Solar MD

Leaders in Energy Storage Solutions

Product Introduction

About Us

Solar MD specializes in Lithium-Ion Battery Energy Storage Systems for residential, commercial and utility scale applications.

“Our goal is to deliver affordable, clean energy solutions around the world, empowering communities and enhancing quality of life by stabilizing energy access. ”

History

2014

Founded in 2014 by Kaloyan Dimov, Kostadin Petkov & James Eedes as a renewable energy installation company with the focus of own product development.

2015

First battery system with integrated inverter.

2017

Mass production and distribution of the Solar MD 3.7 & 7.4kWh residential battery.

Launch of the mypower24 portal.

2019

New product range with higher energy density 8.3 & 14.3kWh

History

2020

Introduction of High Voltage commercial batteries 71.5 – 243.1kWh and containerized solutions from 1MWh.

2022

1 GWh of batteries shipped

2023

Start of the distribution in Europe and opening the assembly plant in Bulgaria.

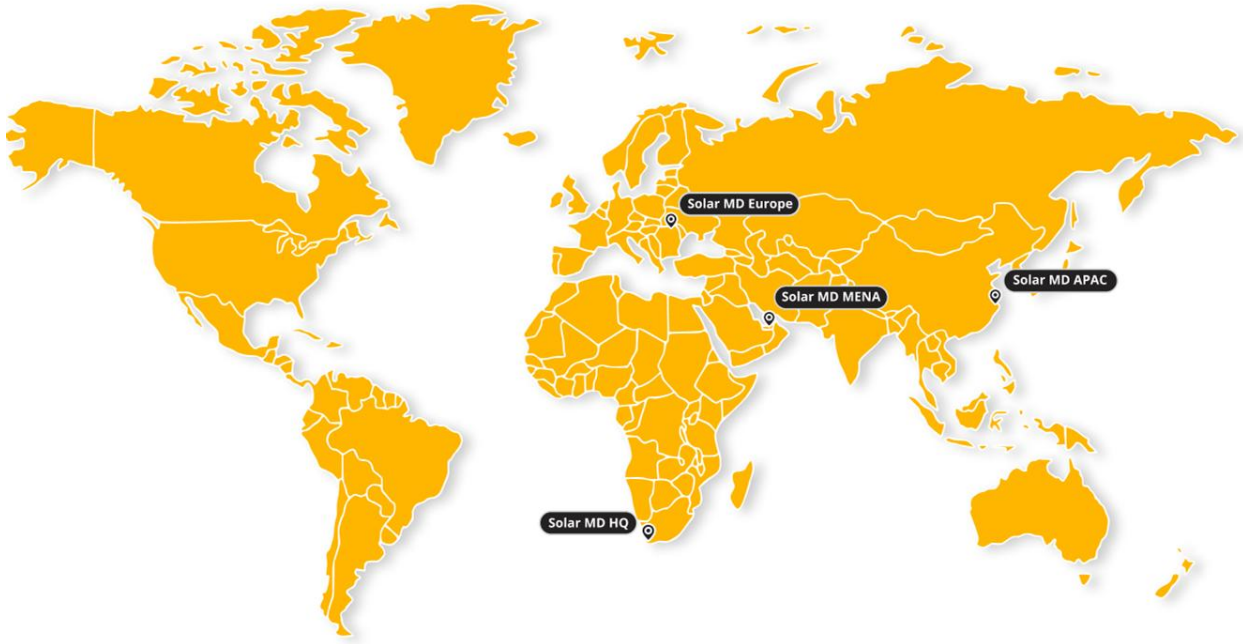
2024

Opening of a new factory with a production capacity of 3GWh.

Awarded TOP 50 fastest growing companies in Africa

Global Presence

- > 1500 MWh shipped
- 50+ Countries
- 15 000 sqm Factory
- 50% R&D Employees
- 2 Factories
- 4 Sales & Service Offices



Technology Partner

Mechanical Engineering
- Containerized Solutions
- Inhouse construction
- Battery housing
- Design, Plan & Build

Production & Support
- Low Voltage 8.3-14.3kWh
- High Voltage 71.5 – 243.1kWh
- PCB manufacturing
- Metal rack flat packed
- Technical Support Team

Software Development
- Inhouse EMS
- Mypower 24 portal
- Energy Management
- Battery/Cell Level Monitoring

Electrical Engineering
- Inhouse BMS design
- BMU manufacture
- Logger V2 design
- PCB design

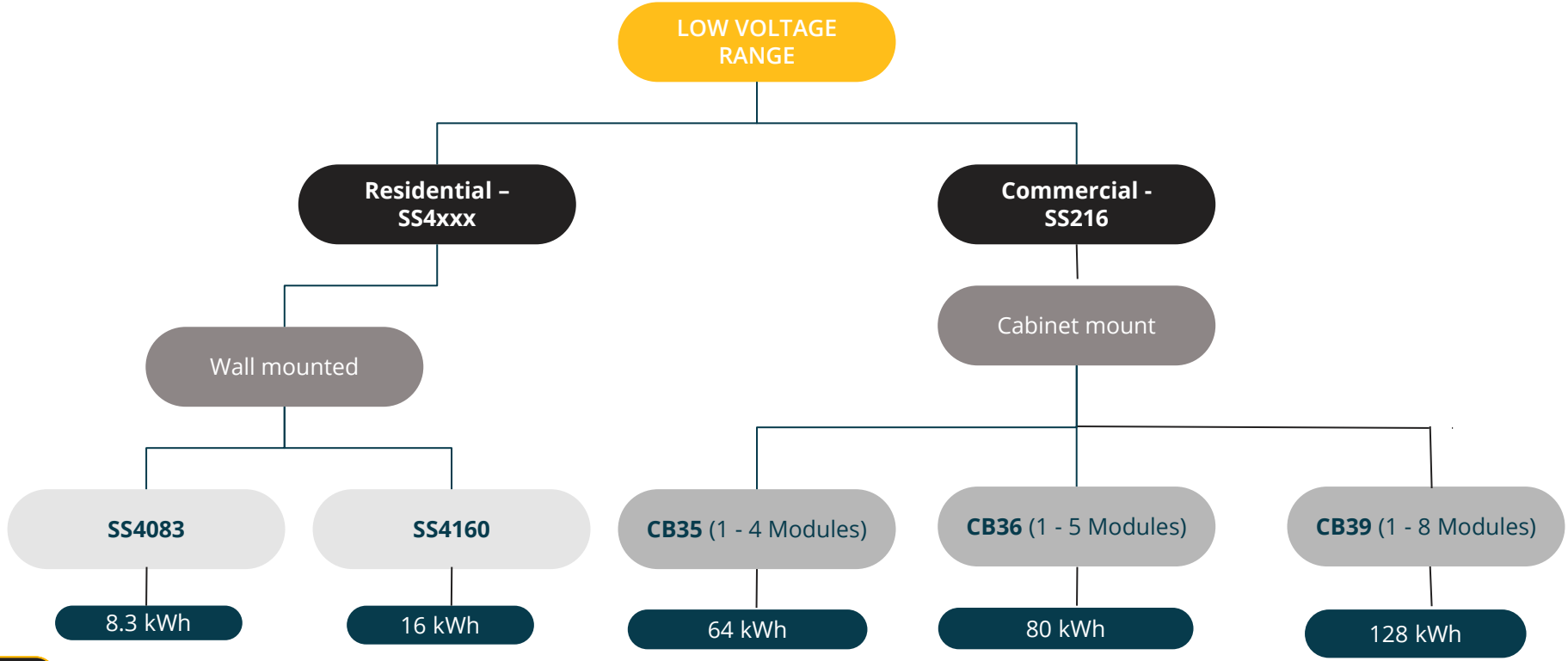
https://www.youtube.com/watch?v=0mZm77lhvx4

Product Overview

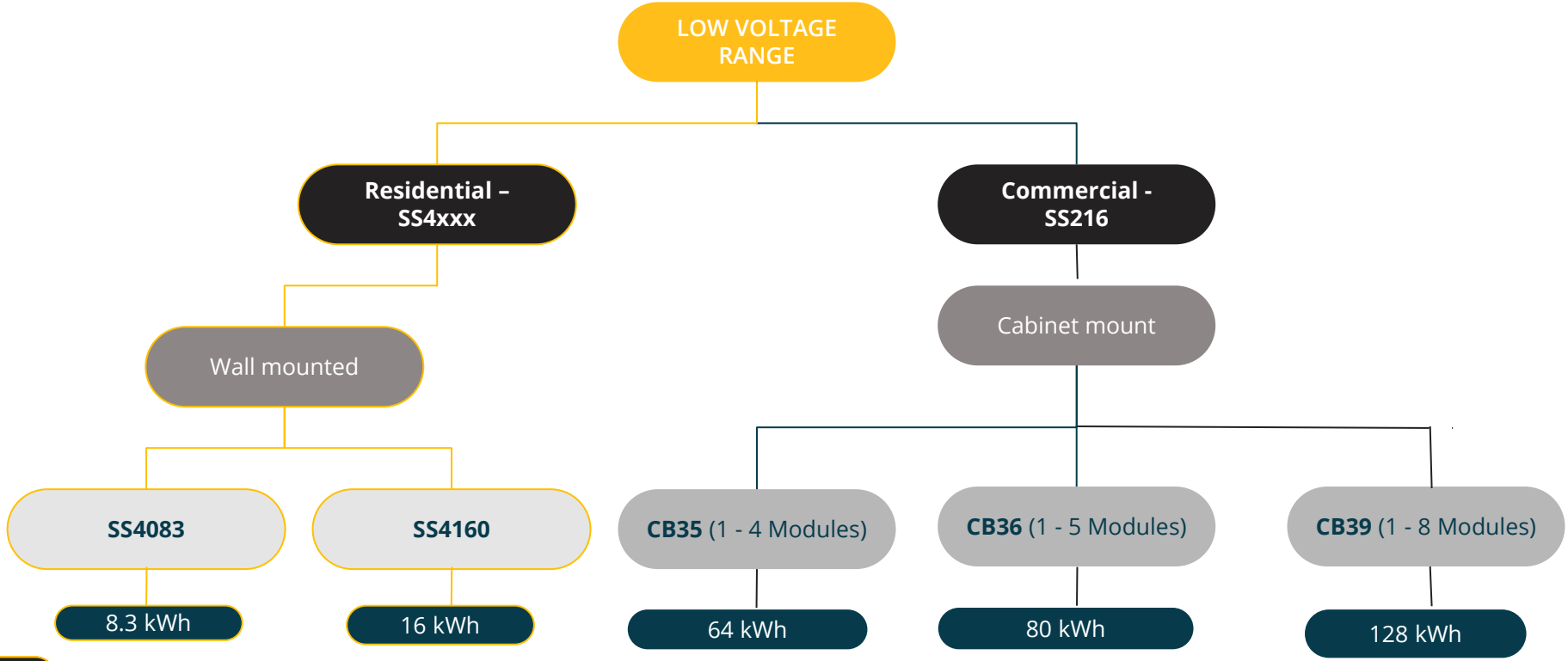
Product Overview

01 – LV Batteries

Low Voltage Battery Range



Low Voltage Battery Range



Low Voltage Battery Range | SS4083

- 51.2 V
- 8.3kWh
- Smallest in our range
- Wall Mounted or Floor Standing

5 Years Guarantee on Product Material & Workmanship

10 Years Energy Output Warranty

Low Voltage Battery Range | SS4083

- Off-Grid
- Hybrid Inverter
- Grid Tied
- Charger Systems
- Residential UPS Systems
- Commercial UPS Systems

Cell Chemistry	Lithium Iron Phosphate (LiFePO4)
Cell Manufacturer	CALB
Rated Capacity	8.3kWh
Nominal Power @0.7C	7.5kWh
Nominal Voltage	51.2V
Number of battery modules	1
Weight per module	70kg
Operational Voltage	44.8 - 55.6Vdc
Communication	CANBUS / RS485
Dimensions W x D x H	389mm x 183mm x 635mm
Cycle Life @25°C	≥4000
Charging Efficiency	99%
Operational Temperature	0°C to +50°C
Storage Duration	6 months @25°C
Safety Standard Compliance	CE / EN 55016 / IEC 61000
Cell Certificate	IEC 62619 / UN38.3 /UN3480 / UL 1642 / UL 1973

Low Voltage Battery Range | SS4160

- 51.2 V Solution
- 16kWh
- TOP- Seller
- Wall Mounted or Floor Standing

5 Years
Guarantee on Product Material & Workmanship

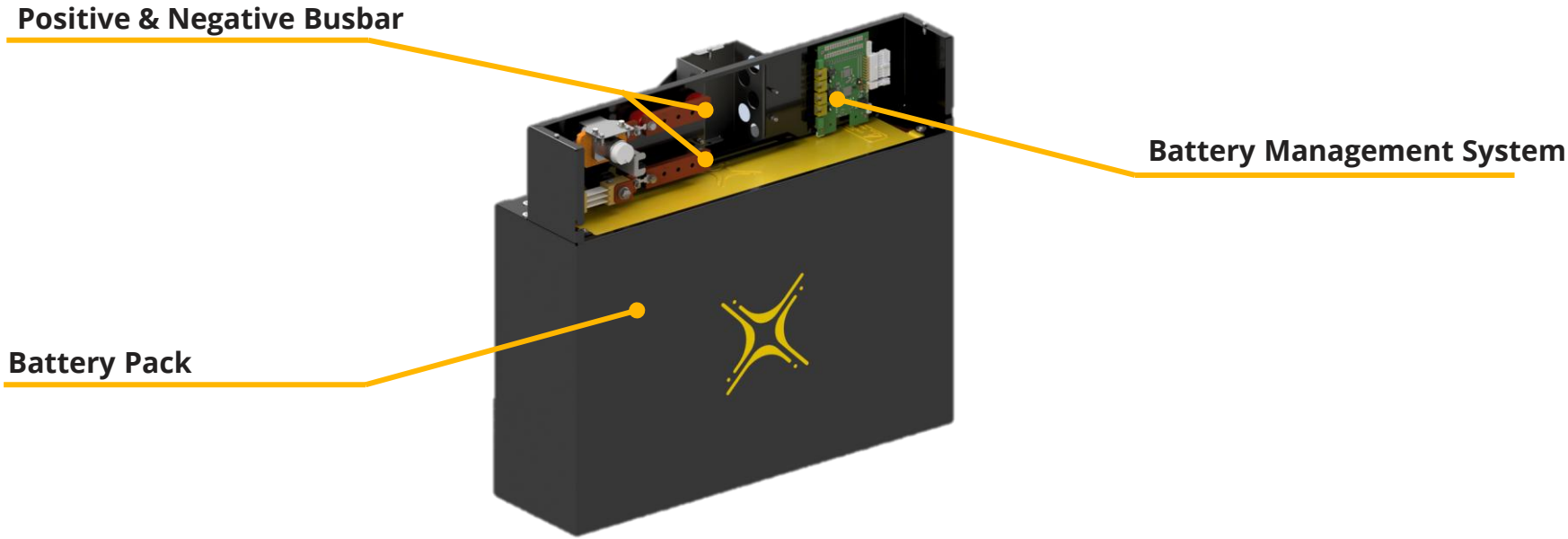
12 Years
Energy Output Warranty

Low Voltage Battery Range | SS4160

- Off-Grid Systems
- Hybrid Systems
- Grid Tied Systems
- Charger Systems
- Residential UPS Systems
- Commercial UPS Systems

SS4160	
Cell Chemistry	Lithium Iron Phosphate (LiFePO4)
Cell Manufacturer	CATL
Rated Capacity	16.0 kWh
Nominal Power @0.5C	8 kW
Nominal Voltage	51.2V
Operational Voltage	44.8 - 55.6Vdc
Max Charge & Discharge Current	157A
Cycle Life @25°C	≥7000
Charging Efficiency	99%
Operational Temperature	0°C to 50°C
Communication	CANBUS / RS485
Weight per module	118kg
Dimensions (W x D x H)	674mm x 187mm x 606mm
Storage Duration	6 months @25°C
Safety Standard Compliance	CE / EN 55016 / IEC 61000
Cell Certificate	IEC 62619 / UN38.3 / UN3480 / UL 1642 / UL 1973

Low Voltage Battery Range | SS4160

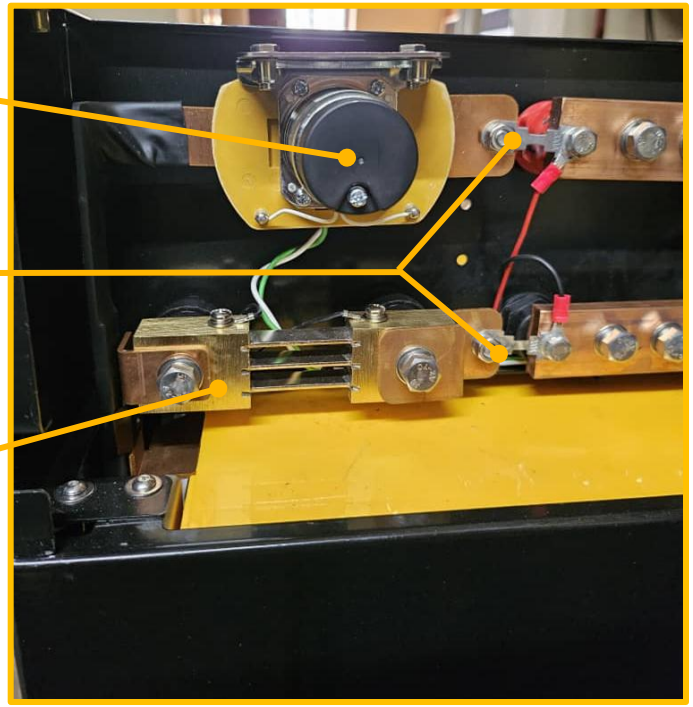


Low Voltage Battery Range | SS4160

200A Relay

200A +/- Fuse

Shunt



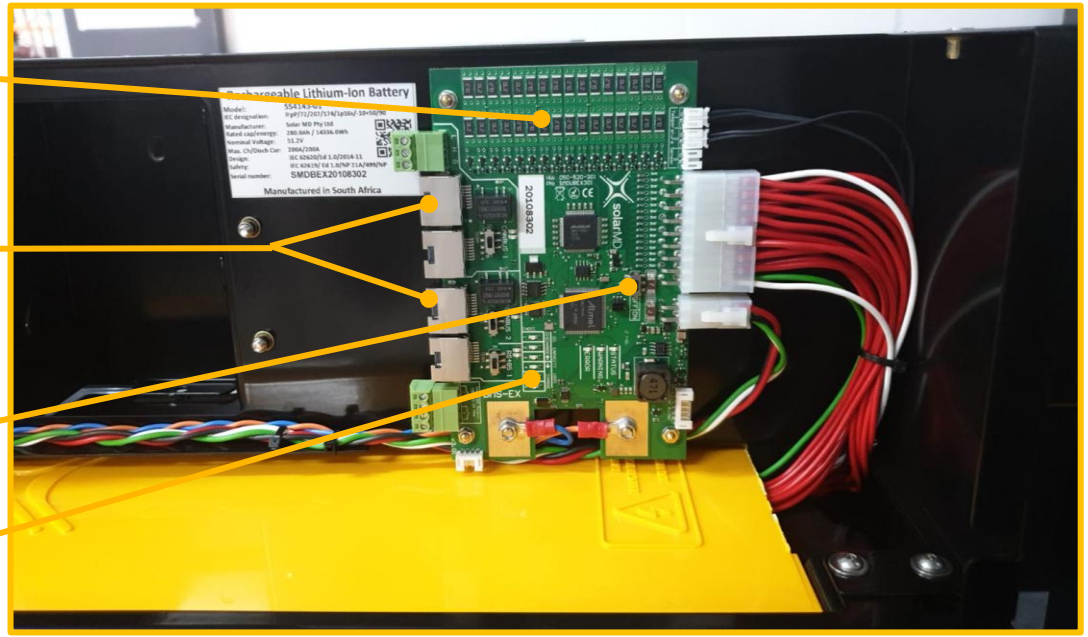
Low Voltage Battery Range | SS4160

BMS

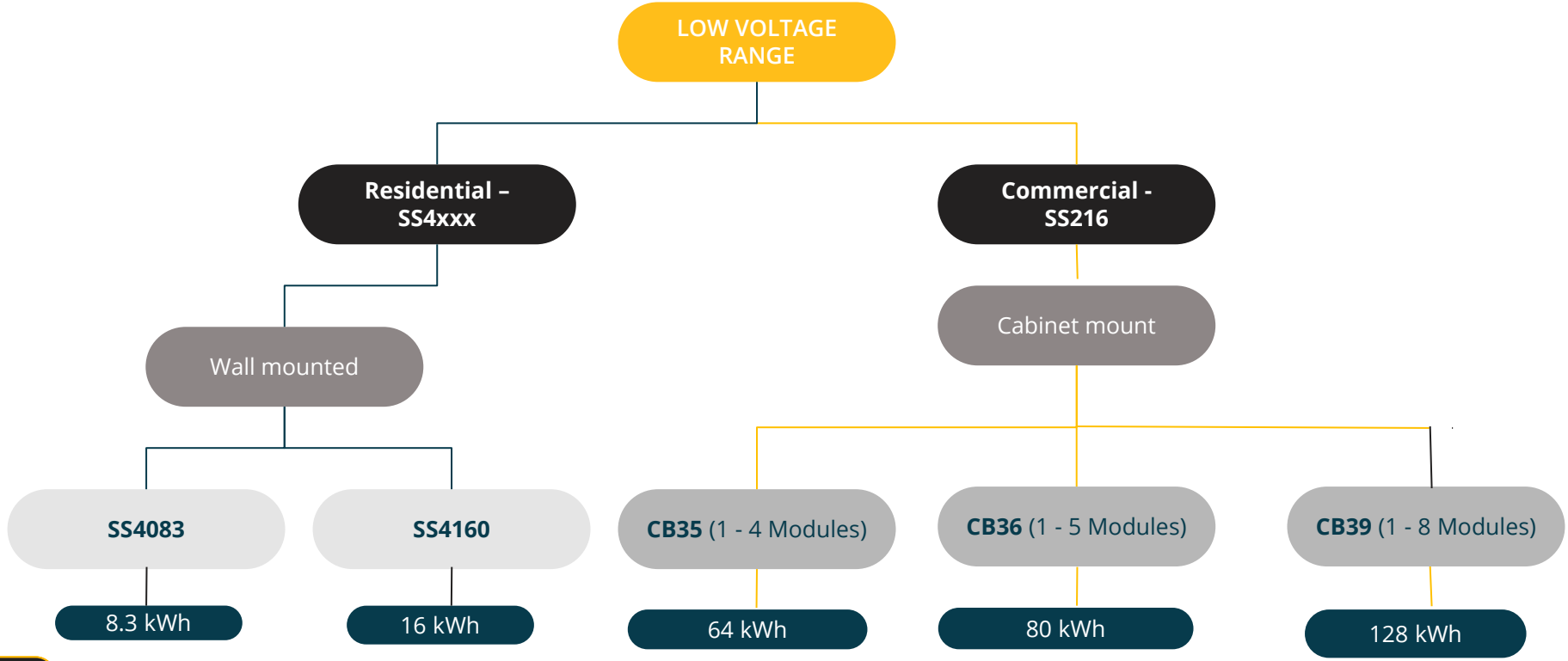
CAN BUS / RS485

On/Off Switch

Status LEDs



Low Voltage Battery Range



Low Voltage Battery Range | SS216

- 51.2V Solution
- 16 kWh
- Space Optimized
- Rack Mounted
- International Best-Seller

5 Years
Guarantee on Product Material & Workmanship

12 Years
Energy Output Warranty

Low Voltage Battery Range | SS216

- Off-Grid
- Hybrid Inverter
- Grid Tied
- Charger Systems
- Residential UPS Systems
- Commercial UPS Systems
- Low Voltage Battery Inverter

SS216	
Cell Chemistry	Lithium Iron Phosphate (LiFePO4)
Cell Manufacturer	CATL
Rated Capacity	16 kWh
Nominal Power @0.5C	8 kW
Nominal Voltage	51.2V
Operational Voltage	44.8 - 55.6Vdc
Max Charge & Discharge Current	157A
Communication	CANBUS / RS485
Weight per module	112kg
Dimensions (W x D x H)	426mm x 722mm x 230mm

Low Voltage Battery Range | SS216

CB35

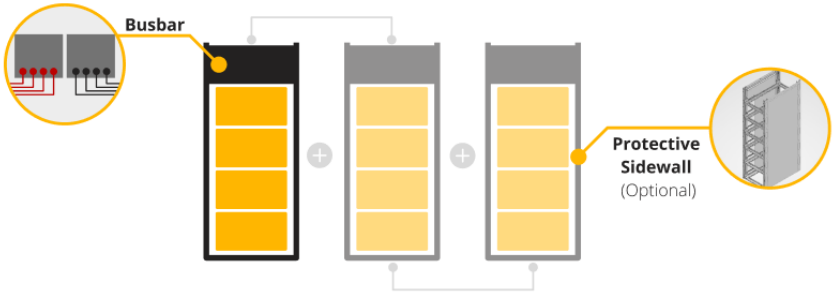
1 - 4x SS214 modules.

CB36

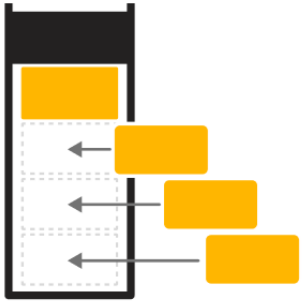
1 - 5x SS214 modules.

CB39

1 - 8x SS214 modules.

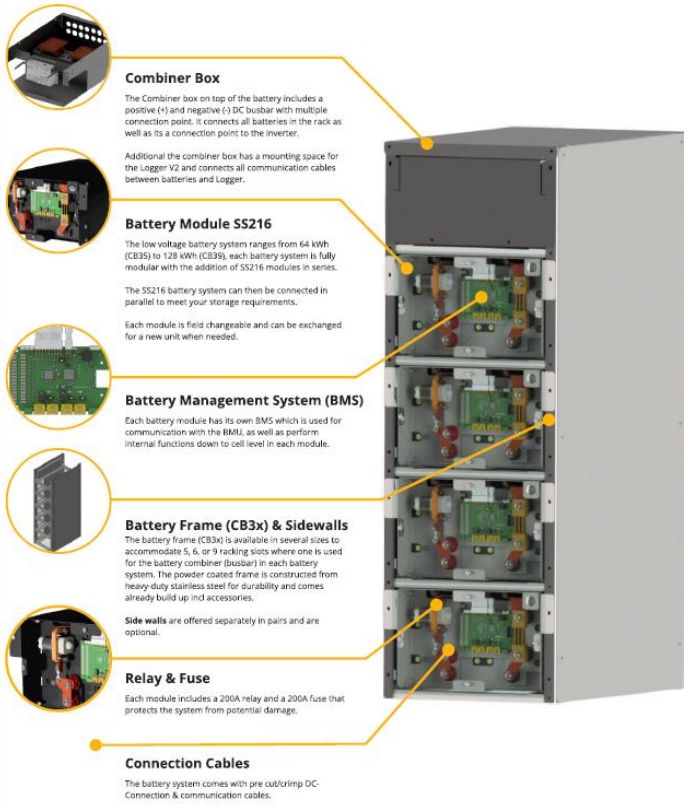


Capacity can be increased through a parallel connection of the batteries.



Increase capacity by adding on more modules when you need

Low Voltage Battery Range | SS216



Combiner Box

The Combiner box on top of the battery includes a positive (+) and negative (-) DC busbar with multiple connection point. It connects all batteries in the rack as well as its a connection point to the inverter.

Additional the combiner box has a mounting space for the Logger V2 and connects all communication cables between batteries and Logger.

Battery Module SS216

The low voltage battery system ranges from 64 kWh (CB35) to 128 kWh (CB39), each battery system is fully modular with the addition of SS216 modules in series.

The SS216 battery system can then be connected in parallel to meet your storage requirements.

Each module is field changeable and can be exchanged for a new unit when needed.

Battery Management System (BMS)

Each battery module has its own BMS which is used for communication with the BMU, as well as perform internal functions down to cell level in each module.

Battery Frame (CB3x) & Sidewalls

The battery frame (CB3x) is available in several sizes to accommodate 5, 6, or 9 racking slots where one is used for the battery combiner (busbar) in each battery system. The powder coated frame is constructed from heavy-duty stainless steel for durability and comes already build up incl accessories.

Side walls are offered separately in pairs and are optional.

Relay & Fuse

Each module includes a 200A relay and a 200A fuse that protects the system from potential damage.

Connection Cables

The battery system comes with pre cut/crimp DC-Connection & communication cables.

Low Voltage Battery Range | SS216

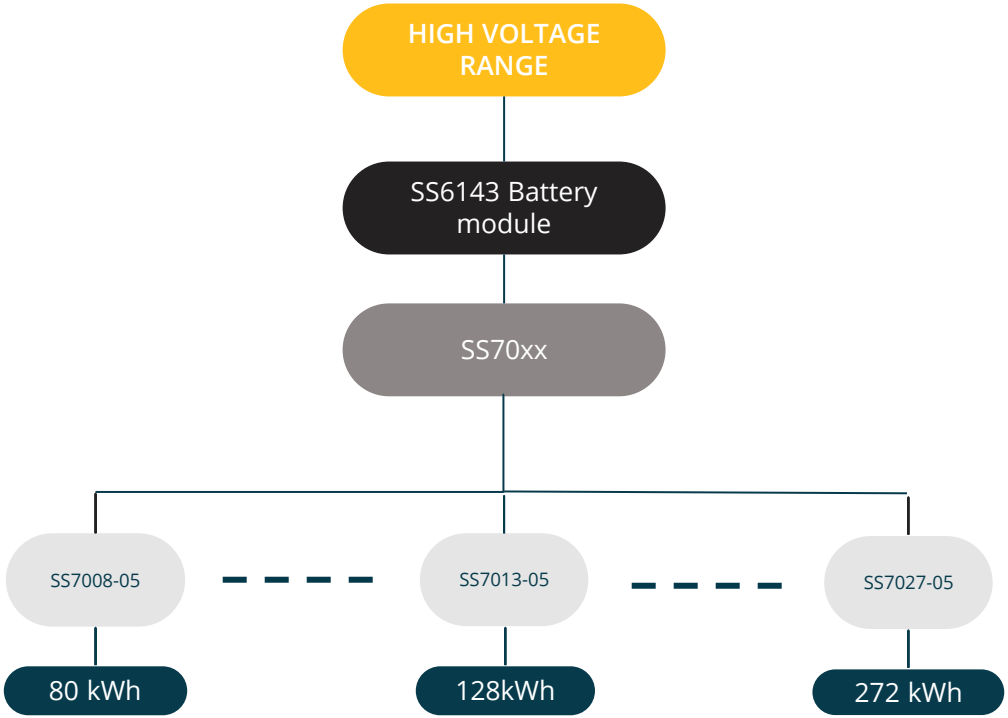
	CB35	CB36	CB39
battery modules per cabinet	1 - 4x SS216 Modules	1 - 5x SS216 Modules	1 - 8x SS216 Modules
Capacity Range	16 - 64 kWh	16 - 80 kWh	16 - 128 kWh
Nominal Power (@0.5C)	8 - 32kW	8 - 40 kW	8 - 64 kW
Nominal Voltage	51.2V	51.2V	51.2V
Operational Voltage	44.8 - 55.6Vdc	44.8 - 55.6Vdc	44.8 - 55.6Vdc
Communication	CANBUS / RS485	CANBUS / RS485	CANBUS / RS485
Rack Weight	50kg	60kg	90kg
Total Weight[1]	498kg	620kg	986kg
Dimensions (W x D x H)	438mm x 710mm x 1300mm	438mm x 710mm x 1525mm	438mm x 710mm x 2286mm

[1] Total system weight on site. Shipping weight and packaging sizes will change according to transport (sea/road) weight limitations.

Product Overview

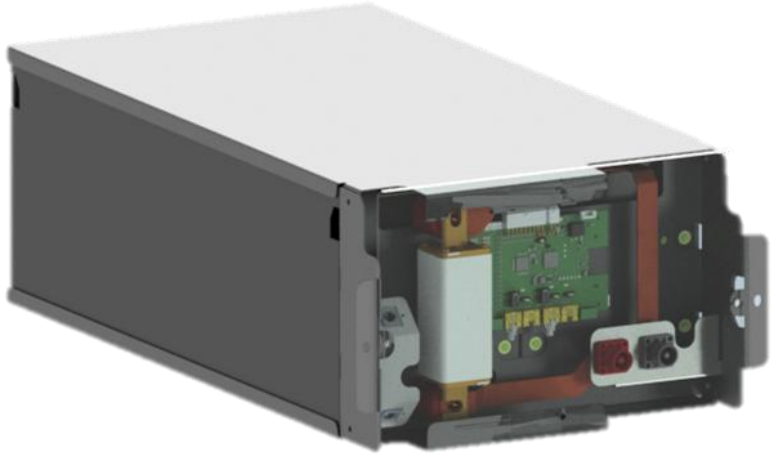
02 – HV Batteries

High Voltage Battery Range | SS70xx



High Voltage Battery Range | SS70xx

- 51.2V – 870.4V
- SS6160 / 16kWh
- Infinite Scalable
- High Energy Use
- Distributor Friendly



5 Years
Guarantee on Product Material & Workmanship

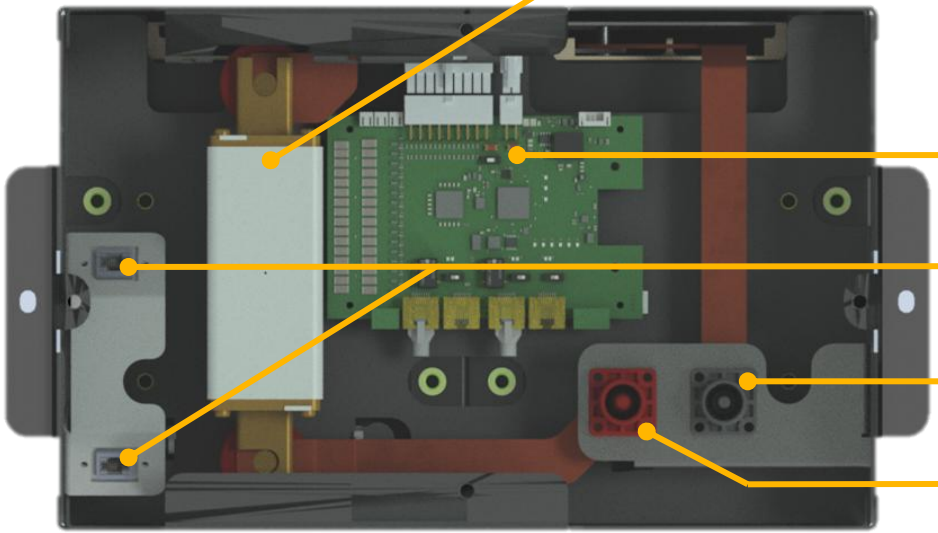
12 Years
Energy Output Warranty

High Voltage Battery Range | SS70xx

- Back-Up Power
- Peak Shaving
- Charger Systems
- Residential UPS Systems
- Commercial UPS Systems
- Off-Grid Electricity Supply
- High Voltage Battery Inverter

SS6160	
Cell Chemistry	Lithium Iron Phosphate (LiFePO4)
Cell Manufacturer	CATL
Rated Capacity	16 kWh
Nominal Power @0.5C	8 kW
Nominal Voltage	51.2V
Operational Voltage	44.8 - 55.6Vdc
Max Charge & Discharge Current	157A
Weight per module	114kg
Dimensions W x D x H	410mm x 712mm x 242mm

High Voltage Battery Range | SS70xx



Protection 1000V 200A Fuse

Battery Management System (BMS)

CANBUS Module Connectors

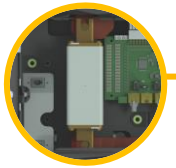
DC HV – Negative Connector

DC HV – Positive Connector

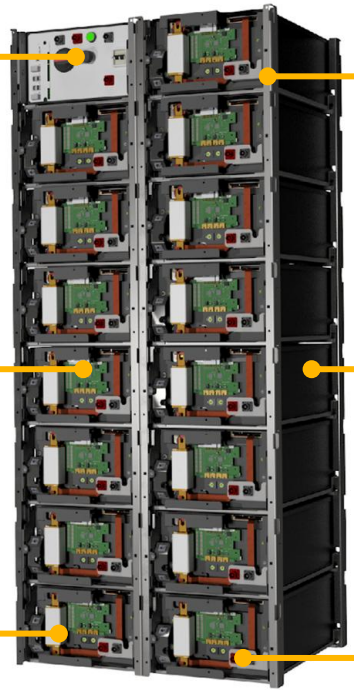
High Voltage Battery Range | SS70xx

Battery Management Unit (BMU)

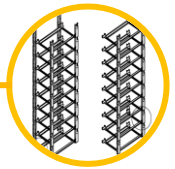
Battery Management System (BMS)



Protection 1000V 200A Fuse



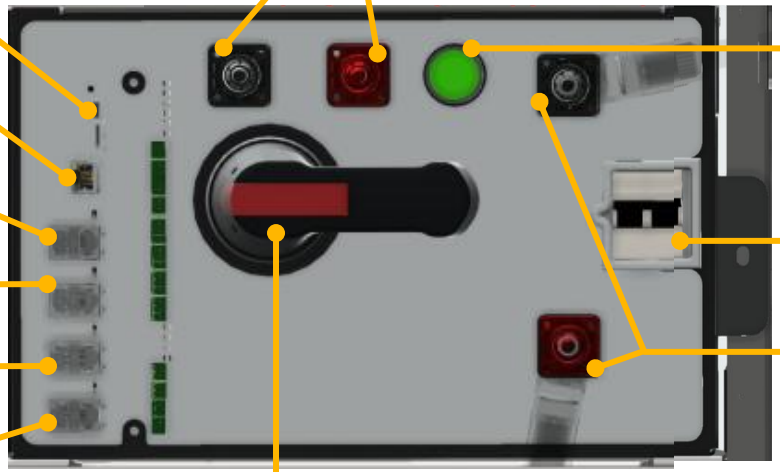
Battery Module SS6143



Battery Frame 8, 12 or 18 Rack System

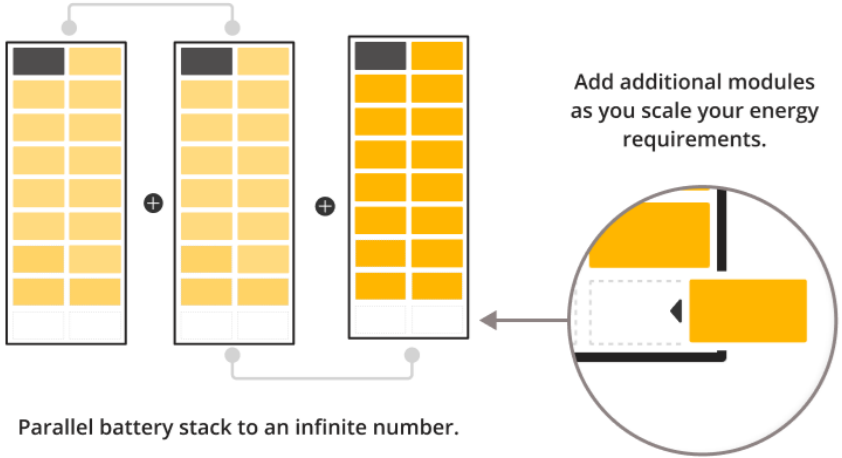
Connection ports DC & Coms

High Voltage Battery Range | SS70xx



High Voltage Battery Range | SS70xx

Extend your existing system anytime when more capacity is needed.



Parallel battery stack to an infinite number.

High Voltage Battery Range | SS70xx

	SS7008-05	SS7013-05	SS7027-05
Rated capacity	80 kWh	128 kWh	272 kWh
Nominal Power (@0.5C)	40 kW	64 kW	136 kW
Nominal Voltage	256V	409.6V	870.4V
Operational Voltage (Min/Max)	224V - 280V	358.4V - 448V	761.6V - 952V
Communication	CANBUS / RS485 / Ethernet	CANBUS / RS485 / Ethernet	CANBUS / RS485 / Ethernet
Number of battery modules	5	8	17
Battery Rack	CB51x_HV-H8-R1	CB52x_HV-H6-R2	CB52x_HV-H9-R2
Total weight[1]	629.2 kg	986.4 kg	2039.8 kg
Dimensions W x D x H	424mm x 712mm x 1976mm	848mm x 712mm x 1482mm	848mm x 712mm x 2223mm

High Voltage Battery Range | SS70xx

Flat Packed

Stackable

All DC & Coms Cables incl.

Blank Plates

Packing List

High Voltage Battery Range | SS70xx

Product Overview

02 – HV Batteries

Outdoor Cabinet

High Voltage Battery Range | SS70xx

- Most flexible Solution
- Lightweight Design (150kg)
- Build in Fire Protection
- Integrated Cooling System
- Compatible Across All Major Brands
- 80 – 272KWh

High Voltage Battery Range | SS70xx

HV - Outdoor Battery Storage Solution	
Cell Chemistry	Lithium Iron Phosphate (LiFePO4)
Cell Manufacturer	CATL
Capacity Range	80 - 272 kWh
Operational Voltage (min/max)	224 - 952 V
Number of battery modules	5 - 17 pcs (SS6160 Modules)
Battery Rack	CB52x_HV-H9-R2
Cell Certification & Standards	IEC 62619 / UN38.3 / UN3480/ UL1642/ CE
Cycle Life @25°C	≥7000
Recommended depth of discharge (DoD)	90%
Cabinet Round Trip Efficiency	> 93% (Battery Only)
Cabinet Ambient Temperature	-10°C to 50°C (-30°C on request)
Cabinet Thermal Insulation	SPX33 - Polyethylene foam
Protection Class	IP65
Cabinet Safety Standard	IEC 62933-5-2:2020
Battery Safety Standard	CE / EN 55016 / IEC 61000
Fire Protection	Fire Pro (Eco Friendly - K2 CO3)
Climatization	Air Conditioner
Energy Management System	mypower24 Plant Controller

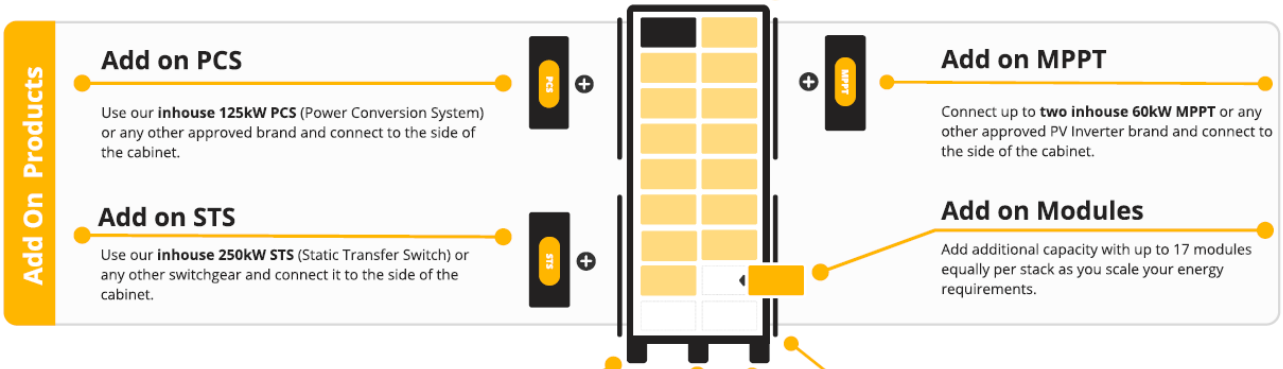
High Voltage Battery Range | SS70xx

BMU

The BMU is responsible for collecting information of the entire battery system, SOC calculations and information exchange among the various battery modules in its respective cluster, and guarantees the safe and reliable operation of the entire energy storage system. The BMU is also responsible for communication with external devices (eg. PCS/HPS/Charger etc).

SS70xx Inside

The High Voltage battery system is integrated into the outdoor cabinet and ranges from 80 kWh (SS7008-05) to 272 kWh (SS7027-05), each battery system is fully modular with the addition of SS6160 modules in series.



Fire Safety

Fire detection system according to IEC standards utilising environmentally friendly aerosol technology.

System Cooling

1.5

Integrated air conditioner with 1.5 kW of cooling capacity to keep the system operating at optimal temperatures

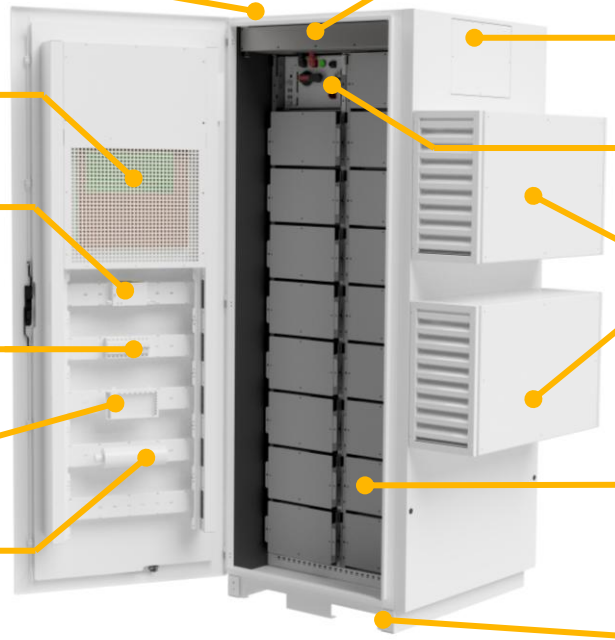
Mounting Side Plates

Installed with Four side mounting plates for installation of equipment tailored to individual requirements.

Battery Frame CB5x_HV-H9-R2

The battery frame CB5x_HV-H9-R2 accommodates 18 racking slots where one is used for the BMU in each battery system. The frame is constructed from heavy-duty stainless steel for durability and comes integrated into the outdoor cabinet.

High Voltage Battery Range | SS70xx



4x Lifting Eye Points

1.5kW Aircon

Logger V2

AC Breaker

Ethernet Switch

Fire surpressant

DC Busbar

DC Connection Box

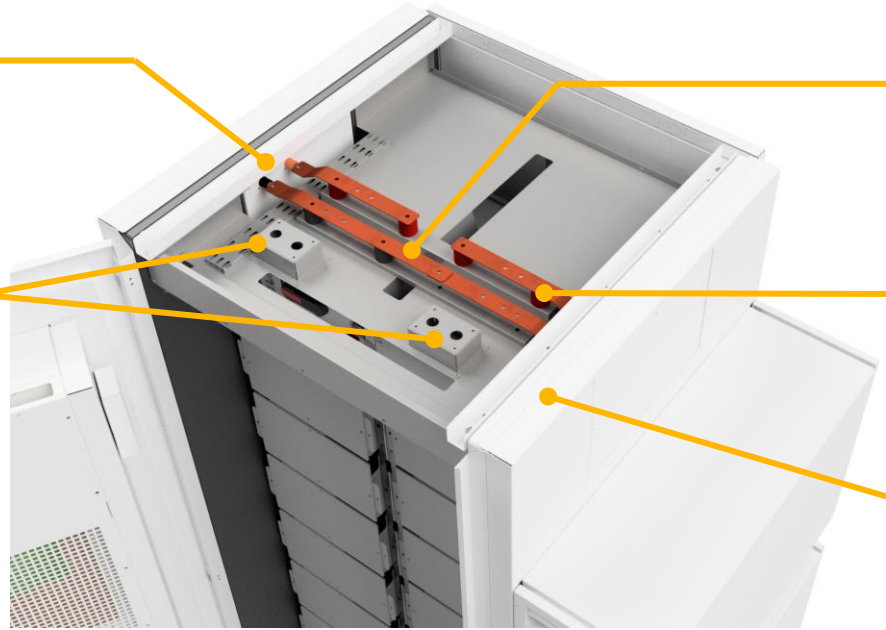
Battery Management Unit (BMU)

Add On Products

SS6143 Modules

Transport Footing

High Voltage Battery Range | SS70xx

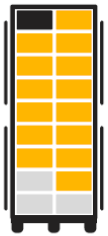


Product Overview

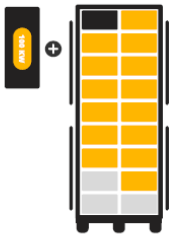
02 – HV Batteries

Outdoor Cabinet BUNDLES

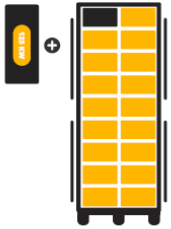
High Voltage Battery Range | SS70xx



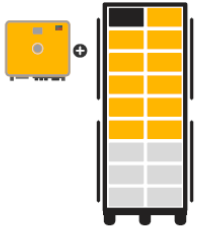
Standalone
80 - 272 kWh



Bundle
100kW / 208 kWh



Bundle
125kW / 272kWh

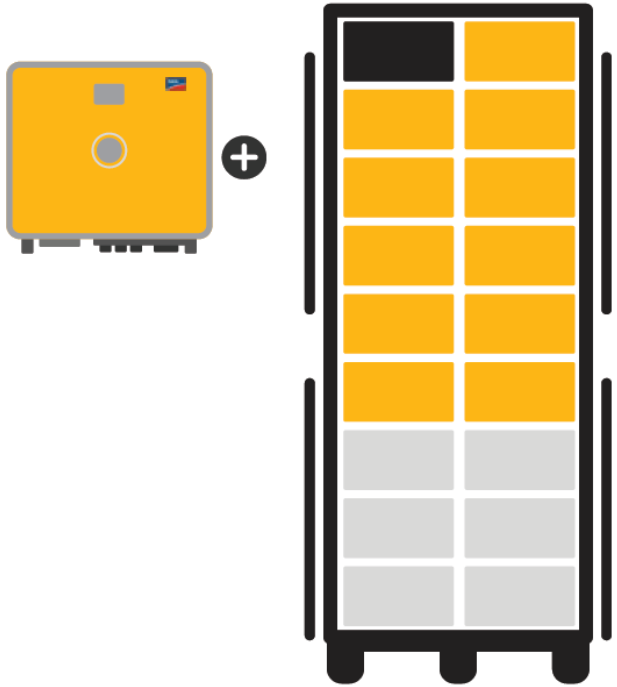


powered by SMA
50kW / 112kWh

DC Parameters				
Battery voltage operating range	224 - 952 V	627.2 - 784 V	761.6 - 952 V	313.6 - 392V
Number of battery modules	5 - 17 pcs	14 pcs	17 pcs	7 pcs
PCS voltage operating range	-	580-1000V	580-1000V	200 - 980 V
PCS Maximum charge - / discharge current	157 A	157 A	157 A	150 A

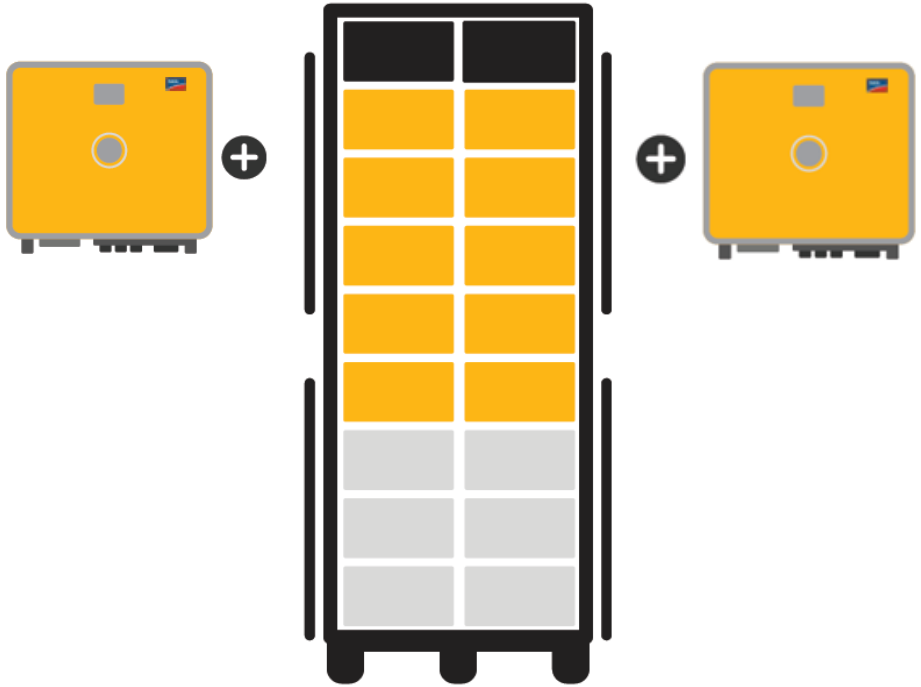
High Voltage Battery Range | SS70xx

- Powered by SMA
- SMA SI-X 30/50
- Off-Grid up to 12 in parallel (600kW)
- On-Grid up to 12 in parallel (600kW)
- One Battery Stack per PCS



High Voltage Battery Range | SS70xx

- Powered by SMA
- SMA SI-X 30/50
- Off-Grid up to 12 in parallel (600kW)
- On-Grid up to 12 in parallel (600kW)
- One Battery Stack per PCS



High Voltage Battery Range | SS70xx

- PCS Nominal Power: 30 – 50KW
- PCS Operating Voltage: 200 – 980V
- Charge & Discharge Current: 150A

SMD Battery	SS7011-05	SS7027-05
Capacity	112kWh	272kWh
Nom. Voltage	358 V	870.4 V
Output Power	54.6kW	132.6kW

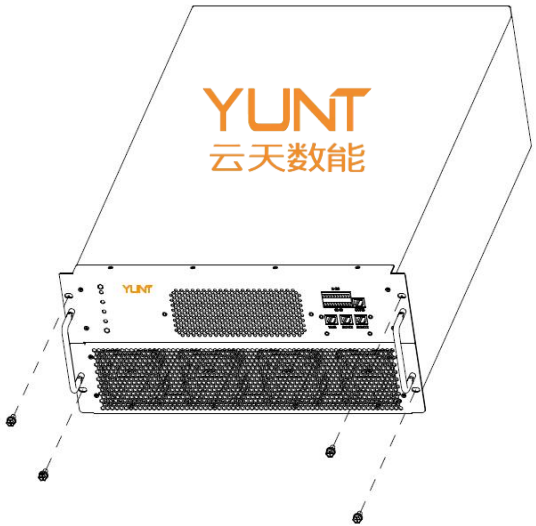
Battery max. Output Power = Nominal Battery Voltage * PCS charge/discharge Current

High Voltage Battery Range | SS70xx

- Solar MD Bundles
- 125kW PCS
- 120kW MPPT (2x 60kW)
- 250kW STS (Static Transfer Switch – 10ms)
- Off-Grid up to 6 in parallel (750kW)*
- On-Grid up to 32 in parallel (4MW)
- One Battery Stack per PCS

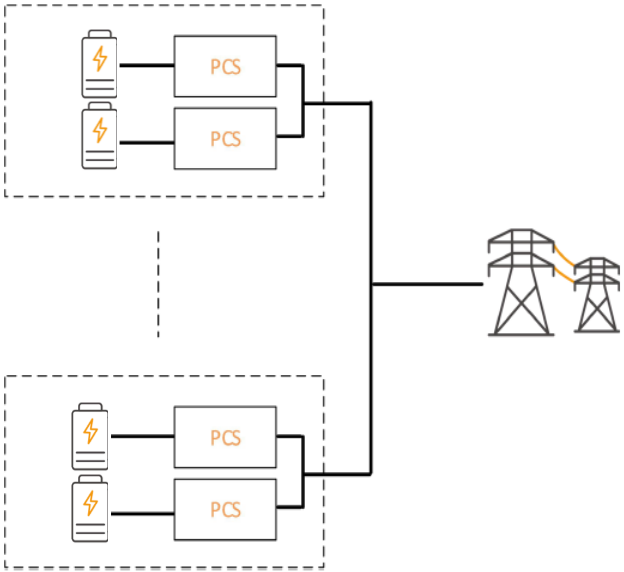
*Isolation Transformer Mandatory

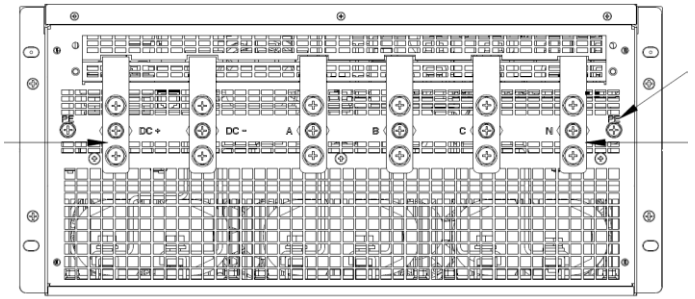
High Voltage Battery Range | YUNT Mars



- PCS Nominal Power: 125kW
- PCS Operating Voltage: 580 – 1000V
- Charge & Discharge Current: 216A
- Transformerless - 3 Wire + N
- 400V Output

High Voltage Battery Range | YUNT Mars



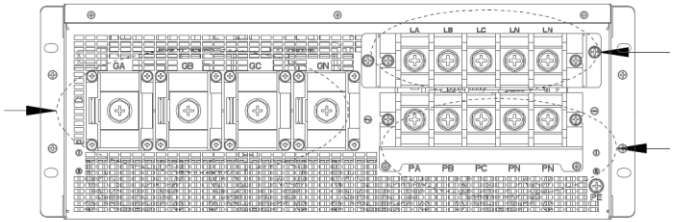


SMD Battery	SS7026-05	SS7027-05
Capacity	256kWh	272kWh
Nom. Voltage	819.2 V	870.4 V
Output Power	128kW	136kW

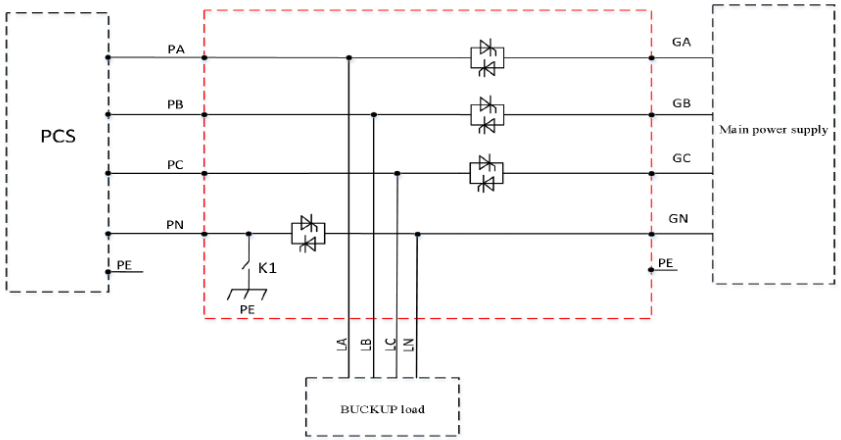
Battery max. Output Power = Nominal Battery Voltage * PCS charge/discharge Current

High Voltage Battery Range | YUNT STS

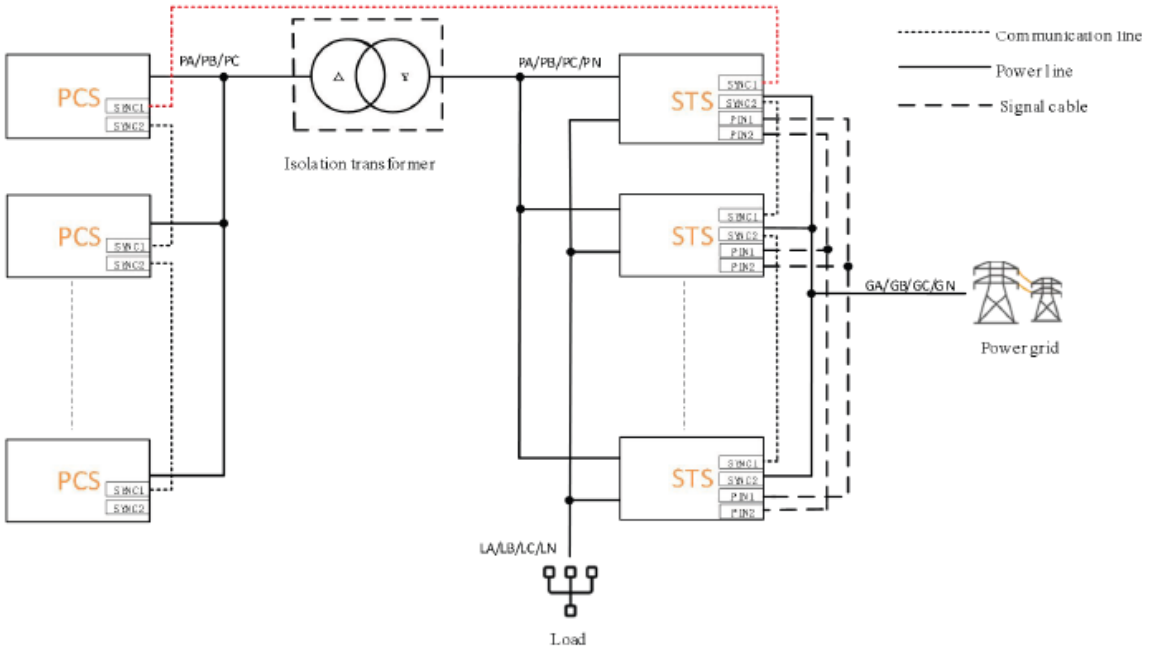
- 250kW Grid Side
- 125kW PCS Side
- 10ms transfer time
- 10% overload capacity in grid operation



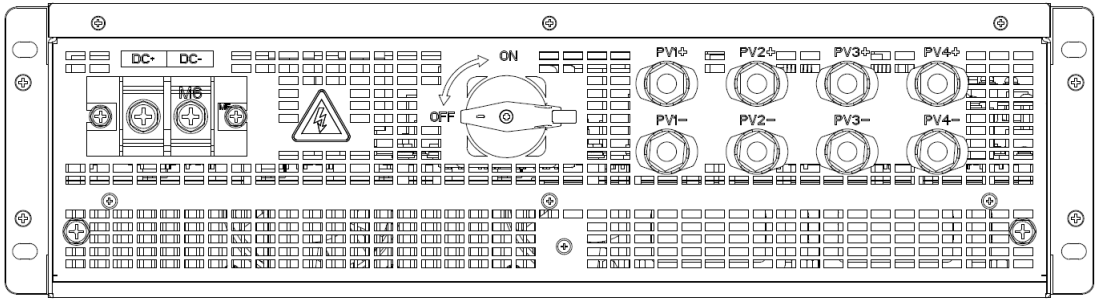
The STS internally uses active bidirectional thyristors to realize the switching function.



High Voltage Battery Range | YUNT STS



High Voltage Battery Range | YUNT Mercury



- Rated Power: 60kW
- PV Input: 4x 15kW (45A)
- Battery Voltage Range: 350 – 1000V

Product Overview

03 – Utility Scale BESS

Utility Scale Solutions | SS70XX Containerized

- Pre-Commissioned
- Plug & Play
- PCS or Hybrid Included
- Highly Customized
- Containerized

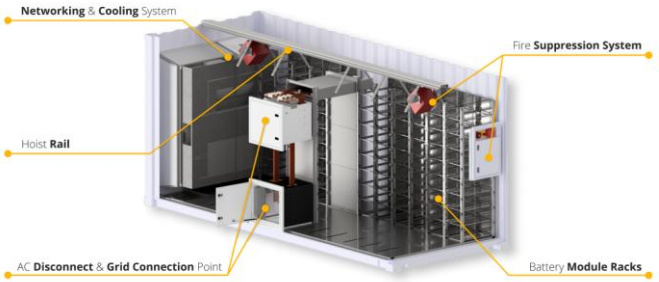
5 Years
Guarantee on Product Material & Workmanship

12 Years
Energy Output Warranty

Utility Scale Solutions | SS70XX Containerized

The Containerized **Battery Energy Storage Solution (BESS)** is an advanced Lithium-Ion storage unit built into a customized 20ft or 40ft container.

The unit is designed to be fully scalable to meet your storage requirements. Storage size for a containerized solution can **range from 750 kWh up to 6.5 MWh per container**. This solution can be a pure storage solution or integrated with various Power Conversion Systems (PCS) from 500kW+ output power.

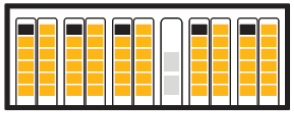


Cell Chemistry	Lithium Iron Phosphate (LiFePO4)
Cell Manufacturer	CATL
Cell Certification & Standards	IEC 62619 / UN38.3 / UN3480/ UL1642/ CE
Cycle Life @25°C	≥7000
Recommended depth of discharge (DoD)	90%
Container Round Trip Efficiency	> 93% (Battery Only)
Container Ambient Temperature	-10°C to 50°C (-30°C on request)
Container Thermal Insulation	Rockwool
Protection Class	IP65
Container Safety Standard	IEC 62933-5-2:2020
Fire Protection	Fire Pro (Eco Friendly - K2 CO3)
Climatization	2x 36000 BTU Air Conditioners 20°C Standard room temperature
Energy Management System	mypower24 Plant Controller

Utility Scale Solutions | SS70XX Containerized

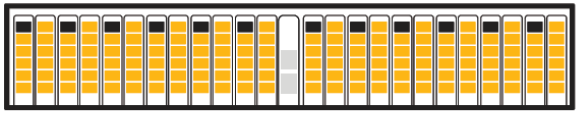
20ft Battery Only

Our 20ft battery only container has a **maximum capacity of 2.7 MWh** utilising 170x SS6160 High Voltage battery modules (10x SS70xx racks) connected in series and battery racks connected in parallel.



40ft Battery Only

Our 40ft battery only container has a **maximum capacity of 6.5 MWh** utilising 408x SS6160 High Voltage battery modules (24x SS70xx racks) connected in series and battery racks connected in parallel.



20ft Battery & PCS (incl. Transformer)

Our 20ft battery & inverter variation has a **capacity range of 0.5 - 1 MWh** utilising max. 64x SS6160 High Voltage battery modules (4x SS70xx racks) with **250 - 500KW output power** inclusive isolation transformer.

40ft Battery & PCS (incl. Transformer)

Our 40ft battery & inverter variation has a **capacity range of 2 - 3 MWh** utilising max. 192x SS6160 High Voltage battery modules (12x SS70xx racks) with **1 - 1.5MW output power** inclusive isolation transformer.

20ft Battery & PCS (excl. Transformer)

Our 20ft battery & rack PCS variation has a **maximum capacity of 2.2MWh** utilizing 136x SS6160 High Voltage battery modules (8x SS70xx racks) and up to 8x 125kW PCSs (excl. isolation transformer) for max. **1MW output power**.

40ft Battery & PCS (excl. Transformer)

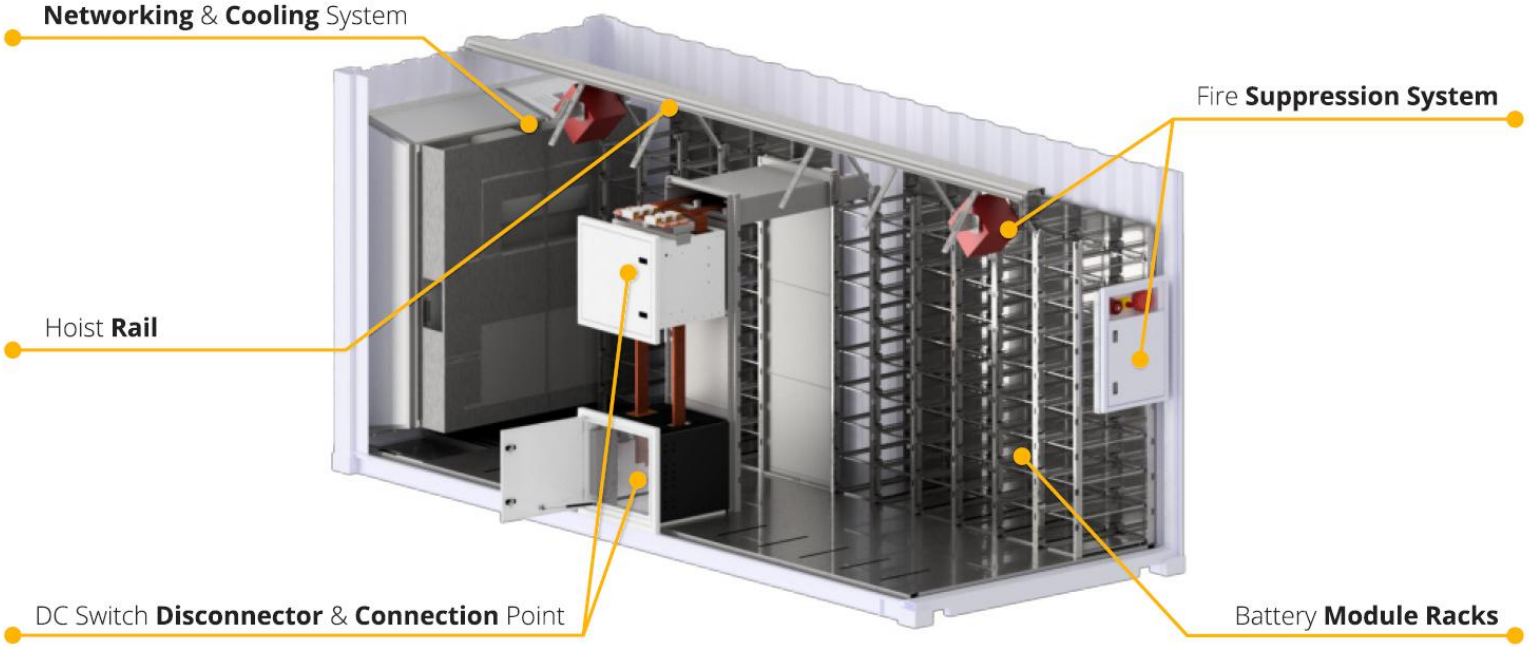
Our 40ft battery & rack PCS variation has a **maximum capacity of 4.9MWh** utilizing 306x SS6160 High Voltage battery modules (18x SS70xx racks) and up to 18x 125kW PCSs (excl. isolation transformer) for max. **2.25MW output power**.

Utility Scale Solutions | SS70XX Containerized

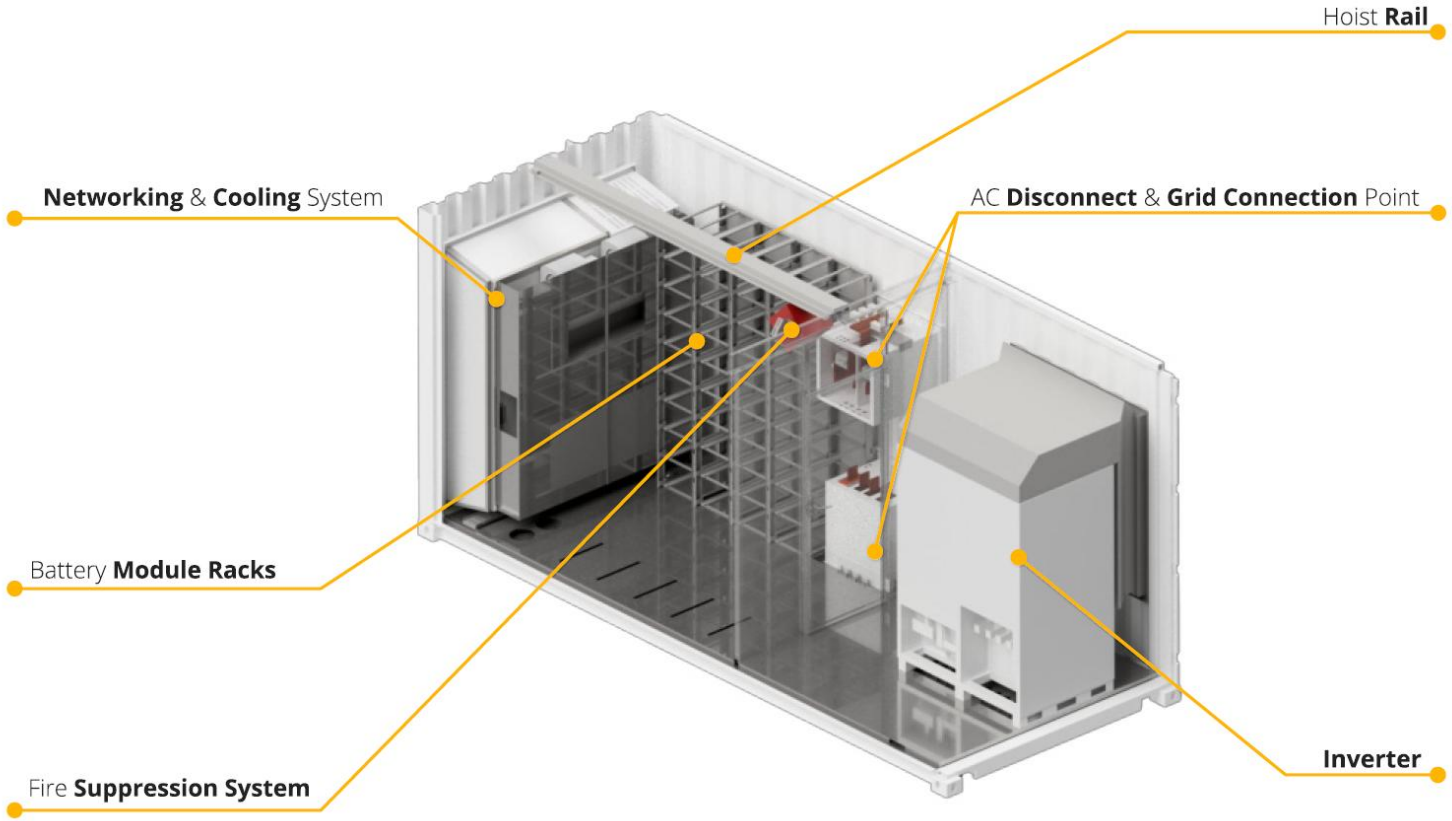
Technical Information	20ft Battery Only	40ft Battery Only	20ft Battery & PCS (incl. Transformer)	40ft Battery & PCS (incl. Transformer)	20ft Battery & PCS (excl. Transformer)	40ft Battery & PCS (excl. Transformer)
Capacity Range:	2.7 MWh (Max)	6.5 MWh (Max)	0.5 - 1 MWh	2 - 3 MWh	2.2 MWh	4.9 MWh
Inverter Power (PCS):	-	-	250 - 500kW	1 - 1.5 MW	1MW	2.25 MW
Battery Nominal Power @ 0.5C:	1.3 MW	3.2 MW	0.25 - 0.5 MW	1 - 1.5 MW	1.1 MW	2.45 MW
Operational Voltage:	761.6 - 945.2Vdc	761.6 - 945.2Vdc	582.4 - 896Vdc	582.4 - 896Vdc	761.6 - 945.2Vdc	761.6 - 945.2Vdc
DC Max. Current:	3000A	3000A (6000A on request)	620A	1860A	155A	155A
Number of Battery Modules:	170 pcs (SS6160 - 16kWh)	408 pcs (SS6160 - 16kWh)	max. 64 pcs (SS6160 - 16kWh)	max. 192 pcs (SS6160 - 16kWh)	136 pcs (SS6160 - 16kWh)	306 pcs (SS6160 - 16kWh)
Dimensions (W x D x H):	6058 x 2440 x 2890 mm	12200 x 2440 x 2890 mm	6058 x 2440 x 2890 mm	12200 x 2440 x 2890 mm	6058 x 2440 x 2890 mm	12200 x 2440 x 2890 mm
Total Weight[1]:	Max. 24 637 kg	Max. 58 250 kg	Max. 17 862 kg	Max. 35 812 kg	Max. 20 520 kg	Max. 41 920 kg

[1] *Total system weight on site. Shipping weight and packaging sizes will change according to transport (sea/road) weight limitations.*

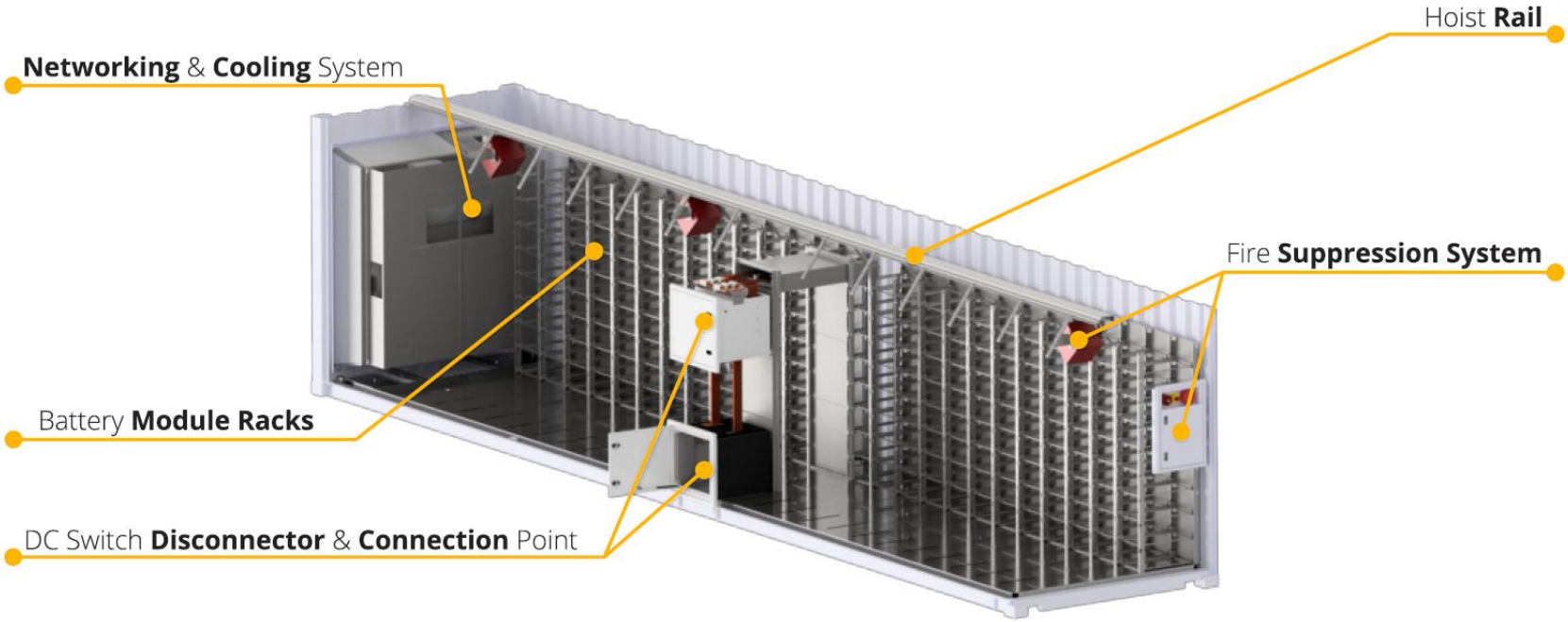
Utility Scale Solutions | SS70XX Containerized



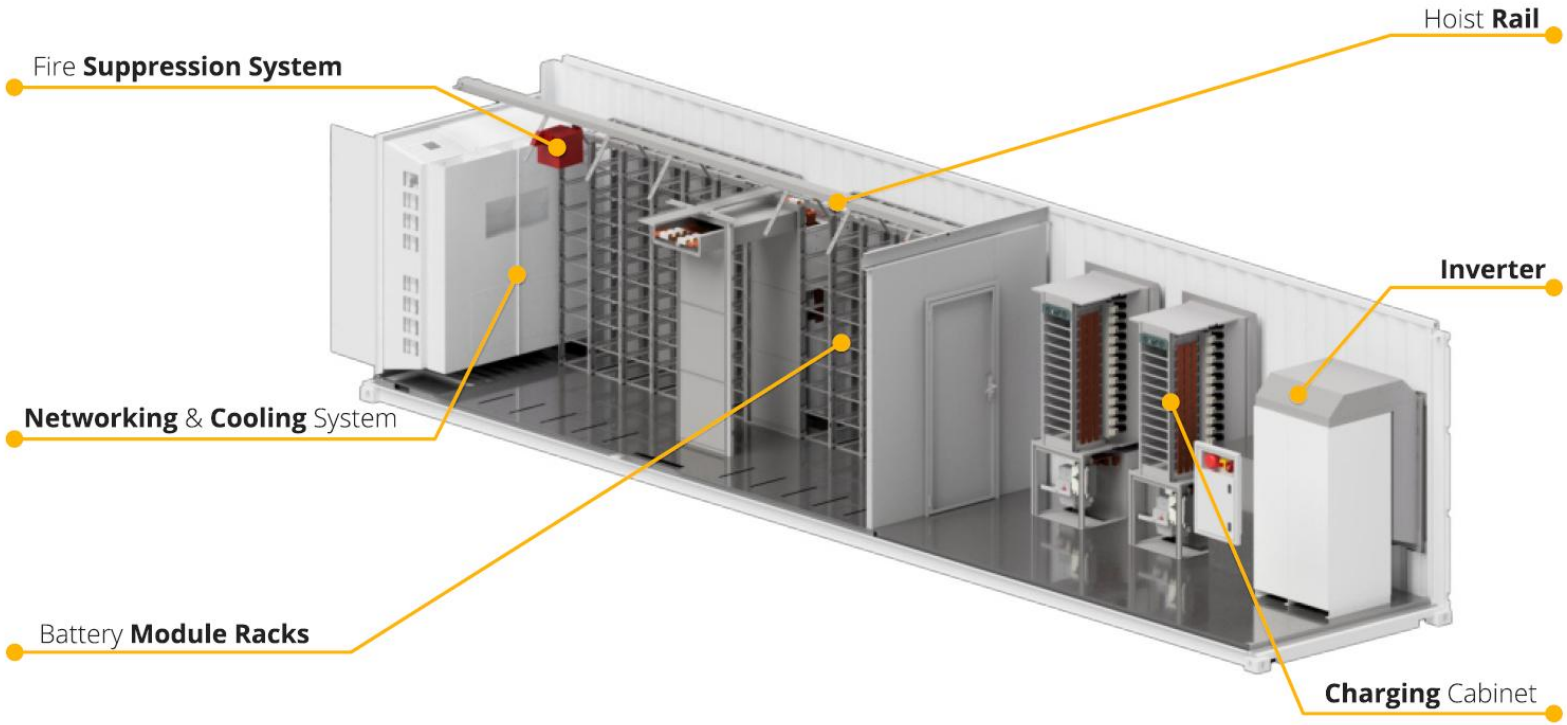
Utility Scale Solutions | SS70XX Containerized



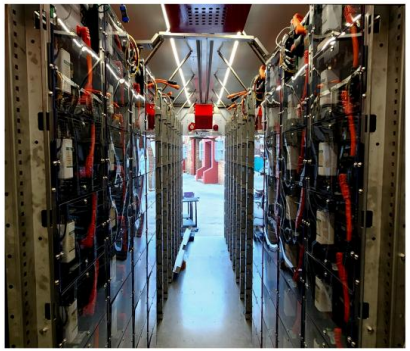
Utility Scale Solutions | SS70XX Containerized



Utility Scale Solutions | SS70XX Containerized



Utility Scale Solutions | SS70XX Containerized

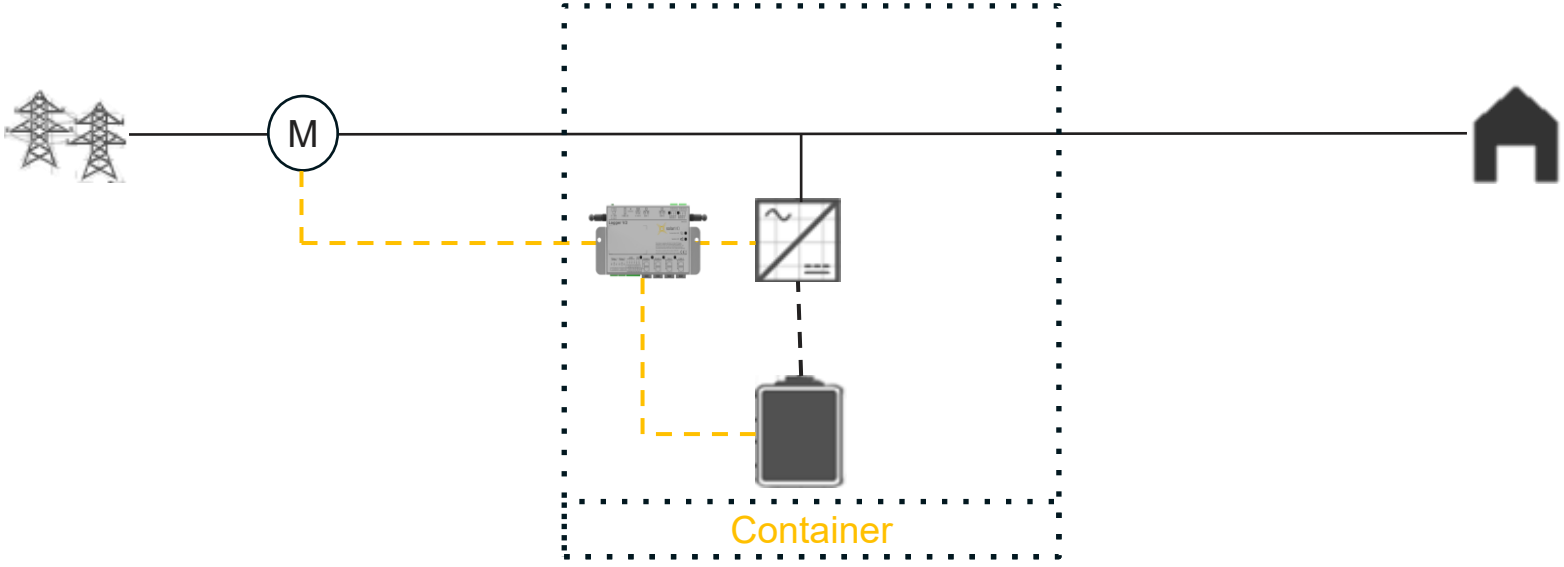


Product Overview

Work Modes

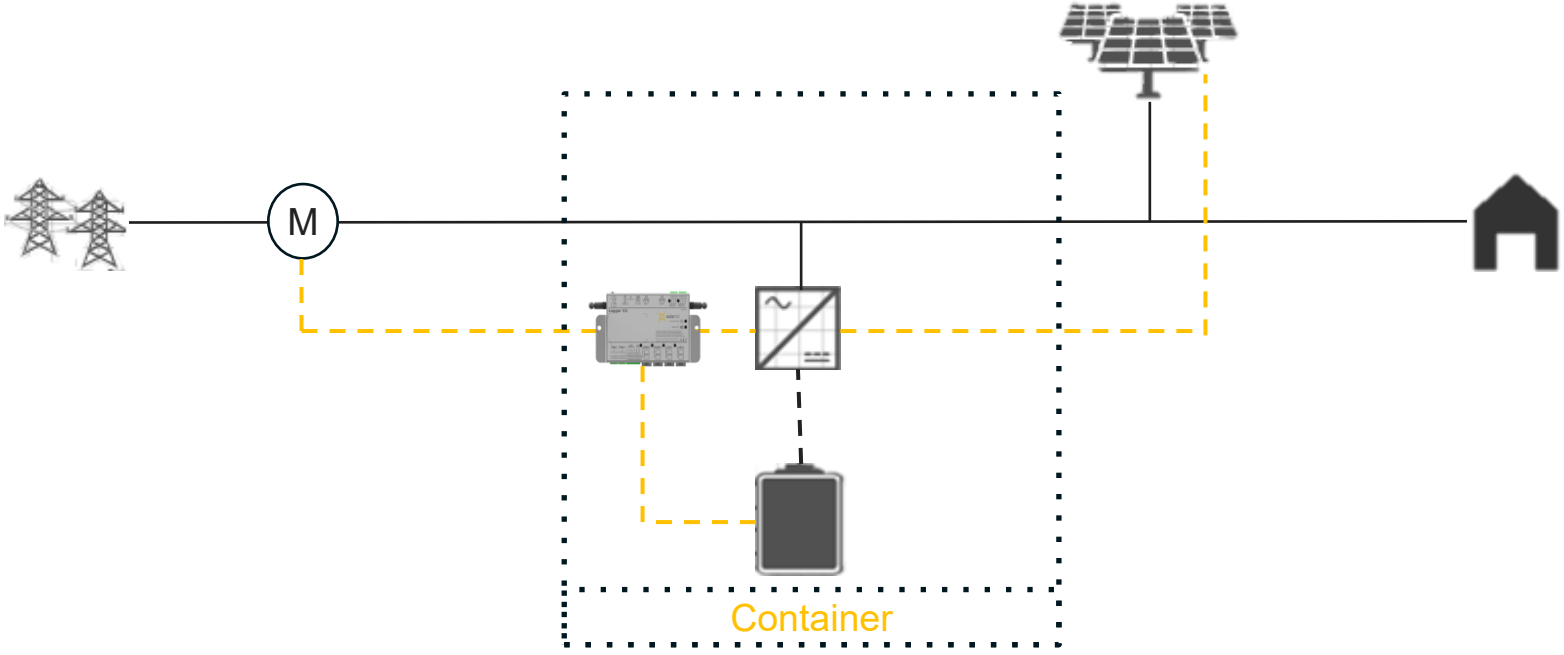
Work Modes| Grid Parallel

- Increased Self-Consumption
- Energy Arbitrage
- Peak Shaving
- Zero Feed In



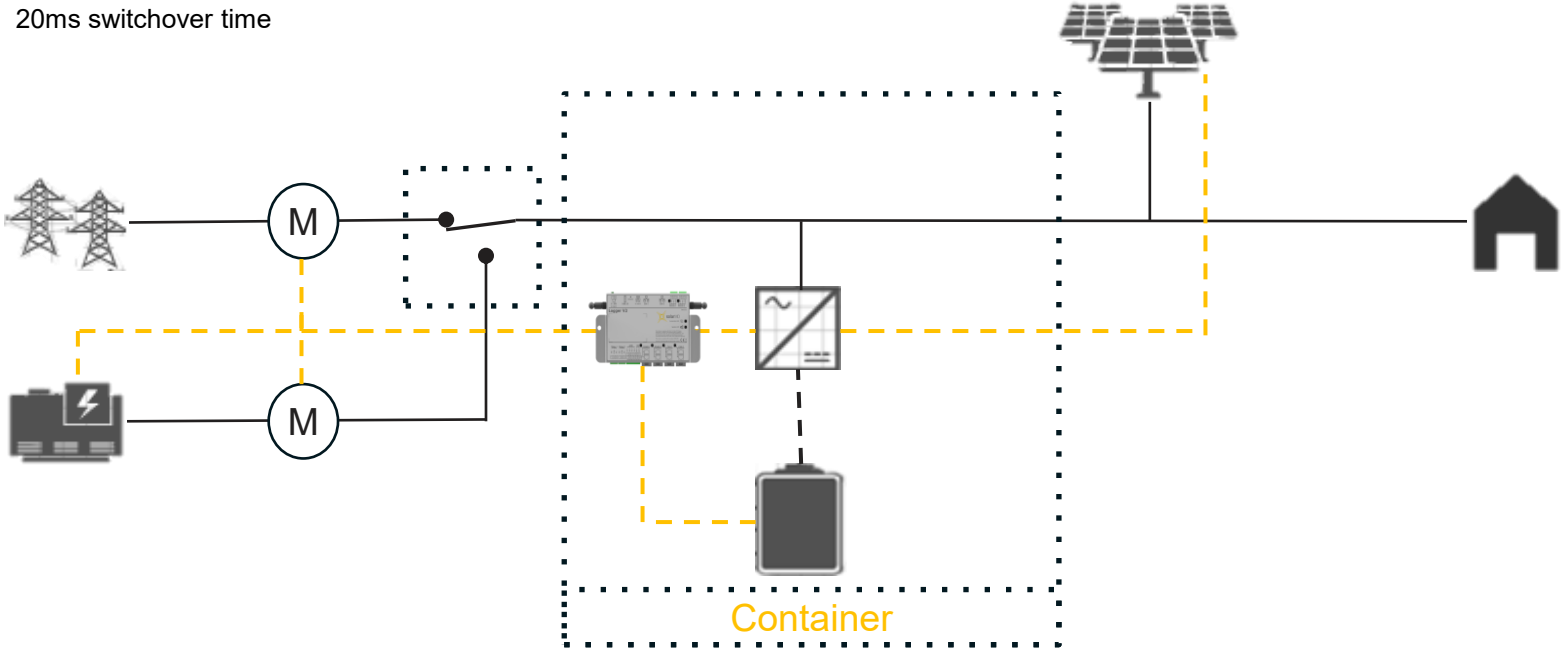
Work Modes| Grid Parallel

- Increased Self-Consumption
- Energy Arbitrage
- Peak Shaving
- Zero Feed In
- PV Integration



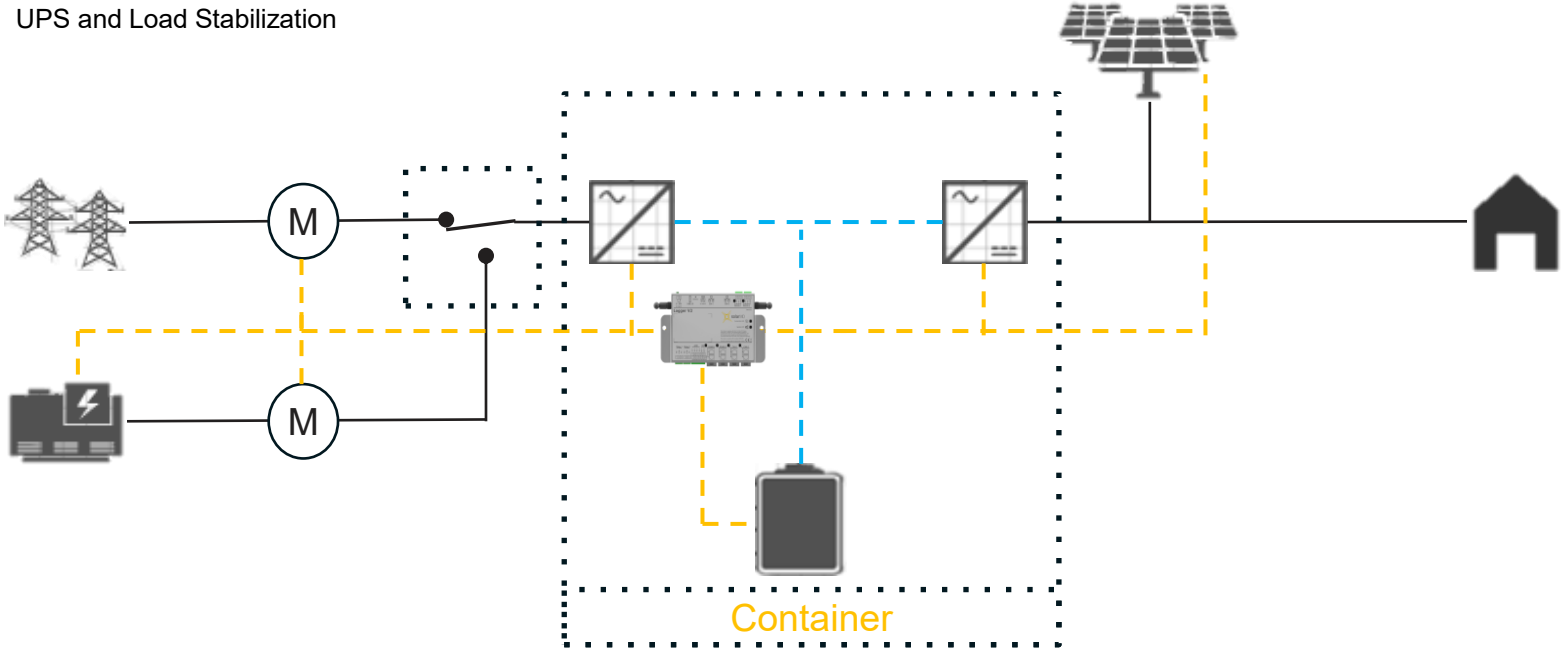
Work Modes| Grid Parallel

- Increased Self-Consumption
- Energy Arbitrage
- Peak Shaving
- Zero Feed In
- Generator & PV Integration
- 20ms switchover time



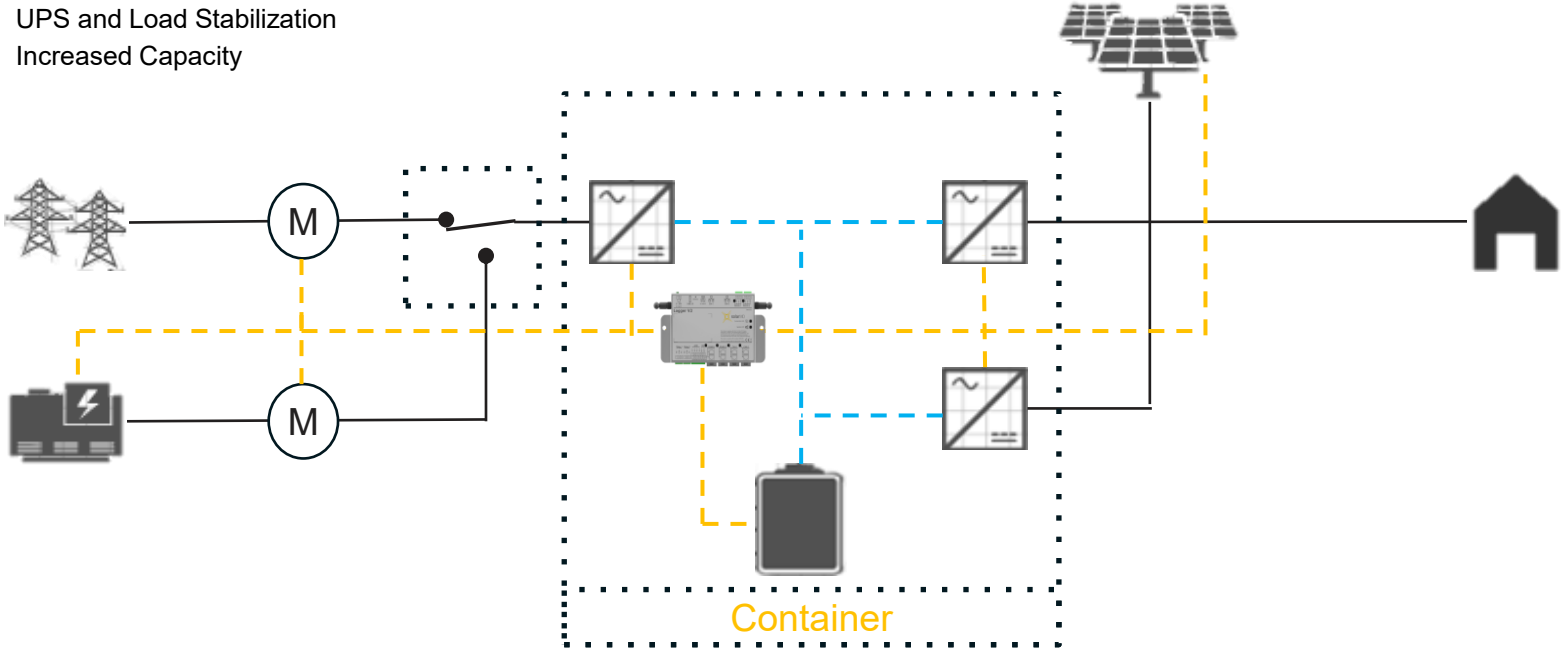
Work Modes | Double Conversion

- Increased Self-Consumption
- Energy Arbitrage
- Peak Shaving
- Zero Feed In
- Generator & PV Integration
- UPS and Load Stabilization



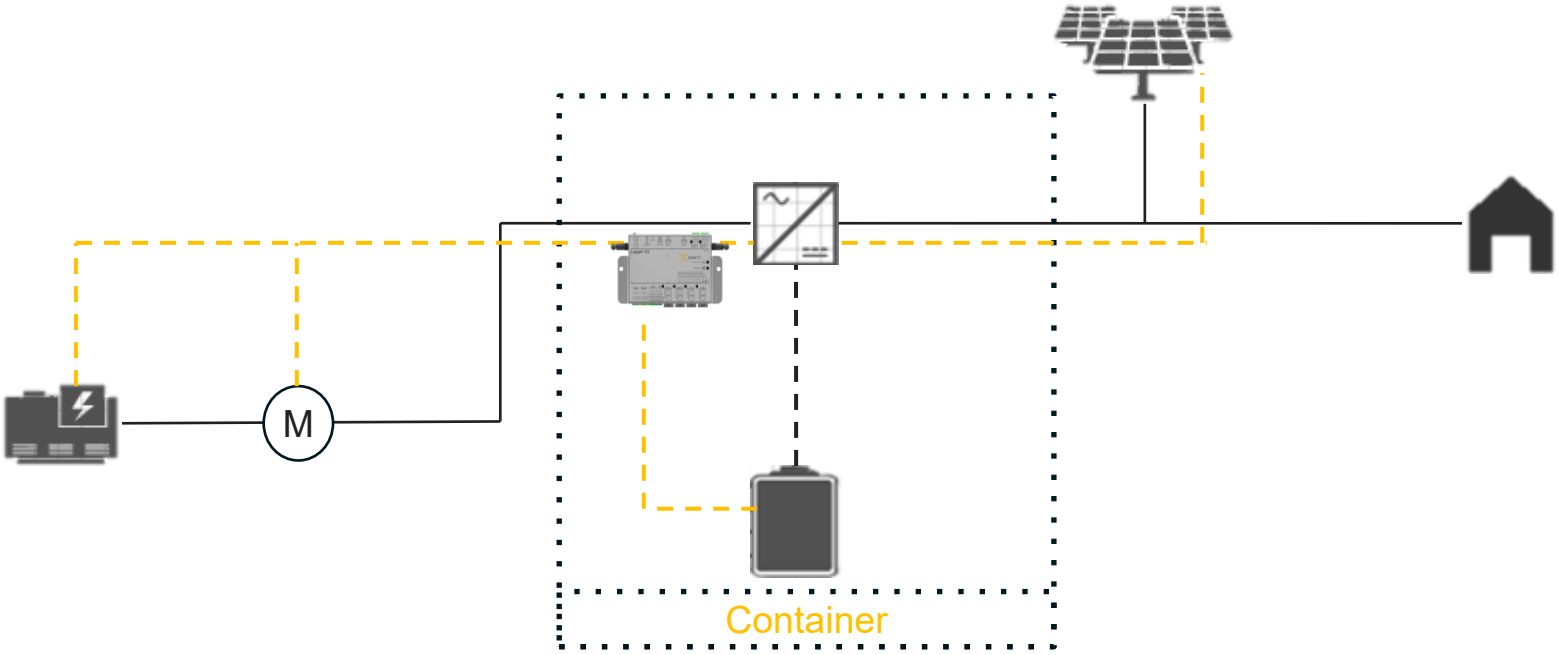
Work Modes| Double Conversion

- Increased Self-Consumption
- Energy Arbitrage
- Peak Shaving
- Zero Feed In
- Generator & PV Integration
- UPS and Load Stabilization
- Increased Capacity



Work Modes| Off-Grid

- Mini Grid Management
- Generator & PV Integration



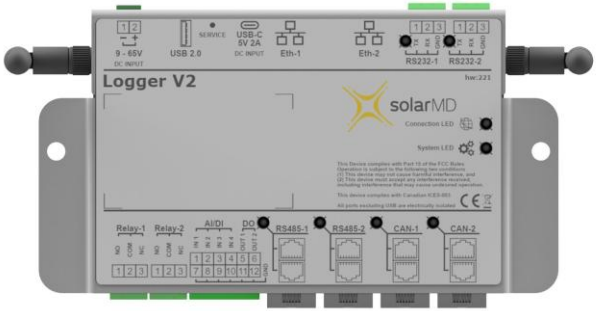
Product Overview

04 – Monitoring & Control

Monitoring & Control | EMS – Logger V2

The High-Performance Logger V2 offers easy and fast communication with automatic device discovery and connection.

- **Interfaces include** CAN Bus, RS232, RS485, Ethernet, and Wi-Fi (client and station).
- **Integrated programmable relays** for load control.
- **Communicates with supported inverters**, energy meters, weather stations, and other energy devices.



Monitoring & Control | EMS – Logger V2

System Level Management

The **Energy Management System (EMS)** is a comprehensive solution designed to monitor, control, and optimize the energy consumption and production of all connected systems. It allows to integrate with multiple brands and products to adjust energy consumption or production based on real time data to enable seamless integration of renewable energy sources into power grids. Regular reports provide insights into energy consumption, cost savings, and environmental impact.

Features:

- Remote Control
- Solar Inverter Integration
- Generator and Alternative Sources
- Energy Arbitrage (Integration with local energy exchange)
- Energy Management
- Peak Shaving
- Mini-Grid Management

Free access - No monthly fee

Battery Level Management

Each battery module features a sophisticated **Battery Management System (BMS)**. This system seamlessly communicates with the Battery Management Unit (BMU) to ensure optimal performance and safety.

Key functionalities include:

- Precise cell voltage measurement
- Cell balancing for extended lifespan
- High voltage management to prevent damage
- Data collection and storage for monitoring
- Efficient charging and discharging control
- Thermal management for ideal operating temperatures

Monitoring & Control | EMS – Logger V2

Compatibility

Solar MD batteries are compatible with specific inverters/chargers and MPPTs such as off-grid, hybrid and UPS inverters and more. We provide guidelines for other power electronic brands as well. We recommend integration with digital communication or voltage-based integration by both Solar and power electronics manufacturers.

We have tested and can recommend the below-mentioned popular inverter brands compatible with Solar MD batteries and Solar MD Logger-V2 monitoring systems.

Monitoring & Control |

mypower24 is a comprehensive management platform designed to simplify and centralize the control of your energy devices. Seamlessly integrating with your Logger V2, mypower24 offers a robust suite of features that effectively manage and optimize your energy infrastructure:

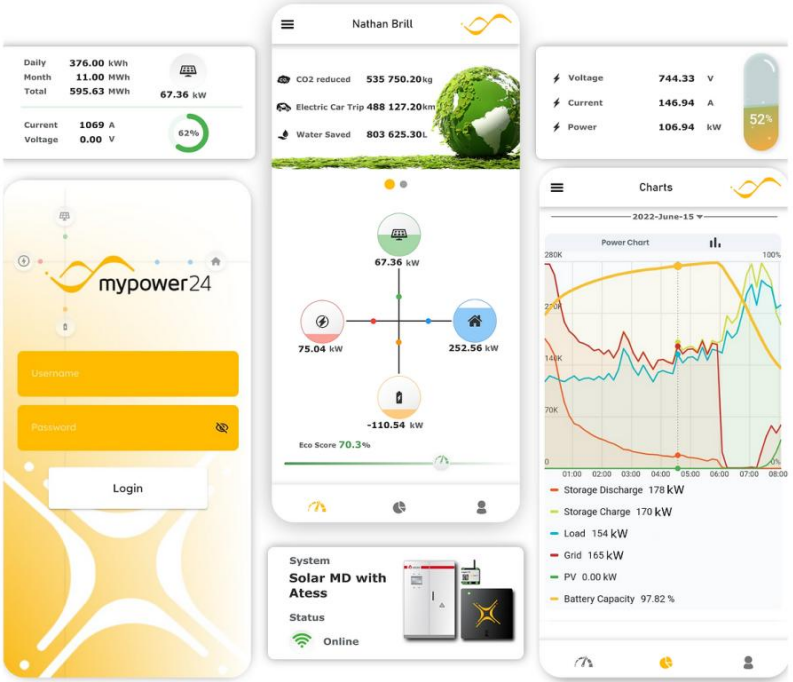
- **Real-Time Data & Insights**: Gain valuable insights into your energy usage with real-time data visualisation and historical records.
- **Unmatched Security:** mypower24 prioritises your data security with certified authentication and encrypted data transfer.
- **Convenient Remote Management:** We remotely manage your system & devices for maximum efficiency.

Monitoring & Control |

Mobile User App

The mypower24 mobile app is the user interface for the end client. It's a friendly and easy to use overview of the most important information of the energy system.

- **Dashboard Overview** of all devices and their energy information.
- **Energy Flow Diagram** to view and isolate information about your battery, consumption, solar production and other devices in the network.
- **Device Status** shows the connectivity and product information of all devices connected.

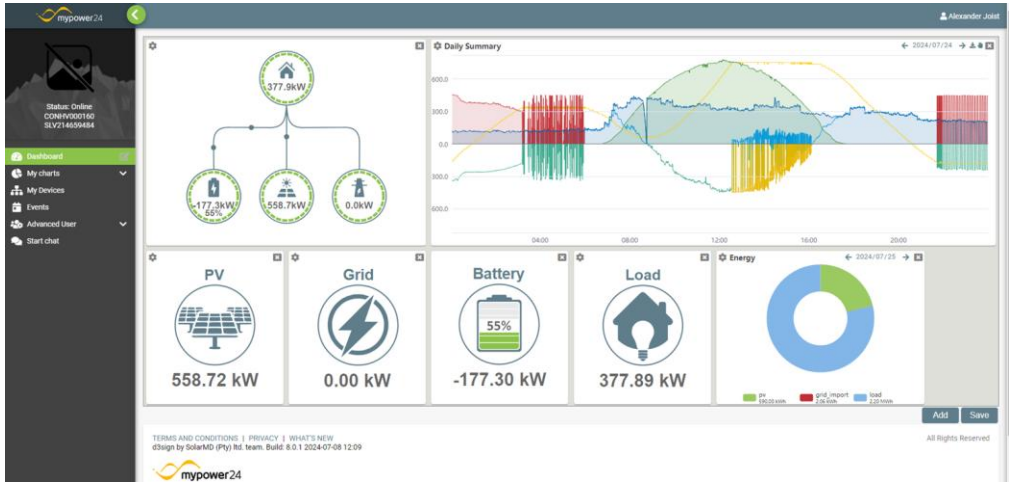


Monitoring & Control |

Installer Interface

The mypower24 Web Version is the user interface for the installer. This is the place where the magic happens.

- **Dashboard Overview** of all devices and their energy information.
- **Energy Flow Diagram** to view and isolate information about your battery, consumption, solar production and other devices in the network.
- **Insights** to battery information, easy programming logics and plant setup.



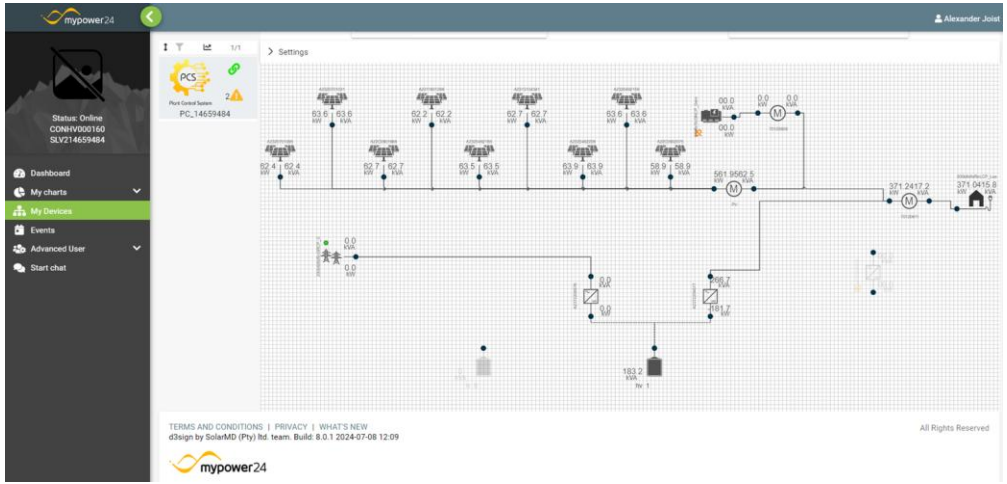
Monitoring & Control |

(Expert Level Access)

Plant Controller

The Plant Controller is a tool inside the mypower24 platform. This is where all devices connect and logics are applied

- **Draw** the electrical connections of your system in a single line diagram
- **Load all connected devices** onto the screen
- **Setup Logics** of what these devices are supposed to do or control
  - Energy Arbitrage
  - Energy Management
  - Peak Shaving
  - Zero Feed In



After Sales | Support Hotline

- Strong technical support department
- Troubleshoot any issues related to both low and high voltage batteries
- Assists remotely with firmware updates
- BMS & Relay replacements
- Installation
- Available Monday to Saturday via WhatsApp chat & Telephone

Thank you!