Technical Information

SMA SMART HOME
Compatibility List for the Sunny Home Manager 2.0

Table of Contents

1 Content and Structure of this Document

This document provides an overview of products that are compatible with the use of Sunny Home Manager 2.0 (HM-20):

- Monitoring products
- Load control products
- Products for energy generation and storage

Monitoring products

The Sunny Home Manager supports simple monitoring of different values without using these values for direct control. This information is visualized in Sunny Portal.

Load control products

As an energy manager for systems equipped with PV systems, the Sunny Home Manager offers solutions for load control of devices from different manufacturers. Loads can include, for example, appliances for the household, heating and hot water preparation as well as e-mobility.

In principle there are the following types of load control for this:

- Indirect control, e.g. via a radio-controlled socket or a relay
  Radio-controlled sockets and relays enable communication with a wide range of devices that cannot be controlled by the Sunny Home Manager via a direct data connection.
- Direct control, e.g. via the an EEBus or SEMP interface
  Loads with a direct data connection to the Sunny Home Manager can be included in energy management without detailed configuration. The Sunny Home Manager automatically exchanges all load-relevant information directly with the appliances in the household and includes the load optimally in the planning process.
- Direct control via the SG-Ready interface
  When connecting a load with electronic control input (e.g. SG Ready or trigger input), the control input signals will be supplied by a relay with a floating switching output. The load is hard-wired to the power supply and always has power. The control input is activated via the relay of the actuator and the load starts.

Products for energy generation and storage

The Sunny Home Manager receives the data of the energy generated by the PV system directly from the connected SMA inverters. If third-party inverters or other generators are also installed in the PV system, the Sunny Home Manager takes over the measurement data for the generated energy from an intermediate energy meter.

Battery inverters can temporarily store the energy generated by the PV system and make it available when needed. The Sunny Home Manager makes it possible to optimally schedule and use this temporarily stored energy.

Additional Information

SMA offers the option to use the protocol interface SEMP under https://www.sma.de/produkte/sma-developer.html.

Information on the EEBus communication interface and the EEBus protocol you find under https://www.eebus.org/

2 Monitoring

2.1 Energy Monitoring

In energy monitoring, the entire energy flows in the household are recorded. Both the amount of energy generated by the PV system and the energy consumption of connected loads can be measured.

2.1.1 Energy Meter

2.1.1.1 SMA Energy Meter

The Sunny Home Manager supports the following energy meter:

Product	Firmware version
SMA Energy Meter 10	from 1.0.4.R
SMA Energy Meter 20	from 2.0.4.R

2.1.2 Radio-Controlled Sockets

The measuring function of the radio-controlled sockets can be used to record the energy consumption of individual electrically connected loads, e.g. household appliances.

2.1.2.1 Radio-controlled sockets from Edimax

For the compatibility of the Wi-Fi radio-controlled sockets from Edimax with the Sunny Home Manager (from version 2.2), the firmware versions of the devices must be taken into account:

Product	Firmware version
SP-2101W	up to 2.08
SP-2101W V2	from 1.00
SP-2101W V3	from 4.04

2.1.2.2 Radio-controlled sockets from AVM

The Sunny Home Manager (from version 2.3) supports AVM radio-controlled sockets in combination with a FRITZ!Box with DECT function. The FRITZ!OS version of the FRITZ!Box must be taken into account:

Product	FRITZ!Box, FRITZ!OS version
FRITZ!DECT 200	from 5.5
FRITZ!DECT 210	from 6.0

2.1.2.3 Radio-controlled sockets from Niko

The Sunny Home Manager (from version 2.11) supports Niko radio-controlled sockets in combination with a Niko Home Control hub. The version of the hub must be taken into account:

Series	Product	Niko Home Control, hub version
Radio-controlled socket, wall socket type	552-80698 / 552-80699[1)]	from 2.15

[1)] Socket with pin-earthing

Series	Product	Niko Home Control, hub version
Radio-controlled socket, flush socket type	170-34505 / 170-33505[1)]	from 2.15
Niko Home Control starter kit energy including the Niko Home Control hub + 3x radio-controlled wall sockets	552-99098 / 552-99099[1)]	from 2.15

2.2 Temperature Monitoring

2.2.1 AVM Temperature Display

The Sunny Home Manager (from version 2.5) supports the display of the device temperature in combination with a FRITZ!Box with DECT function. The FRITZ!OS version of the FRITZ!Box must be taken into account:

Product	FRITZ!Box, FRITZ!OS version
Radio-controlled socket FRITZ!DECT 200	from 5.5
Radio-controlled socket FRITZ!DECT 210	from 6.0
Radiator regulators FRITZ!DECT 301	from 7.2

2.3 Meter Monitoring and Status Display

The current status of the grid supply and the grid feed-in can be displayed via an LED lamp and thus support you in your load control.

The Sunny Home Manager (from version 2.7) supports AVM LED lamps in combination with a FRITZ!Box with DECT function. The FRITZ!OS version of the FRITZ!Box must be taken into account:

Product	FRITZ!Box, FRITZ!OS version
LED lamp FRITZ!DECT 500	from 7.2

3 Smart Home Control Equipment

Via a compatible radio-controlled socket or a compatible relay, a variety of devices that cannot communicate directly with the Sunny Home Manager can be connected to and switched by the Sunny Home Manager.

3.1 Radio-Controlled Sockets

3.1.1 Radio-controlled sockets from Edimax

For the compatibility of the Wi-Fi radio-controlled sockets from Edimax with the Sunny Home Manager (from version 2.2), the firmware versions of the devices must be taken into account:

Product	Firmware version
SP-2101W	up to 2.08
SP-2101W V2	from 1.00
SP-2101W V3	from 4.04

3.1.2 Radio-controlled sockets from AVM

The Sunny Home Manager (from version 2.3) supports AVM radio-controlled sockets in combination with a FRITZ!Box with DECT function. The FRITZ!OS version of the FRITZ!Box must be taken into account:

Product	FRITZ!Box, FRITZ!OS version
FRITZ!DECT 200	from 5.5
FRITZ!DECT 210	from 6.0

3.1.3 Radio-controlled sockets from Niko

The Sunny Home Manager (from version 2.11) supports Niko radio-controlled sockets in combination with a Niko Home Control hub. The version of the hub must be taken into account:

Series	Product	Niko Home Control, hub version
Radio-controlled socket, wall socket type	552-80698 / 552-80699[2)]	from 2.15
Radio-controlled socket, flush socket type	170-34505 / 170-33505[2)]	from 2.15
Niko Home Control starter kit energy including the Niko Home Control hub + 3x radio-controlled wall sockets	552-99098 / 552-99099[2)]	from 2.15

3.2 Relay

3.2.1 Moxa Relay

The Sunny Home Manager (from version 2.5) supports the following relays from Moxa:

Product	Communication standard
Moxa ioLogik E 1214[3)]	Modbus

[2)] Socket with pin-earthing

[3)] Currently, only relay output 1 of the possible 6 relay outputs of the Moxa 1214 can be used, e.g. for SG Ready devices such as heat pumps.

4 Electrical Loads

This list contains a selection of electrical loads which, according to the manufacturers, can communicate directly or indirectly with the Sunny Home Manager and has been compiled according to the manufacturers' specifications. Not all devices have been tested by SMA in conjunction with the Sunny Home Manager.

4.1 Home appliances from Bosch and Siemens

Below are listed home appliances of the brands Bosch and Siemens of BSH Hausgeräte GmbH, which are equipped with a communication module that supports a connection to the Sunny Home Manager.

Unfortunately, the new connectivity module launched by BSH in 2021 does not support the EEBus function, which is why this generation of devices cannot be controlled by the Sunny Home Manager and thus cannot be integrated into the energy management of the Sunny Home Manager.

4.1.1 Dishwashers from Bosch and Siemens

The following dishwashers from Bosch and Siemens are equipped with a communication module that supports connection to the Sunny Home Manager:

Series	Product	Sold	Communication standard
Bosch Series 6	SBA68PD06E	Germany	EEBus
	SBE68TX26E	Germany	EEBus
	SBI68TS06E	Germany	EEBus
	SBV68TX06E	Germany	EEBus
	SMA68PD06E	Germany	EEBus
	SME68TX26E	Germany	EEBus
	SMI68TS06E	Germany	EEBus
	SMS68NW06E	Germany	EEBus
	SMU68TS06E	Germany	EEBus
	SMS68TW06E	Germany	EEBus
	SMV68TX06E	Germany	EEBus

Series	Product	Sold	Communication standard
Bosch Series 8	SMI88TS16D	Germany	EEBus
	SMI88TS06E	Germany	EEBus
	SMI88US36E	Germany	EEBus
	SMA88TD36E	Germany	EEBus
	SMS88TI36E	Germany	EEBus
	SMS88UI36E	Germany	EEBus
	SMS88US36E	Germany	EEBus
	SMV88TX16D	Germany	EEBus
	SMV88TX06E	Germany	EEBus
	SMV88UX36E	Germany	EEBus
	SBA88TD36E	Germany	EEBus
Siemens iQ500	SN258I06TE	Europe	EEBus
	SN258W06TE	Europe	EEBus
	SN458B06TS	Europe	EEBus
	SN558S06ME	Europe	EEBus
	SN558S06TE	Europe	EEBus
	SN558S16PE	Europe	EEBus
	SN658X06TE	Europe	EEBus
	SN658X16PE	Europe	EEBus
	SN758X06TE	Europe	EEBus
	SN758X46TE	Europe	EEBus
	SN778D16TE	Europe	EEBus
	SN858D06PE	Europe	EEBus
	SX558S06TE	Europe	EEBus
	SX658X06TE	Europe	EEBus
	SX758X06TE	Europe	EEBus
	SX758X46TE	Europe	EEBus
	SX858D06PE	Europe	EEBus
	SX858D36TE	Europe	EEBus

Series	Product	Sold	Communication standard
Siemens IQ700	SN278I36TE	Europe	EEBus
	SN278I36UE	Europe	EEBus
	SN478S16TD	Europe	EEBus
	SN478S36TE	Europe	EEBus
	SN478S36UE	Europe	EEBus
	SN578S16TD	Europe	EEBus
	SN578S36TE	Europe	EEBus
	SN578S36UE	Europe	EEBus
	SN678X16TD	Europe	EEBus
	SN678X36TE	Europe	EEBus
	SN678X36UE	Europe	EEBus
	SN878D26PE	Europe	EEBus
	SX678X36TE	Europe	EEBus
	SX678X36UE	Europe	EEBus
	SX878D26PE	Europe	EEBus

4.1.2 Clothes dryers from Bosch and Siemens

The following dryers from Bosch and Siemens are equipped with a communication module that supports connection to the Sunny Home Manager:

Series	Product	Sold	Communication standard
Bosch Home Professional	WTYH7701	Germany	EEBus
	WTYH7781	Germany	EEBus
	WTY887W6	Germany	EEBus
	WTX87E90	Germany	EEBus
	WTX87E40	Germany	EEBus
Bosch Series 8	WTX87M40	Germany	EEBus
	WTX87M20	Germany	EEBus
	WTX87K90	Germany	EEBus
	WTX87K80	Germany	EEBus
Siemens avantgarde	WT47X940EU	Germany, Austria	EEBus
Siemens iQ800	WT7YH701	Germany, Austria	EEBus

4.1.3 Washing machines from Bosch and Siemens

The following washing machines from Bosch and Siemens are equipped with a communication module that supports connection to the Sunny Home Manager:

Series	Product	Sold	Communication standard
Bosch Home Professional	WAV28E41	Germany	EEBus
	WAYH2842	Germany	EEBus
	WAYH2891	Germany	EEBus
	WAYH8748	Germany	EEBus
	WAYH8749	Germany	EEBus
	WAX32F90	Germany	EEBus
	WAX32E90	Germany	EEBus
Bosch Series 8	WAV28K40	Germany	EEBus
	WAV28M40	Germany	EEBus
Siemens avantgarde	WM14U840EU	Germany, Austria	EEBus
	WM14U940EU	Germany, Austria	EEBus
Siemens iQ700	WM14VL40	Germany, Austria	EEBus
	WM14VM40	Germany, Austria	EEBus
	WM14VMG1	Germany, Austria	EEBus
Siemens iQ800	WM14VG40	Germany, Austria	EEBus
	WM16XE90	Germany, Austria	EEBus
	WM16XF90	Germany, Austria	EEBus
	WM4YH748	Germany, Austria	EEBus
	WM4YH749	Germany, Austria	EEBus
	WM4YH7W0	Germany, Austria	EEBus
	WM6YH842	Germany, Austria	EEBus
	WM6YH891	Germany, Austria	EEBus

4.1.4 Washer-dryers from Bosch and Siemens

The following washing machines with dryer function from Bosch and Siemens are equipped with a communication module that supports connection to the Sunny Home Manager:

Series	Product	Sold	Communication standard
Bosch Series 6	WDU28512	Germany, Austria, Luxembourg	EEBus
	WDU28592	Germany, Austria, Luxembourg	EEBus

Series	Product	Sold	Communication standard
Siemens iQ500	WD14U512	Germany, Austria, Luxembourg	EEBus
	WD14U592	Germany, Austria, Luxembourg	EEBus

4.2 Space- and Water Heating

4.2.1 Heat pumps

Heat pumps are divided into three different types. This has an influence on the type of connection to the Sunny Home Manager.

ON/OFF heat pumps are heat pumps whose compressor runs with a constant speed during operation and draws a constant level of power. There are three control options for ON/OFF heat pumps:

- Control via radio-controlled sockets
- Direct control via the SG-Ready interface of the heat pump
- Direct control via a communication standard (SEMP or EEBus)

Inverter heat pumps are heat pumps where the rotating speed of the compressor during operation is controlled in such a way that, in accordance with the available temperature profile, an optimum performance level is achieved. The heat pump control is able to adjust the energy consumption according to the situation. There are two control options for inverter heat pumps:

- Direct control via the SG-Ready interface of the heat pump
- Direct control via a communication standard (SEMP or EEBus)

Integral systems as well as air-to-water heat pumps and brine-to-water heat pumps perform the function of ventilation in addition to space- and water heating. They can be controlled by the Sunny Home Manager if they communicate via a communication standard.

According to the manufacturer, the heat pumps listed below can be controlled directly by the Sunny Home Manager.

4.2.1.1 Heat Pumps with SG-Ready Interface

Type	Product	Part number	Communication standard
Relay	Moxa ioLogik E 1214	EIO-E1214	Modbus

Models that have an SG Ready interface can be found in the SG Ready database: https://www.waermepumpe.de/normen-technik/sg-ready/sg-ready-datenbank/

4.2.1.2 Heat pumps from AEG Haustechnik

Type	Series	Product	Communication standard
ON/OFF heat pump	WPT	220 EL	Radio-controlled socket
		300 EL	Radio-controlled socket
		300 EL plus	Radio-controlled socket

4.2.1.3 Heat pumps from Stiebel Eltron

The following heat pumps are able to use the SEMP data protocol in conjunction with the Stiebel Eltron ISG web and the EMI software module or can be operated with the Sunny Home Manager in conjunction with a radio-controlled socket:

Type	Series	Product	Communication standard
ON/OFF heat pumps	Stiebel WWK	220 electronic	SMA radio-controlled socket
		300 electronic	SMA radio-controlled socket
		300 electronic SOL	SMA radio-controlled socket
		221 electronic	SMA radio-controlled socket
		301 electronic	SMA radio-controlled socket
		301 electronic SOL	SMA radio-controlled socket
Integral systems	Stiebel LWZ	303/403 (Integral/SOL) from manufacture date 08/2008	SEMP
		303/404 (SOL)	SEMP
		304/404 Trend	SEMP
		504	SEMP
Air-to-water heat pumps	Stiebel WPL	10 I, IK, AC	SEMP
		13/20 A basic	SEMP
		13-23 E / cool	SEMP
		34/47/57	SEMP
		15/25 A(C)(S)	SEMP
Brine-to-water heat pumps	Stiebel WPF	20-66 / HT	SEMP
		04-16 / cool	SEMP
	Stiebel WPC	04-13 / cool	SEMP

4.2.1.4 Heat pumps from Tecalor

The following heat pumps are able to use the SEMP data protocol in conjunction with the Tecalor ISG web and the EMI software module or can be operated with the Sunny Home Manager in conjunction with a radio-controlled socket:

Type	Series	Product	Communication standard
ON/OFF heat pumps	Tecalor TTA	220 electronic	SMA radio-controlled socket
		300 electronic	SMA radio-controlled socket
		300 electronic SOL	SMA radio-controlled socket
		221 electronic	SMA radio-controlled socket
		301 electronic	SMA radio-controlled socket
		301 electronic SOL	SMA radio-controlled socket
Integral systems	Tecalor THZ	303/403 (Integral/SOL) from manufacture date 08/2008	SEMP
		304/404 (SOL)	SEMP
		304/404 Trend	SEMP
		504	SEMP
Air-to-water heat pumps	Tecalor TTL	10 I, IK, AC	SEMP
		13/20 A basic	SEMP
		13-23 E / cool	SEMP
		34/47/57	SEMP
		15/25 A(C)(S)	SEMP
Brine-to-water heat pumps	Tecalor TTF	10-16 M	SEMP
		20-66 / HT	SEMP
		04-16 / cool	SEMP
	Tecalor TTC	04-13 / cool	SEMP

4.2.1.5 Vaillant Heat Pumps

The Vaillant heat pumps have to be connected to the local network (router) via a Vaillant communication unit (VR 920 or VR 921). The Sunny Home Manager from firmware version 2.2 supports the following Vaillant heat pumps:

Type	Series	Product	Sold	Communication standard
Air-to-water heat pumps	aroTHERM	VWL _/2	Germany, Austria, Belgium, Denmark, Finland, Luxembourg, Netherlands, Sweden, Switzerland	EEBus
		VWL _/3		EEBus
		VWL _/5		EEBus
Air-to-water heat pumps	aroTHERM Split	VWL _/5	Germany, Austria, Belgium, Denmark, Finland, Luxembourg, Netherlands, Sweden, Switzerland	EEBus
	aroTHERM plus	VWL _/6		EEBus
Heat pumps	flexoCOMPACT exclusive	VWL _/4	Germany, Austria, Belgium, Denmark, Finland, Luxembourg, Netherlands, Sweden, Switzerland	EEBus
	flexoTHERM exclusive	VWL _/4		EEBus
Air-to-water heat pumps installed indoors	recoCOMPACT exclusive	VWL _/5	Germany, Austria, Belgium, Denmark, Finland, Luxembourg, Netherlands, Sweden, Switzerland	EEBus
	versoTHERM plus	VWL _/5		EEBus

4.2.2 Heating elements

4.2.2.1 Heating elements from MYPV

Not compatible in case of setting a direct meter communication when configuring the Sunny Home Manager.

Product	Communication standard
AC ELWA-E	SEMP
AC • Thor	SEMP
AC • Thor 9s	SEMP

4.3 E-mobility

4.3.1 Charging stations for electric vehicles

4.3.1.1 Charging stations from SMA

The Sunny Home Manager (from version 2.8) supports a maximum of 3 SMA EV Charger per PV system.

Series	Product	Communication standard
SMA EV Charger	EVC7.4-1AC-10 (from version 1.2.x.R)	SEMP
	EVC22-3AC-10 (from version 1.2.x.R)	SEMP

4.3.1.2 Charging stations from Mennekes

Series	Product	Communication standard
Mennekes AMTRON	Xtra	SEMP
	Premium	SEMP
	Professional (from version 5.22)	SEMP
	Charge Control (from version 5.22)	SEMP

5 Energy Generators and Storage Systems

5.1 SMA PV Inverters

Device type		From inverter firmware version
Sunny Boy	SB 3000TL-21 / SB 3600TL-21 / SB 4000TL-21 / SB 5000TL-21 / SB 6000TL-21	2.00.00.R[4)]
	SB1.5-1VL-40 / SB2.0-1VL-40 / SB2.5-1VL-40	2.03.01.R
	SB3.0-1AV-40 / SB3.6-1AV-40 /SB4.0-1AV-40 /SB5.0-1AV-40	1.02.18.R
	SB3.0-1AV-41 / SB3.6-1AV-41 / SB4.0-1AV-41 / SB5.0-1AV-41 / SB6.0-1AV-41	3.10.18.R
	SB 2500TLST-21 / SB 3000TLST-21	2.00.27.R[4)]
Sunny Tripower	STP3.0-3AV-40 / STP4.0-3AV-40 / STP5.0-3AV-40 / STP6.0-3AV-40 / STP8.0-3AV-40 / STP10.0-3AV-40	02.11.09.R
	STP 50-40	01.01.19.R
	STP 8000TL-10 / STP 10000TL-10 / STP 12000TL-10 / STP 15000TL-10 / STP 17000TL-10	2.33.02.R[4)]
	STP 5000TL-20/STP 6000TL-20/STP 7000TL-20/STP 8000TL-20/ STP 9000TL-20/STP 10000TL-20/STP 12000TL-20	2.00.15.R
	STP 15000TLEE-10 / STP 20000TLEE-10	2.10.20.R
	STP 15000TL-30 / STP 20000TL-30 / STP 25000TL-30	02.80.04.R
	STP 12-50 / STP 15-50 / STP 20-50 / STP 25-50	2.2.9.R

For inverters without an integrated Speedwire interface, the Speedwire/Webconnect data module SWDM-10 may also be required.

5.2 SMA Battery Inverters

Device type		From inverter firmware version
Sunny Boy Storage	SBS2.5-1VL-10	02.02.01.R
	SBS3.7-10 / SBS5.0-10 / SBS6.0-10	01.00.63.R
Sunny Island	SI 6.0H- / SI 8.0H	01.00.xx.R
	SI3.0M-11 / SI4.4M-11	1.00.00.R
	SI3.0M-11 / SI4.4M-11 / SI6.0H-11 / SI8.0-11 With SMA Speedwire data module Sunny Island SWDMSI-NR10	
	SI4.4M-12 / SI6.0H-12 / SI8.0H-12	01.00.xx.R
	SI4.4M-13 / SI6.0H-13 / SI8.0H-13	3.0x.xx.R

[4)] This firmware version is the minimum requirement for the function **Limiting of the active power feed-in**.

5.3 SMA Hybrid Inverters

Device type		From inverter firmware version
Sunny Boy	SB 3600SE-10 / SB 5000SE-10	2.3.35.R
Sunny Tripower	STP5.0-3SE-40 / STP6.0-3SE-40 / STP8.0-3SE-40 /STP10.0-3SE-40	1.00.08.R

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