



# **SUNNY ISLAND (MOW + US)**

Approved Batteries and Information on Batteries in Sunny Island Systems

2

# Table of contents

1	Gene	General Information						
2	Appr	roved Batteries	4					
	2.1	Sunny Island 3.0M / 4.4M / 6.0H / 8.0H	4					
	2.2	Sunny Island 4548-US / 6048-US	10					
3	Reco	mmended minimum configuration for use in different systems	14					

3

### 1 General Information

Die Sunny Island product family (SI3.0M, SI4.4M, SI6.0H and SI8.0H) is equipped with an integrated battery management for lead-acid batteries of type FLA and VRLA.

It is also possible to connect an external battery management that uses different battery technologies.

#### **AWARNING**

#### Danger to life due to fire or explosion when batteries are fully discharged

A fire may occur due to incorrect charging of fully discharged batteries. This can result in death or serious injury.

- Before commissioning the system, verify that the battery is not fully discharged.
- Do not commission the system if the battery is fully discharged.
- If the battery is fully discharged, contact the battery manufacturer for further proceedings.
- Only charge fully discharged batteries as instructed by the battery manufacturer.

## i Legal Provisions

This document does not replace any regional, state, provincial, federal or national laws, regulations or standards that apply to the installation, electrical safety and use of the product. SMA Solar Technology AG assumes no responsibility for the compliance or non-compliance with such laws or codes in connection with the installation of the Sunny Island.

## i Retrofitting

The batteries listed in this document can also be retrofitted to systems already in operation using Sunny Island-11/-12/-13. The prerequisite for this is a firmware update of the inverter. The update file is, for example, available for download on the product page of the inverter at www.SMA-Solar.com.

## i Using lead-acid batteries

The battery management integrated in the Sunny Island ensures that the lead-acid battery is charged carefully, deep discharge is avoided and the state of charge of the battery is determined. Prerequisite for optimum operation of the system and, in particular, for gentle treatment of the lead-acid battery is the adjustment of the parameters of the lead-acid battery to the values of each respective application recommended by the battery manufacturer (see operation and installation manual).

## i Using lithium-ion and hybrid (sodium)-ion batteries

All lithium-ion and hybrid (sodium)-ion batteries supply a defined nominal current. The full functionality for the PV storage system can only be guaranteed if the battery capacity (battery capacity and battery currents) is matched to the Sunny Island system constellation used. In particular, three-phase systems usually require more than one battery.

Pay attention to the battery manufacturers' recommendations at the end of this document or to the minimum
configuration lists regarding the suitable dimensioning of the battery (battery type, circuitry and number of
battery modules). Only this ensures that the nominal and overload currents specified in the datasheet for the
various system constellations and applications can be achieved.

# 2 Approved Batteries

# 2.1 Sunny Island 3.0M / 4.4M / 6.0H / 8.0H

The lithium-ion batteries of the following manufacturers are approved for the SMA Energy System Home and the Sunny Island 3.0M / 4.4M / 6.0H / 8.0H:

#### **Manufacturer ADS-TEC**

	Self-consumption systems		Battery backup systems		Off-grid sys	tems
	1~	3~	1~	3~	1~	3~
StoraXe® Home & Small Business SRS0009	✓	✓	✓	✓	-	-

#### Manufacturer Akasol

	Self-con	Self-consumption systems		Battery backup systems		systems
	1~	1~ 3~		3~	1~	3~
neeoQube	✓	-	-	-	-	-
neeoRack	✓	✓	✓	✓	✓	✓
			Only for Sunny Island 3.0M and 4.4M		Only for Sunny Island 3.0M and 4.4M	

#### **Manufacturer Axitec**

	Self-con	sumption systems	Battery	backup systems	Off-grid systems	
	1~	3~	1~	3~	1~	3~
AXIstorage Li7S	✓	✓	✓	✓	✓	✓
As of firmware 2.04					Emerger Required	ncy power generator
AXIstorage Li8S	✓	<b>✓</b>	✓	<b>✓</b>	✓	✓
As of firmware version 3.04						
AXIstorage Li9S	✓	✓	✓	✓	✓	✓
As of firmware 2.06					Emerger Required	ncy power generator
AXIstorage Li10S	✓	✓	✓	✓	✓	✓
As of firmware 2.06					Emerger Required	ncy power generator

## Manufacturer BMZ

	Self-con	sumption systems	Battery	backup systems	Off-grid	d systems
	1~	3~	1~	3~	1~	3~
BMZ ESS 3.0 As of firmware 2.04	✓	✓	✓	✓	✓	✓
BMZ ESS 7.0	✓	✓	✓	✓	✓	✓
As of firmware 2.04					Emergei Required	ncy power generator
BMZ ESS 9.0	✓	<b>✓</b>	✓	✓	✓	✓
As of firmware 2.06					Emergency power generator Required	
BMZ ESS X	✓	✓	✓	<b>✓</b>	✓	✓
As of firmware 2.06					Emerger Required	ncy power generator
BMZ ESS Z	✓	<b>✓</b>	✓	<b>✓</b>	✓	✓
As of firmware version 3.04						

#### Manufacturer BYD

	Self-consumption systems		Battery back	kup systems	Off-grid systems	
	1~	3~	1~	3~	1~	3~
B-BOX As of firmware 2.7	✓	✓	✓	✓	✓	✓
Battery-Box LV As of firmware 1.0	✓	<b>✓</b>	<b>✓</b>	✓ 3~ only for Sunny Island 4.4M	-	-
Battery-Box Premium LVL 15.4 As of firmware BMU: 1.8 As of firmware BMS: B-1.3	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>
Battery-Box Premium LVS 4.0-24.0 As of firmware BMU: 1.18 As of firmware BMS: 1.8	✓	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>

	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~
LV Flex As of firmware BMU: ≥V1.22	✓	✓	✓	✓	✓	✓
As of firmware BMS: ≥V1.13						
LV Flex Lite	✓	<b>✓</b>	✓	✓	✓	✓
As of firmware BMU: ≥V1.22						
As of firmware BMS: ≥V1.13						

# Manufacturer Cegasa

	Self-consumption systems		Battery backup systems		Off-grid sys	tems
	1~	3~	1~	3~	1~	3~
eBick PRO 280 As of firmware 3.2.0	✓	✓	✓	✓	✓	✓
eBick Ultra 175 As of firmware 14032023	✓	<b>✓</b>	<b>✓</b>	✓	✓	✓

# Manufacturer Exide / GNB

	Self-con	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~	
Sonnenschein Lithium Module Pro	✓	-	✓	-	✓	-	
As of firmware 1.11							
Sonnenschein lithium As of firmware 2.06	✓	✓	✓	✓	✓	✓	
					Emergen Required	cy power generator	

#### Manufacturer GS-HUB

	Self-consumption systems		Battery back	Battery backup systems		tems
	1~	3~	1~	3~	1~	3~
HomeHub (MU8G1 + BU25G1)	✓	✓ 3~ only for	✓	-	✓	-
As of firmware MU > 8.5		Sunny Island 4.4M <sup>1)</sup>				
As of firmware BU > 3.13						

## Manufacturer Hoppecke

	Self-consumption systems		Battery backup systems		Off-grid sys	tems
	1~	3~	1~	3~	1~	3~
sun powerpack pre- mium	✓	✓	✓	✓	✓	✓
As of firmware 1.1.0 r11767						

#### Manufacturer IBC

	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~
SolStore X.X Li As of firmware 2.06	✓	✓	✓	✓	✓ Emerge Require	ncy power generator

## Manufacturer Leclanché

	Self-consumption systems		Battery b	ackup systems	Off-grid systems	
	1~	3~	1~	3~	1~	3~
Apollion Cube As of firmware 2.06	<b>✓</b>	✓	✓	✓	Emergener Required	cy power generator

## **Manufacturer LG Energy Solution**

	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~
RESU 3.3	✓	-	-	-	-	-
	Only for Sunrand 4.4M	ny Island 3.0M				
RESU 5.0	✓	-	-	-	-	-

During three-phase continuous operation with the nominal power of the inverter, derating of the battery may occur depending on the temperature and state of charge of the battery. Derating the battery temporarily reduces the power of the entire system.

	Self-consum	ption systems	Battery back	cup systems	Off-grid systems	
	1~	3~	1~	3~	1~	3~
RESU 6.4	✓	-	✓	-	-	-
	Recommended for Sunny Island 3.0M and 4.4M		Only for Sunn and 4.4M	ny Island 3.0M		
RESU 6.5	✓	-	✓	-	-	-
			Only for Sunn	y Island 3.0M		
RESU 10	✓	-	✓	-	-	-
			Only for Sunn and 4.4M	y Island 3.0M		
RESU 12 2)	✓	-	✓	-	-	-
As of firmware 2.0.0.0			Only for Sunn and 6.0H	ny Island 4.4M		
RESU 13 <sup>2)</sup>	✓	-	✓	-	-	-
As of firmware 1.7.0.3			Only for Sunn and 6.0H	ny Island 4.4M		
RESU Plus Extension Kit	✓	-	✓	-	-	-
(an accessory for the parallel connection of 2 RESU batteries) <sup>3)</sup>			Only for Sunn and 4.4M	ny Island 3.0M		

#### Manufacturer Mercedes-Benz Energy GmbH

	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~
Mercedes-Benz Energy Storage Home As of firmware 29.30 - 5.X	✓	-	✓	-	-	-
	Recommende land 3.0M ar	d for Sunny Is- nd 4.4M	Recommended land 3.0M an	,		
Mercedes-Benz Energy Storage Home (2.0) As of firmware 10.xx	✓	-	-	-	-	-

<sup>&</sup>lt;sup>2)</sup> RESU 12 and RESU 13 are designed to be discharged under power of 5 kW in all operating modes (self-consumption systems and battery-backup systems). The overload capability of the battery is limited to a duration of 3 seconds for all conditions exceeding nominal power. Ensure that the system is operated according to its intended use.

<sup>&</sup>lt;sup>3)</sup> If two RESU batteries are used with the RESU Plus Extension Kit, the total battery capacity is equal to the sum of the two individual battery capacities. However, the maximum peak power of both batteries is limited to 5 kW with the RESU Plus Extension Kit. Therefore, only Sunny Islands 3.0-4.4M can be used in the battery-backup system with the RESU Plus Extension Kit.

#### Manufacturer Murata

	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~
Murata PLC-BMU solution with IJ1101M	-	-	-	-	✓	✓

## Manufacturer Pylontech

	Self-consumption systems		Battery back	Battery backup systems		tems
	1~	3~	1~	3~	1~	3~
US2000 As of firmware 2.9 US2000C As of firmware 2.1	✓	✓	<b>✓</b>	✓	<b>√</b> 4]	<b>√</b> <sup>4</sup> ]
US3000 As of firmware 2.9 US3000C As of firmware 2.1	✓	✓	✓	✓	<b>√</b> <sup>4</sup> )	<b>√</b> 4}
US5000 As of firmware 1.0	✓	✓	✓	✓	<b>√</b> 4}	<b>√</b> 4)
US5000B As of firmware 1.0	✓	✓	✓	✓	<b>√</b> <sup>4</sup> }	<b>√</b> 4)
UP5000 As of firmware 2.1	✓	✓	✓	✓	<b>√</b> 4}	<b>√</b> 4)
Pelio As of firmware 1.0	✓	✓	✓	✓	✓	1

## **Manufacturer Sony**

	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~
Controller IJ1004C Module fORTELION IJ1001M	✓	✓	✓	✓	✓	✓

## Manufacturer SSL Energie GmbH

	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~
eSafe© As of firmware 1.0.35	✓	✓	✓	✓	✓	✓

 $<sup>^{4)}</sup>$  When used in an off-grid system, the battery protection mode level 3 must not be set below 4% on the inverter.

#### **Manufacturer Tesvolt**

	Self-consum	Self-consumption systems		Battery backup systems		Off-grid systems	
	1~	3~	1~	3~	1~	3~	
Tesvolt Lithium-lon bat- tery-storage system Li10	✓	✓	✓	1	✓	1	
As of firmware 3.17							
Tesvolt Li-Ion battery- storage system from Li 20	✓	✓	✓	✓	✓	✓	
As of firmware 1.11							
TS-series	✓	✓	✓	✓	✓	✓	
As of firmware 1.06							

#### Manufacturer UZ Energy

	Self-consumption systems		Battery back	Battery backup systems		tems
	1~	3~	1~	3~	1~	3~
Power Lite L051100- A1/B/D	✓	✓	✓	✓	✓	✓
As of firmware LM- M01S- YZ109S-21.Z9.04-230 525 <sup>5)</sup>						

The hybrid (sodium)-ion batteries of the following manufacturers are approved for the SMA Energy System Home and the Sunny Island 3.0M / 4.4M / 6.0H / 8.0H:

#### Manufacturer Aquion Energy<sup>6)</sup>

	Self-consumption systems		Battery backup systems		Off-grid sys	tems
	1~	3~	1~	3~	1~	3~
Aspen 48S / 48M	✓	✓	✓	✓	✓	✓

# 2.2 Sunny Island 4548-US / 6048-US

The batteries that are compatible with the SI8.0H in off-grid applications are also compatible with the SI4548-US and SI6048-US, since all inverters have the same communication protocol.

If the double-split phase is used for the SI4548-US and SI6048-US devices, the battery manufacturer must be consulted to determine the minimum number of battery modules. The manufacturer must also be asked about UL certification.

<sup>&</sup>lt;sup>5)</sup> Due internal overcharging protection, the battery is fully charged at a charge level of 96%.

<sup>&</sup>lt;sup>6)</sup> Contact Aquion Energy in the event of servicing.

# The lithium-ion batteries of the following manufacturers are approved for the Sunny Island 4548-US / 6048-US:

## Manufacturer Axitec (Always check UL compatibility with manufacturer)

	Battery l	backup sys	tems		Off-grid	Off-grid systems			
	1~	Split phase	3~	Double- split phase	1~	Split phase	3~	Double- split phase	
AXIstorage Li7S As of firmware 2.04	✓	✓	✓	✓	✓	✓	✓	✓	
					Emergency power generator required				
AXIstorage Li8S	✓	✓	✓	✓	✓	✓	✓	✓	
As of firmware version 3.04					Emerç	gency powe	r generator	required	
AXIstorage Li9S	✓	✓	✓	✓	✓	✓	✓	✓	
As of firmware 2.06					Emergency power generator required				
AXIstorage Li10S	✓	✓	✓	✓	✓	✓	✓	✓	
As of firmware 2.06					Emerg	gency powe	r generator	required	

## Manufacturer BMZ (Always check UL compatibility with manufacturer)

	Battery l	backup sys	items		Off-gri	Off-grid systems			
	1~	Split phase	3~	Double- split phase	1~	Split phase	3~	Double split phase	
BMZ ESS 3.0 As of firmware 2.04	✓	✓	✓	✓	✓	✓	✓	✓	
BMZ ESS 7.0	✓	✓	✓	✓	✓	1	✓	✓	
As of firmware 2.04					Eme	ergency powe	er generat	or required	
BMZ ESS 9.0	✓	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	✓	
As of firmware 2.06					Eme	ergency powe	er generat	or required	
BMZ ESS X	✓	✓	✓	✓	✓	1	✓	1	
As of firmware 2.06					Eme	ergency powe	er generat	or required	
BMZ ESS Z	✓	✓	✓	✓	✓	<b>✓</b>	✓	✓	
As of firmware version 3.04					Eme	ergency powe	er generat	or required	

#### **Manufacturer BYD**

	Battery b	Battery backup systems			Off-grid systems			
	1~	Split phase	3~	Double- split phase	1~	Split phase	3~	Double- split phase
B-BOX	✓	✓	✓	✓	✓	✓	✓	✓
As of firmware 2.7								
LV Flex	✓	✓	✓	✓	✓	✓	✓	✓
As of firmware BMU: ≥V1.22								
As of firmware BMS: ≥V1.13								
LV Flex Lite	✓	✓	✓	✓	✓	✓	✓	✓
As of firmware BMU: ≥V1.22								
As of firmware BMS: ≥V1.13								

## Manufacturer Leclanché

	Battery backup systems			Off-grid systems				
	1~	Split phase	3~	Double- split phase	1~	Split phase	3~	Double- split phase
Apollion Cube	✓	✓	✓	✓	✓	✓	✓	✓
As of firmware 2.06					Eme	ergency powe	er generat	or required

## Manufacturer Pylontech

	Battery l	Battery backup systems			Off-grid	Off-grid systems			
	1~	Split phase	3~	Double- split phase	1~	Split phase	3~	Double- split phase	
US3000 As of firmware 2.9	✓	✓	✓	✓	✓	✓	✓	✓	
US3000C As of firmware 2.1	✓	✓	✓	✓	✓	✓	✓	✓	
US5000 As of firmware 1.0	✓	✓	✓	✓	✓	✓	✓	✓	
Pelio As of firmware 1.0	✓	✓	✓	✓	✓	✓	✓	✓	

#### **Manufacturer Tesvolt**

	Battery backup systems			Off-grid systems				
	1~	Split phase	3~	Double- split phase	1~	Split phase	3~	Double- split phase
Tesvolt lithium-ion bat- tery-storage system (Always check UL compatibility with manufacturer) As of firmware 3.17	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	✓	<b>✓</b>
TS-series As of firmware 1.06	✓	✓	✓	✓	✓	✓	✓	✓

The hybrid (sodium)-ion batteries of the following manufacturers are approved for the Sunny Island 4548-US / 6048-US:

## Manufacturer Aquion Energy<sup>7)</sup>

	Battery backup systems		Off-grid systems					
	1~	Split phase	3~	Double- split phase	1~	Split phase	3~	Double- split phase
Aspen 48S / 48M	✓	✓	✓	✓	✓	✓	✓	✓

<sup>7)</sup> Contact Aquion Energy in the event of servicing.

# 3 Recommended minimum configuration for use in different systems

The following minimum configurations are recommended for the following batteries in order to be able to use the rated power and overload capability of the Sunny Island devices. Deviation from these recommendations is possible, but may result in the system not being able to deliver the power specified in the datasheet of our devices. Especially for battery-backup or off-grid operations where no other AC sources are available, the specified configurations should be considered.

Some electrical loads (e.g., motors) may have high starting currents for a short time. These electrical loads may require a larger design with more battery modules or systems than specified by minimum configuration.

#### **AXITEC AXIStorage Li 8S**

Application		Inverters	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 1
		SI 6.0H	≥ 1
		SI 8.0H	≥ 1
	Three-phase	SI 4.4M	≥ 2
		SI 6.0H	≥ 3
		SI 8.0H	≥ 3
Battery backup / off-grid opera-	Single-phase	SI 4.4M	≥ 1
tion		SI 6.0H	≥ 1
		SI 8.0H	≥ 2
	Three-phase	SI 4.4M	≥ 3
		SI 6.0H	≥ 3
		SI 8.0H	≥ 4

#### **AXITEC AXIstorage Li 8S with SI 6048US**

Application		Inverters	Systems (towers)
Battery backup / off-grid opera-	Single-phase	SI 6048US	≥ 2
tion	Split phase	SI 6048US	≥ 3
	Three-phase	SI 6048US	≥ 4
	Double-split phase	SI 6048US	≥6

#### **BMZ ESS Z**

Application		Inverters	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ ]
		SI 6.0H	≥ 1
		SI 8.0H	≥ 1
	Three-phase	SI 4.4M	≥ 2
		SI 6.0H	≥ 3
		SI 8.0H	≥ 3
Battery backup / off-grid opera-	Single-phase	SI 4.4M	≥ ]
tion		SI 6.0H	≥ 1
		SI 8.0H	≥ 2
	Three-phase	SI 4.4M	≥ 3
		SI 6.0H	≥ 3
		SI 8.0H	≥ 4

## **BMZ ESS Z**

Application		Inverters	Systems (towers)
Battery backup / off-grid opera- tion	Single-phase	SI 6048US	≥ 2
	Split phase	SI 6048US	≥ 3
	Three-phase	SI 6048US	≥ 4
	Double-split phase	SI 6048US	≥ 6

## **BYD Battery-Box Premium LVS**

Application		Inverters	Battery modules	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 1	≥ 1
		SI 6.0H	≥ 2	≥ 1
		SI 8.0H	≥ 3	≥ 1
	Three-phase	SI 4.4M	≥ 4	≥ 1
		SI 6.0H	≥ 6	≥ 2
		SI 8.0H	≥ 8	≥ 2
Battery backup / off-grid	Single-phase	SI 4.4M	≥ 2	≥ ]
operation		SI 6.0H	≥ 4	≥ 1
		SI 8.0H	≥ 4	≥ 1
	Three-phase	SI 4.4M	≥ 8	≥ 2
		SI 6.0H	≥ 12	≥ 3
		SI 8.0H	≥ 12	≥ 3

## **BYD Battery-Box Premium LVL 15.4**

Application		Inverters	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 1
		SI 6.0H	≥ ]
		SI 8.0H	≥ 1
	Three-phase	SI 4.4M	≥ 1
		SI 6.0H	≥ 2 LVL 15.4 8)
		SI 8.0H	≥ 2 LVL 15.4 8)
Battery backup / off-grid opera-	Single-phase	SI 4.4M	≥ 1
tion		SI 6.0H	≥ ]
		SI 8.0H	≥ 1
	Three-phase	SI 4.4M	≥ 2 LVL 15.4 <sup>8)</sup>
		SI 6.0H	≥ 3 LVL 15.4 8)
		SI 8.0H	≥ 3 LVL 15.4 <sup>8)</sup>

#### **BYD LV Flex & LV Flex Lite**

Application		Inverters	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 1
		SI 6.0H	≥ 2
		SI 8.0H	≥ 2
	Three-phase	SI 4.4M	≥ 4
		SI 6.0H	≥ 5
		SI 8.0H	≥6
Battery backup / off-grid opera-	Single-phase	SI 4.4M	≥ 2
tion		SI 6.0H	≥ 3
		SI 8.0H	≥ 4
	Three-phase	SI 4.4M	≥ 6
		SI 6.0H	≥ 9
		SI 8.0H	≥ 12

#### **BYD LV Flex**

Application		Inverters	Systems (towers)
Battery backup / off-grid operation	Single-phase	SI 6048US	≥ 3
	Split phase	SI 6048US	≥ 5
	Three-phase	SI 6048US	≥ 7
	Double-split phase	SI 6048US	≥ 10

<sup>&</sup>lt;sup>8)</sup> During three-phase continuous operation with the nominal power of the inverter, derating of the battery may occur depending on the temperature and state of charge of the battery. Derating the battery temporarily reduces the power of the entire system.

## Cegasa eBick PRO 280

Application		Inverters	Battery modules	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 1	≥ 1
		SI 6.0H	≥ 1	≥ 1
		SI 8.0H	≥ 1	≥ 1
	Three-phase	SI 4.4M	≥ 1	≥ 1
		SI 6.0H	≥ 2	≥ 1
		SI 8.0H	≥ 2	≥ 1
Battery backup / off-grid operation	Single-phase	SI 4.4M	≥ 1	≥ 1
		SI 6.0H	≥ 1	≥ 1
		SI 8.0H	≥ 1	≥ 1
	Three-phase	SI 4.4M	≥ 2	≥ 1
		SI 6.0H	≥ 2	≥ 1
		SI 8.0H	≥ 3	≥ 1

## Cegasa eBick 175 Ultra

Application		Inverters	Battery modules	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 1	≥ 1
		SI 6.0H	≥ 1	≥ 1
		SI 8.0H	≥ 1	≥ 1
	Three-phase	SI 4.4M	≥ 1	≥ 1
		SI 6.0H	≥ 2	≥ ]
		SI 8.0H	≥ 3	≥ 1
Battery backup / off- grid operation	Single-phase	SI 4.4M	≥ 1	≥ 1
		SI 6.0H	≥ 1	≥ 1
		SI 8.0H	≥ 1	≥ 1
	Three-phase	SI 4.4M	≥ 2	≥ 1
		SI 6.0H	≥ 3	≥ 1
		SI 8.0H	≥ 4	≥ 1

## **Exide Sonnenschein Lithium Module Pro**

Application		Inverters	Battery modules	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 3	≥ 1
		SI 6.0H	≥ 4	≥ 1
		SI 8.0H	≥ 5	≥ 2 <sup>9)</sup>
Battery backup / off-	Single-phase	SI 4.4M	≥ 4	≥ 1
grid operation		SI 6.0H	≥ 6	≥ 2 <sup>9)</sup>
		SI 8.0H	≥ 7	≥ 2 <sup>9)</sup>

<sup>&</sup>lt;sup>9)</sup> Towers can be partially filled.

#### **GS HUB HomeHub**

Application		Inverters	Battery modules	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 2	≥ 1
		SI 6.0H	≥ 3	≥ 1
		SI 8.0H	≥ 3	≥ 1
	Three-phase	SI 4.4M	≥ 4 <sup>8)</sup>	≥ 1
		SI 6.0H	-	-
		SI 8.0H	-	-
Battery backup / off-grid operation	Single-phase	SI 4.4M	≥ 3	≥ 1
		SI 6.0H	≥ 4	≥ 1
		SI 8.0H	≥ 4	≥ 1
	Three-phase	SI 4.4M	-	-
		SI 6.0H	-	-
		SI 8.0H	-	-

## Pylontech Pelio

Application		Inverters	Battery modules	Battery-cable sets
Self-consumption	Single-phase	SI 4.4M	≥ 1	1
		SI 6.0H	≥ 2	2
		SI 8.0H	≥ 2	2
	Three-phase	SI 4.4M	≥ 3	3
		SI 6.0H	≥ 5	4
		SI 8.0H	≥ 6	5
Battery backup / off-grid operation	Single-phase	SI 4.4M	≥ 2	2
		SI 6.0H	≥ 2	3
		SI 8.0H	≥ 3	3
	Three-phase	SI 4.4M	≥ 4	4
		SI 6.0H	≥ 6	6
		SI 8.0H	≥ 8	8

# Pylontech Pelio / US5000

Application		Inverters	Systems (towers)	Battery-cable sets
Battery backup / off- grid operation	Single-phase	SI 6048US	≥ 2	2
	Split phase	SI 6048US	≥ 4	4
	three-phase	SI 6048US	≥ 6	6
	Double-split phase	SI 6048US	≥ 8	8

## Pylontech US2000 / 2000C

Application		Inverters	Battery modules	Battery-cable sets <sup>10)</sup>
Self-consumption	Single-phase	SI 4.4M	≥ 3	1
		SI 6.0H	≥ 4	2
		SI 8.0H	≥ 5	2
	Three-phase	SI 4.4M	≥ 9	3
		SI 6.0H	≥ 12	4
		SI 8.0H	≥ 15	5
Battery backup / off-grid	Single-phase	SI 4.4M	≥ 3	2
operation		SI 6.0H	≥ 4	3
		SI 8.0H	≥ 5	3
	Three-phase	SI 4.4M	≥ 9	4
		SI 6.0H	≥ 12	6
		SI 8.0H	≥ 15	8

## **Pylontech US3000 / 3000C**

Application		Inverters	Battery modules	Battery-cable sets <sup>10)</sup>
Self-consumption	Single-phase	SI 4.4M	≥ 2	1
		SI 6.0H	≥ 3	2
		SI 8.0H	≥ 4	2
	Three-phase	SI 4.4M	≥ 6	3
		SI 6.0H	≥ 9	4
		SI 8.0H	≥ 11	5
Battery backup / off-grid	Single-phase	SI 4.4M	≥ 2	2
operation		SI 6.0H	≥ 3	3
		SI 8.0H	≥ 4	3
	Three-phase	SI 4.4M	≥ 6	4
		SI 6.0H	≥ 9	6
		SI 8.0H	≥ 11	8

 $<sup>^{10]}</sup>$  The battery cable sets are needed for the connection to an inverter, a DC busbar or DC Combiner.

## Pylontech UP5000

Application		Inverters	Battery modules	Battery-cable sets <sup>10)</sup>
Self-consumption	Single-phase	SI 4.4M	≥ 2	1
		SI 6.0H	≥ 3	2
		SI 8.0H	≥ 3	2
	Three-phase	SI 4.4M	≥ 5	3
		SI 6.0H	≥ 7	4
		SI 8.0H	≥ 9	5
Battery backup / off-grid	Single-phase	SI 4.4M	≥ 2	2
operation		SI 6.0H	≥ 3	3
		SI 8.0H	≥ 4	3
	Three-phase	SI 4.4M	≥ 5	4
		SI 6.0H	≥ 8	6
		SI 8.0H	≥ 10	8

## Pylontech US5000 / US5000B

Application		Inverters	Battery modules	Battery-cable sets <sup>10)</sup>
Self-consumption	Single-phase	SI 4.4M	≥ 1	1
		SI 6.0H	≥ 2	2
		SI 8.0H	≥ 2	2
	Three-phase	SI 4.4M	≥ 3	3
		SI 6.0H	≥ 5	4
		SI 8.0H	≥ 6	5
Battery backup / off-grid	Single-phase	SI 4.4M	≥ 2	2
operation		SI 6.0H	≥ 2	3
		SI 8.0H	≥ 3	3
	Three-phase	SI 4.4M	≥ 4	4
		SI 6.0H	≥ 6	6
		SI 8.0H	≥ 8	8

## Pylontech US3000 / US3000C

Application		Inverters	Systems (towers)	Battery-cable sets
Battery backup / off- grid operation	Single-phase	SI 6048US	≥ 4	2
	Split phase	SI 6048US	≥ 7	4
	three-phase	SI 6048US	≥ 11	6
	Double-split phase	SI 6048US	≥ 14	8

## UZ Energy Power Lite L051100-A1/B/D

Application		Inverters	Systems (towers)
Self-consumption	Single-phase	SI 4.4M	≥ 2
		SI 6.0H	≥ 3
		SI 8.0H	≥ 3
	Three-phase	SI 4.4M	≥ 5
		SI 6.0H	≥ 7
		SI 8.0H	≥ 9
Battery backup / off-grid opera-	Single-phase	SI 4.4M	≥ 2
tion		SI 6.0H	≥ 3
		SI 8.0H	≥ 4
	Three-phase	SI 4.4M	≥ 6
		SI 6.0H	≥ 9
		SI 8.0H	≥ 12

Technical Information SI-Lilon-TI-en-48

21













