) | Lithium iron phosphate | 12.8 | 6 | 6 |
| 12.8 V 11 Ah Battery (Flexx140) | Lithium iron phosphate | 12.8 | 11 | 11 |
| 3.7 V 2.4 Ah Battery (radio) | Lithium ion | 3.7 | 2.4 | 2.4 |
| 3.7 V 2.5 Ah Battery (torch) | Lithium ion | 3.7 | 2.5 | 2.5 |

### PV Module

| Name / Model Number | Peak Power at STC Rating (W) | Measured Peak Power at STC (W) |
|---|---|---|
| 35 W Module (SP00010101) | 35 | 37 |
| 50 W Module (SP00020101) | 50 | 51 |
| 80 W Module (SP00030101) | 80 | 76 |

### Light Sources*

| Name / Model Number | Luminous Flux Rating (lm) | | | Measured Luminous Flux (lm) | | | Measured Lamp Efficacy (lm/W) | | |
|---|---|---|---|---|---|---|---|---|---|
| | High | Mid | Low | High | Mid | Low | High | Mid | Low |
| 1.4 W dimmable bulb (LI0202) | 160 | 110 | 50 | 180 | -- | -- | 130 | -- | -- |
| 1.3 W dimmable bulb (LI02070101) | 170 | 120 | 85 | 180 | -- | -- | 130 | -- | -- |
| 1.4 W 12 V Tubelight (LI02060101) | 200 | 140 | 70 | 230 | -- | -- | 150 | -- | -- |
| 1.5 W Torch (LI0204) | 160 | 110 | 50 | 180 | -- | -- | 130 | -- | -- |

### Appliances*

| Name / Model Number | Description | Rated Power (W) | Measured Power During Use (W) | Rated Battery Capacity (Ah) | Measured Battery Capacity (Ah) |
|---|---|---|---|---|---|
| **24" Optimized TV (TV00080101)** | 24" diagonal television (9.6 W power consumption while in use) | 16 | 9.6 | -- | -- |
| **Torch (LI0204)** | 160 lumens torch, (Li-ion battery: 2.5 Ah, 3.7 V) | 1.5 | 1.4 | 2.5 | 2.5 |
| **Radio (AC0094)** | portable (Li-ion battery: 2.4 Ah, 3.7 V), with a power consumption of 0.72 W while in-use | 3 | 0.72 | 2.4 | 2.4 |

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

**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 IEC TS 62257-9-8:2020. 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
## Bboxx Ltd.
## Flexx TV Family

| System Name | Number of each component included in each system | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1.4W, 160lm dimmable light | 1.3W, 170lm dimmable light | Tubelight | Torch | 35W PV Module | 50W PV Module | 80W PV Module | Flexx80 Control Unit with 12.8V 6Ah Battery | Flexx 140 Control Unit with 12.8V 11Ah Battery | 24" Optimized TV | Radio |
| Flexx80-35W Kit 01º | 3 | -- | 1 | 1 | 1 | -- | -- | 1 | -- | 1 | 1 |
| Flexx80-35W Kit 02º | -- | 3 | 1 | 1 | 1 | -- | -- | 1 | -- | 1 | 1 |
| Flexx80-50W Kit 01º | 3 | -- | 1 | 1 | -- | 1 | -- | 1 | -- | 1 | 1 |
| Flexx80-50W Kit 02º | -- | 3 | 1 | 1 | -- | 1 | -- | 1 | -- | 1 | 1 |
| Flexx140-50W Kit 01º | 4 | -- | 1 | 1 | -- | 1 | -- | -- | 1 | 1 | 1 |
| Flexx140-50W Kit 02º | -- | 4 | 1 | 1 | -- | 1 | -- | -- | 1 | 1 | 1 |
| Flexx140-80W Kit 01º | 4 | -- | 1 | 1 | -- | -- | 1 | -- | 1 | 1 | 1 |
| Flexx140-80W Kit 02º ** | -- | 4 | 1 | 1 | -- | -- | 1 | -- | 1 | 1 | 1 |

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

ºKit has PAYG function

**NOTICE:**

Only the kits denoted with ** were tested as full systems according to Edition 4 of IEC 62257-9-5 and passed IEC 62257-9-8 standards. An Individual Standardized Specification Sheet (SSS) that reports system-level performance is available for these systems at 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 IEC 62257-9-8.

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

**Warranty Information**

2-year warranty that covers manufacturing defects of the control unit, PV module, and lights. Bboxx will repair by replacing a component or replacing the whole unit.

## Available Daily Elelctrical Energy and Port Information
### Bboxx Ltd.
### Flexx TV Family

| System Name | Available Daily Electrical Energy (Wh/day) | Includes ports for charging? |
|---|---|---|
| Flexx80-35W Kit 01 | 93 | yes |
| Flexx80-50W Kit 01 | 94 | yes |
| Flexx140-50W Kit 01 | 180 | yes |
| Flexx140-80W Kit 01 | 200 | yes |

**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.