



Extended datasheet

MyReserve 25

Perfect no matter what you plan

MyReserve is a DC-generator-coupled and modularly expandable battery storage system for increasing energy self-sufficiency. It is installed between the PV array and the inverter. MyReserve is suitable for existing and new systems.

NEW:

- 10 years product warranty for MyReserve Command 25
- Smart charging with weather forecast
- Integrated secure Internet connection
- Outdoor installation (IP54) with optional anti theft kit
- More efficient (up to 1,000 V PV input voltage)
- More flexible (up to 72 kWh usable energy content)

Benefits

- **Modular**
- **Efficient**
- **Intelligent**
- **Certified safety**
- **Easy installation**
- **Retrofit ready**



SOLARWATT Service

FullCoverage insurance
included*

Product warranty
10 years product warranty for MyReserve Command 25

Performance warranty
10 years performance warranty for min. 80 % of the usable energy of MyReserve Pack

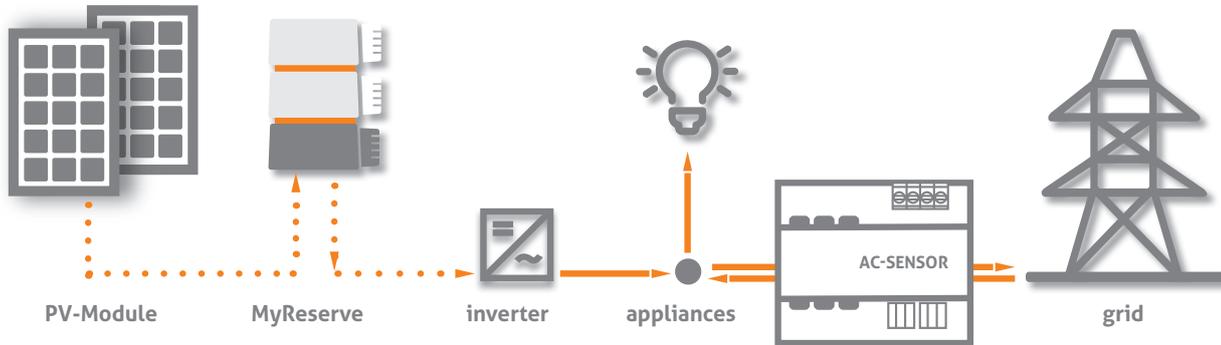
Simple return policy
as per electrical and electronic equipment legislation

Guarantee of origin
Quality from Germany

EnergyManager ready
easy system integration

* FullCoverage is available only in selected countries and provided an inverter is used from the list of "Approved Inverters for MyReserve" (available in the download area of SOLARWATT Website)

System topology: DC-generator coupled



2 components - multiple options

MyReserve Command 25 (IP54)

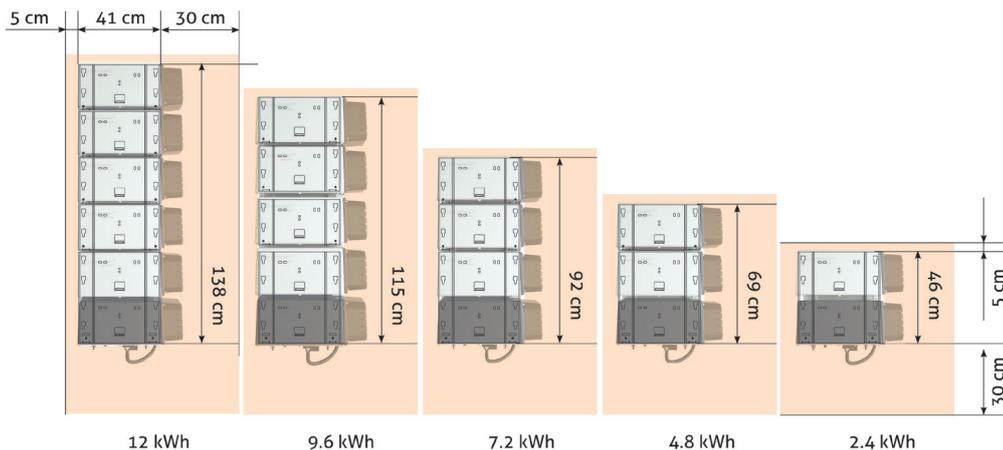
highly efficient battery management system for DC-side integration between PV string and inverter

- Connection of 1 to 5 MyReserve battery packs
- Expandable up to 72 kWh
- Peak power of up to 4.5 kW
- Discharge efficiency of up to 96.7 %
- Fast load response < 1 s (time to supply a load demand)
- Self-learning algorithm for maximum self-consumption
- Safe and easy installation
- Bluetooth®-compatible service interface
- Safety: certified as per „Safety guidelines for Li-ion household battery systems“
- Low power consumption (2.5 - 7 W)
- Outdoor installation (IP54)

MyReserve Pack 24.3 (IP54)

- Powerful lithium-ion battery module for MyReserve battery system
- 2.4 kWh usable energy per MyReserve Pack
- 100 % Depth of Discharge
- World record battery efficiency of 99.2 %
- Long service life > 15 years
- Single person installation (25 kg per MyReserve Pack)
- Certified safety with multiple safety controls
- Integrated BMS with voltage and temperature sensors
- Individual cell monitoring
- Dynamic adjustment of the charge current based on the PV generation + and the household's consumption
- Can be expanded to a high-voltage storage system
- Maintenance-free
- No memory effect
- Outdoor installation (IP54)

Space requirements



MyReserve components



MyReserve Command 25



MyReserve Pack 24.3 (IP54)



AC-Sensor Flex



Accessory Kit MyReserve Command

Wall bracket, protective cover, PV-connectors, AC-connector, seal rubber plug, terminating plug, screw set, cable ties, product documentation



Accessory Kit MyReserve Pack

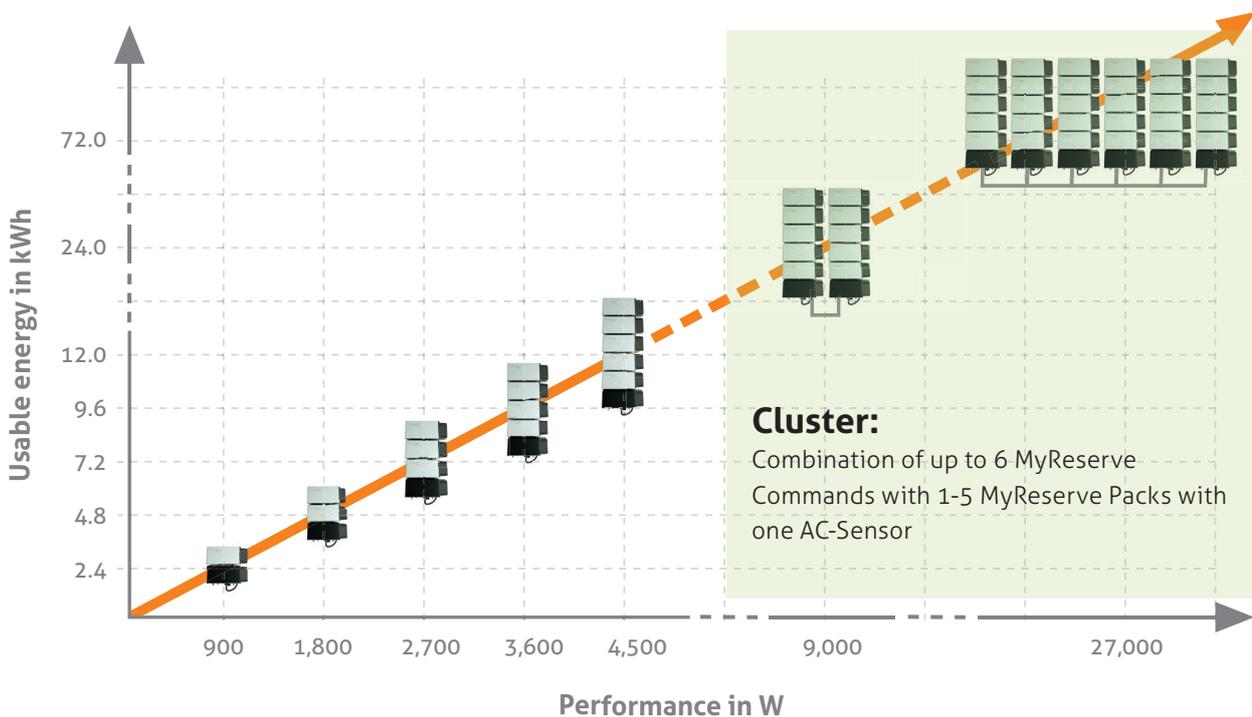
Wall bracket, protective cover, MyReserve wiring harness, screw set



MyReserve anti theft

Locking plates, U-lock

Custom-made performance and usable energy



Overview usable energy and components

1 MyReserve Command 1 MyReserve Pack 2.4 kWh	2 MyReserve Command 2 MyReserve Pack 4.8 kWh	3 MyReserve Command 3 MyReserve Pack 7.2 kWh	4 MyReserve Command 4 MyReserve Pack 9.6 kWh	5 MyReserve Command 5 MyReserve Pack 12.0 kWh	6 MyReserve Command 6 MyReserve Pack 14.4 kWh
1 MyReserve Command 2 MyReserve Pack 4.8 kWh	2 MyReserve Command 4 MyReserve Pack 9.6 kWh	3 MyReserve Command 6 MyReserve Pack 14.4 kWh	4 MyReserve Command 8 MyReserve Pack 19.2 kWh	5 MyReserve Command 10 MyReserve Pack 24.0 kWh	6 MyReserve Command 12 MyReserve Pack 28.8 kWh
1 MyReserve Command 3 MyReserve Pack 7.2 kWh	2 MyReserve Command 6 MyReserve Pack 14.4 kWh	3 MyReserve Command 9 MyReserve Pack 21.6 kWh	4 MyReserve Command 12 MyReserve Pack 28.8 kWh	5 MyReserve Command 15 MyReserve Pack 36.0 kWh	6 MyReserve Command 18 MyReserve Pack 43.2 kWh
1 MyReserve Command 4 MyReserve Pack 9.6 kWh	2 MyReserve Command 8 MyReserve Pack 19.2 kWh	3 MyReserve Command 12 MyReserve Pack 28.8 kWh	4 MyReserve Command 16 MyReserve Pack 38.4 kWh	5 MyReserve Command 20 MyReserve Pack 48.0 kWh	6 MyReserve Command 24 MyReserve Pack 57.6 kWh
1 MyReserve Command 5 MyReserve Pack 12.0 kWh	2 MyReserve Command 10 MyReserve Pack 24.0 kWh	3 MyReserve Command 15 MyReserve Pack 36.0 kWh	4 MyReserve Command 20 MyReserve Pack 48.0 kWh	5 MyReserve Command 25 MyReserve Pack 60.0 kWh	6 MyReserve Command 30 MyReserve Pack 72.0 kWh

Choose from various combinations of MyReserve Pack battery modules and MyReserve Commands depending on the installation.

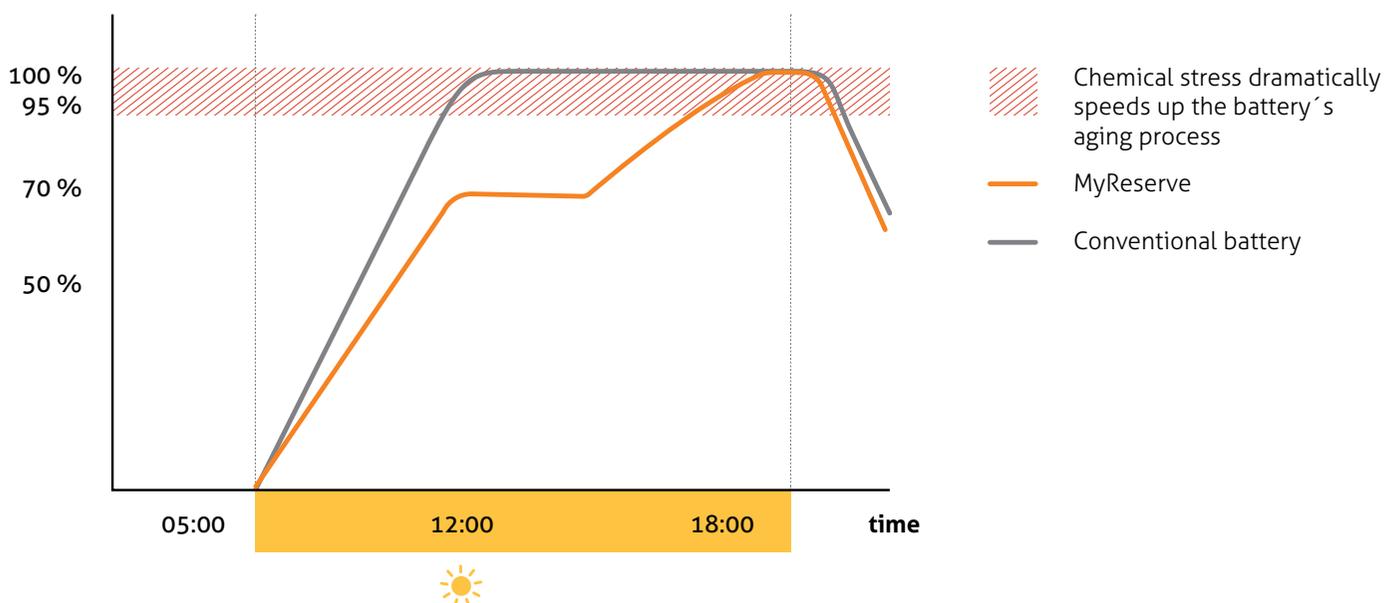
Note: Always use the MyReserve string configurator tool for system planning to ensure that the installation is best suited for the performance of the battery system. There are also other possible configurations beyond this table.

Intelligent charging behavior

MyReserve determines the optimum charging and discharging times using a self-learning algorithm that processes energy generation and energy consumption in the household. This is because if the battery switches to "charging" early in the day, it may remain at maximum charge for large parts of the day. The cells age faster and the lifespan of the battery is reduced.

The charging strategy of MyReserve therefore aims to ensure that the 100 % charge state is not reached until shortly before sunset. MyReserve "learns" from the yield and consumption data of the last seven days and then optimizes the charging behavior. The graph shows a comparison of the charging curve of conventional batteries and the MyReserve.

State of charge

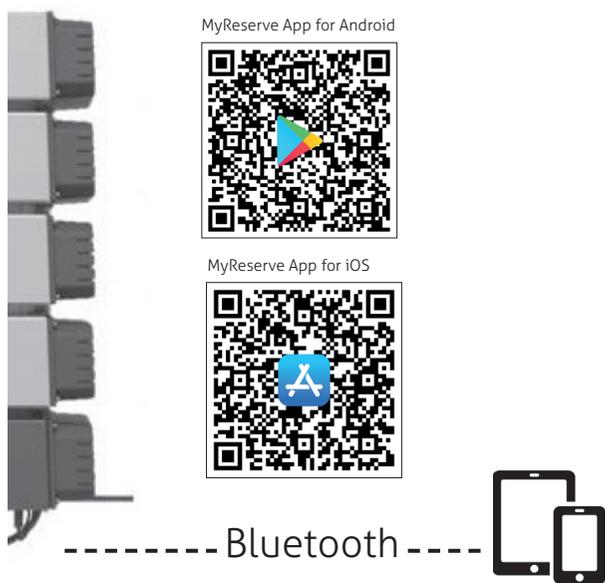


Monitoring storage data via MyReserve App

With the MyReserve app customers can see all the important MyReserve data. Installers can monitor and maintain devices faster and easier.

Extension of the MyReserve app with the Pro installer function:

- Access to special analysis tools
- Test mode to check the system functionality by controlling the charge and discharge
- Firmware update can easily be done via Bluetooth®
- System analysis via parameter monitoring (cell voltage, temperature, status messages)



MyReserve and EnergyManager - maximum autarky within reach

The EnergyManager is the centrepiece optimally combining the solar system and battery - at maximum independence and minimum costs.

It also offers the installer the opportunity to keep an eye on all installations and paves the way for his customers to a modern and future-proof energy supply.

Advantages:

- All energy data at a glance - anywhere, anytime
- Maximizes the potential of solar system + battery
- Intelligent integration of water-heating + e-mobility
- Sensible control of consumers according to power surplus
- Price security through self-generated electricity
- Highest data security



MyReserve Command 25

Number of battery modules to be connected	1	2	3	4	5
Battery module circuitry	In series				
Coupling of the battery converter	In the DC string of the PV system				
Max. number of battery converters in parallel operation (cluster coupling)	6				
Grid connection	Suitable for mains parallel operation with 1 or 3-phase PV inverter				
Max. charge efficiency (PV to BAT)	97.0 %				
Max. discharge efficiency (BAT to INV)	96.7 %				
Efficiency with direct internal consumption (without battery operation) (PV to INV)	99.8 %				
Max. overall efficiency (round trip - charge/discharge)	92 %				
Max. permissible PV input voltage	1.000 V				
Max. permissible PV input power	15 kW				
Min. PV input voltage Umpp (under STC)	150 V	200 V	240 V	290 V	340 V
Max. permissible PV input current I _{dc}	25 A				
Max. charging and discharging current	18 A				
Number of PV inputs, DC in	1				
Connection technology, DC in/DC out	WMC4 (Weidmüller) included in the scope of delivery				
Max. charge and discharge power ¹	0.5-0.9 kW	1.0-1.8 kW	1.5-2.7 kW	2.0-3.6 kW	2.5-4.5 kW
Supply voltage/frequency, AC in	220 - 240 VAC, 50 - 60 Hz				
IP rating	IP54				
Environmental temperature range	-10°C bis 45°C				

1) depending on temperature and PV voltage

MyReserve Pack 24.3 (IP54)

Usable energy	2.4 kWh
Depth of Discharge (DoD)	100 %
Cell technology	Li-Ion
Cell separator	Ceramic coating
BMS	UIT-Supervisor ¹
Maximum efficiency	99.2 %
Weight	25 kg
Dimensions (W x H x D)	384 mm x 200.5 mm x 277 mm (Depth: 260 mm without fastening points)
Housing	Aluminum
Communication	iso SPI
Power connections	Power plug with integrated communication (contact-protection and polarity-reversal protection) ²⁾
Battery fuse	Included
Garantie	10 years (min. 80 % of the usable energy) ³⁾
Cycle life	unlimited number of full cycles during the warranty period
IP rating	IP54
Permissible environmental operating temperature	0°C to 30°C (max. 45°C) ⁴⁾

- 1) Continuous monitoring of all cell voltages, cell temperatures and current. Shut-off of the system when parameter limits are exceeded.
 2) The battery poles are voltage-free when the battery is removed.
 3) The corresponding warranty conditions apply
 4) There are no limitations on performance for the household in the range from appr. 0°C to appr. 30°C. While charging there is a power throttling on appr. +10°C and colder to zero at appr. -2°C. Operation does not take place below appr. -15°C or above appr. +44°C. Accelerated aging of the cells should be expected at temperatures above appr. +44°C.

AC-Sensor

Model name	AC-Sensor 63	AC-Sensor Flex
Installation	DIN top hat rail TS35, suitable for installation in electrical junction boxes	
Limit current	63 A per phase	
Max. cumulated measuring range	+/- 32.0 kW	+/- 2 MW
Measuring method	Direct measurement 1/3 phase	Direct measurement 1/3 phase CT clamp measurement 1/3 phase
Measurement output	balanced three-phase power	
Internal consumption	max. 4.6 W	max. 3.0 W
Current consumption	max. 20 mA	max. 13 mA
Voltage	3 /N/230/400 V ~ ± 10 %	3 /N/85 - 260/400 V ~ ± 10 %
Frequency	50 Hz	50 / 60 Hz
Cross-section of the passing section of outer conductors (current measurement)	6.9 mm	/
Cross-section of neutral conductor and outer conductors in the connection section (voltage measurement)	0.75 mm ² - 2.5 mm ² isolated	/
Current ratio CT clamp measurement	/	75 A/1 A to 4,500 A/1 A
Cross-section area	/	25 mm ² phase 1.5 mm ² neutral
CT clamp cross-section area	/	1.5 mm ²
Interface	CAN-Bus, isolated	CAN-Bus, RJ45, isolated
Installation width	6 HP (108 mm)	4 HP (72 mm)
Weight	0.29 kg	0.22 kg
IP rating	IP21	
Relative humidity	≤ 85 % non condensing	
Operating temperature range	-25°C bis +45°C	
Protection class	II	
Measuring accuracy	Offset < 3 W	