**WARNING**

Risk of fire due to dusty or oxidized contact surfaces of live aluminum conductors
- Connecting dirty or oxidized contact surfaces with aluminum conductors induces the amperage of the live terminals, thereby increasing the transition resistance. This can cause components to overheat, burn, and result in fire or serious injury.
- The contact surfaces can be cleaned, brushed, and treated with acids and alkaline substances (e.g., petroleum jelly or special thermal grease).

**WARNING**

Fire risk
- If fuse is missing or incorrect and a fault occurs, a fire may be caused. This can result in minor or moderate injury.
- Fuse the Sunny Home Manager 2.0 line conductor with a fuse or a selective circuit breaker with max. 63 A.

**WARNING**

Glowing red: An error has occurred. The error has not yet been reported to Sunny Portal.
- Self-consumption < 3 W
- Only qualified persons with the following skills are allowed to perform the tasks described in this document.
- **Training** in the installation and commissioning of electrical devices and installations
- **Training** in how to deal with the dangers and risks associated with installing and using electrical devices and installations
- **Knowledge** of the applicable standards and directives
- **Knowledge** of compliance with this document and all safety information

**SYMBOLS USED**

- Indicates a hazardous situation that, if not avoided, will result in death or serious injury.
- Indicates a hazardous situation that, if not avoided, can result in minor or moderate injury.
- Indicates a situation that, if not avoided, can result in property damage.
- Indicates a situation that, if not avoided, can result in personal injury or property damage and to ensure long-term operation of the product.
- Indicates a situation that must be observed at all times when working on or with the product.
- Indicates a requirement for meeting a specific goal.
- A problem that might occur.
- Information that is important for a specific topic or goal, but not necessarily dangerous.

**SAFETY INFORMATION**

This section contains safety information that must be observed at all times when working on or with the product. To prevent personal injury and property damage and to ensure long-term operation of the product, read this section carefully and observe all safety instructions at all times.

**Troubleshooting**

Refer to the "Troubleshooting" section for error diagnosis.

**Mounting**

- Mount the Sunny Home Manager 2.0 on the top hat rail. To do so, hook the Sunny Home Manager 2.0 onto the top edge of the top-hat rail and press down until it snaps into place.

**ELECTRICAL CONNECTION FOR APPLICATIONS UP TO 63 A**

Installation using the integrated measuring unit

- The following figure shows a connection example in TN and TT grid configurations in the case of installation at the grid-connection point when using the integrated measuring unit (recommended).
- For exact connection specifications, contact your electrical utility company.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating type</td>
<td>Sunny Home Manager 2.0</td>
</tr>
<tr>
<td>Maximum operating altitude</td>
<td>66000 ft (2000 m)</td>
</tr>
<tr>
<td>Relative humidity**</td>
<td>95% to 50%</td>
</tr>
<tr>
<td>Temperature in ambient</td>
<td>35°C to 40°C</td>
</tr>
<tr>
<td>Temperature during transport/storage</td>
<td>5°C to 70°C</td>
</tr>
<tr>
<td>Protection class</td>
<td>II</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>70 mm x 88 mm x 65 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>0.30 kg</td>
</tr>
</tbody>
</table>

**PRODUCT DESCRIPTION**

- SUNNY HOME MANAGER 2.0
- SMA SMART HOME - Battery Charging Management
- SMA SMART HOME - Home appliance energy management using EEBus
- SMA SMART HOME - Battery Charging Management with Time-of-Use Energy Tariffs
- SMA SMART HOME - Load Control via CAN
- SMA SMART HOME - Load Control via MUST
- Smaller: Washing machine
- Auxiliary: AC-Loads on or with a Sunny Home Manager 2.0
- Sunny Home Manager 2.0 is starting up.
- The Sunny Home Manager 2.0 is sending or receiving data.
- The Sunny Home Manager 2.0 is powered by a connected appliance.
- Solar devices are not yet registered in Sunny Home Manager 2.0.
- Energysysteem is not safety-relevant.
- Information that is important for a specific topic or goal, but not necessarily dangerous.
3. Connect the connection cables for current measurement (dashed gray line) to
the Sunny Home Manager 2.0. Observe the prescribed torque for screw termin
also be operated without the measuring unit being enabled.

2. Select the Sunny Home Manager 2.0 as the PV production meter in Sunny Por
cations, contact your electric utility company. For exact connection specifi
The following figure shows a connection example in TN and TT grid configurations.

ELECTRICAL CONNECTION FOR APPLICATIONS > 63 A

IN
OUT
L1 L2 L3
Transformer 1
Energy meter
Transformer 2
Transformer 3
Inverter
Sunny Home Manager 2.0
Connections:
– Connection cable for current measurement
– Connection cable for voltage measurement

Additionally required material (not included in the scope of delivery):

• Connection cables for current transformers
• Connection cables for voltage measurement

Recommandations for the current transformer
SMA Solar Technology recommends current transformers designed for a secondary current of 5 A. The current transformers should have at least accuracy class 1.

Procedure:
1. Connect one current transformer to each line conductor L1, L2 and L3.
2. On each current transformer, connect one connection cable for current measure-
rent to each of the action keyways terminals (K1 and K2). Observe the per
connection between the Sunny Home Manager 2.0 (see Section
“Technical Data”).

3. Connect the connection cables for current measurement (dashed gray line) to
the Sunny Home Manager 2.0. Observe the prescribed torque for screw termi
nals (see Section “Technical Data”).

4. Connect the connection cables for voltage measurement (solid gray line) to the
Sunny Home Manager 2.0. Observe the prescribed torque for screw ter-
minals (see Section “Technical Data”).

Connecting Sunny Home Manager 2.0 via router / network switch
The Sunny Home Manager 2.0 must be connected to the local network via a rout-
er / network switch. If the Sunny Home Manager 2.0 is connected directly to
an inverter via network cable, the data will not be transmitted to the rout-
ning Sunny Home Manager 2.0. In this case, the Sunny Home Manager 2.0 must be con-
ected to each of the secondary current terminals (see Section
“Technical Data”). Observe the prescribed torque for screw terminals (see Section “Technical Data”).

# Connect the network cable to the network terminal of the Sunny Home Manager 2.0.
2. Connect the other end of the network cable to a router / network switch.

COMMISSIONING

Requirements:
☐ The PV system must be in operation.
☐ All devices in the local network must be in operation and connected to the Sunny Home Manager 2.0 via a router / network switch.
☐ Devices that support the EIBus industry standard must be connected to the Sunny Home Manager 2.0 (see technical information “SMA SMART HOME - Home appliance energy management using EIBus”).
☐ DHCP must be active for the router (see router manual).

Procedure:
1. Connect the Sunny Home Manager 2.0 with a cover or the contact protection of
the subdistribution.
2. Power the supply to the subdistribution back on.
3. The LEDs on the Sunny Home Manager 2.0 light up during the startup proce-
dure. All devices in the local network will be recognized automatically.
4. Register all devices in Sunny Portal.
5. Sunny Porta

REGISTRATION IN SUNNY PORTAL

Sunny Portal serves as the user interface of the Sunny Home Manager 2.0. There
fore, you must register the Sunny Home Manager 2.0 in Sunny Portal.

Requirements:
☐ The PV system must be in operation.
☐ All devices in the local network must be in operation and connected to the Sunny Home Manager 2.0 via a router / network switch.
☐ Devices that support the EIBus industry standard must be connected to the Sunny Home Manager 2.0 (see technical information “SMA SMART HOME - Home appliance energy management using EIBus”).
☐ DHCP must be active for the router (see router manual).

Procedure:
1. Call up www.SunnyPortal.com and select [PV System Setup Assistant].
3. The PV System Setup Assistant screen.
4. Select [Device].
5. The User Registration page opens.
6. Follow the instructions of the PV System Setup Assistant.
7. After completing the registration, configure further settings in Sunny Portal (see the Sunny Home Manager 2.0 manual at www.SMA-Solar.com):
• Add automatically recognized devices
• Configure the load profile of the automatically recognized devices
• Enter the operator data
• Enter the PV array power
• Configure the feed-in/consumption tariff and electricity tariff
• Configure settings for PV system monitoring.

DEFINING THE ENERGY METER AT THE GRID-CONNECTION POINT

Requirements:
☐ You must be logged in to Sunny Portal as an

Procedure:
1. Select [Configuration] > Device Overview in the page and menu selection:
2. In the Technical Manager 2.0 row and the Properties column, select the properties symbol.
3. Select [Edit].
4. In the Meter Configuration area, select the desired feed-in and purchased electricity meter from the drop-down list (see Section “Electrical Connection for Applications up to 63 A” for selection).
5. Select [Save].

RESETTING THE SUNNY HOME MANAGER 2.0

1. Loss of data due to replacement or due to resetting to default settings
   If the Sunny Home Manager 2.0 is reset to the default settings or replaced, all
   saved data in the Sunny Home Manager 2.0 will be deleted. The data saved in
   Sunny Portal can be transmitted to the Sunny Home Manager 2.0 after call-
   ing up the PV system again in Sunny Portal. Devices that were connected to
   the Sunny Home Manager 2.0 via EIBus must be reconfigured (see technical
   information “SMA SMART HOME - Home appliance energy management us-
   ing EIBus”).
   Default settings:
   ☐ To reset the Sunny Home Manager 2.0 to the default settings, press down and
   hold the reset button using a sharp object for two to six seconds.
   ☐ LEDs flash fast green and then red.
Restart:
To restart the Sunny Home Manager 2.0, press down and hold the reset button
using a sharp object for longer than six seconds.
☐ The PV System Setup Assistant can not find a
   During registration, the PV System Setup Assistant can not find a
   • Firmware version
   • Error description

DECOMMISSIONING

Danger to life due to electric shock
Lethal voltages are present in the switch cabinet.
• Disconnect the connection point from voltage sources and make sure it
  cannot be interrupted.
• Ensure that the conductors are disconnected from the Sunny Home Manager 2.0 are de-energized.

Procedure:
1. Remove all connected conductors from the Sunny Home Manager 2.0.
2. Remove the Sunny Home Manager 2.0 from the top rail. To do so, tilt the
   lower edge of the Sunny Home Manager 2.0 forwards and lift the
   Sunny Home Manager 2.0 off of the top rail.

DISPOSAL
• Dispose of the Sunny Home Manager 2.0 in accordance with the locally appli-
  cable disposal regulations for electronic waste.

OPEN SOURCE LICENSES
The software licenses for the installed software modules are contained in the
Sunny Home Manager 2.0 software. Upon connecting the Sunny Home Manager 2.0 with a web browser, you will find the licenses at the fol-
lowing address: http://ip_addresses/legal_notices.html

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