



#### **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
- Backup power capability
- 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<sup>®</sup>-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



Accessory Kit MyReserve Command

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



MyReserve Pack 24.3 (IP54)



Accessory Kit MyReserve Pack

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



**AC-Sensor Flex** 



MyReserve anti theft

Locking plates, U-lock

## Custom-made performance and usable energy



Performance in W

### **Overview usable energy and components**

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

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.

### **MyReserve Backup Power**

- DC-generator coupled
- Automatic power supply of all available phases in the event of a blackout
- SwitchBox contains all components for automatic disconnection (incl. AC-Sensor)

#### Scope of delivery MyReserve Backup Power:

- MyReserve 7.2 to 12 kWh (3 to 5 MyReserve Packs)
- Fronius Symo Hybrid 4.0-3-S or Symo Hybrid 5.0-3-S
- SwitchBox
- Uninterrupted power supply (UPS)\*

\* for the supply of MyReserve Command during switching time

- In combination with the Fronius Symo Hybrid inverter
- No re-arrangement of the main distribution board needed
- Backup power supply from PV-system and storage
- Retrofit is always possible

Technical data				
MyReserve Backup Power				
Operating voltage / frequency	3 AC 230/400V 50 Hz			
Max. power output (in backup mode)	2.5 - 3.5 kW			
Phase imbalance	max. 2.08 kW			
Max. Switching time	25 s			
SwitchBox				
Dimensions (WxHxD)	338 x 622 x 161 mm			
Weight	11 kg			
Max. fuse size	max. 63 A			
IP rating	IP65			
Grid types	TN(C)-S/TN-S/TT-Grid			



# 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.



- 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				
Min. PV input voltage Umpp (under STC)	150 V	200 V	240 V	290 V	340 V
Max. permissible PV input current Idc	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 <sup>1</sup>	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				

**AC-Sensor** 

Max. cumulated measuring range

Model name

Installation Limit current

# MyReserve Pack 24.3 (IP54)

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Usable energy	2.4 kWh
Depth of Discharge (DoD)	100 %
Cell technology	Li-lon
Cell separator	Ceramic coating
BMS	UIT-Supervisor <sup>1</sup>
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-pro- tection and polarity-reversal protection) <sup>2)</sup>
Battery fuse	Included
Garantie	10 years (min. 80 % of the usable energy) <sup>3</sup>
Cycle life	unlimited number of full cycles during the warranty period
IP rating	IP54

Measuring method	Direct measurement 1/3 phase	Direct measurement 1/3 phase CT clamp measurement 1/3 phase		
Measurement output	balanced thre	ree-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 sec- tion (voltage measurement)	0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> isolated	1		
Current ratio CT clamp measurement	/	75 A/1 A to 4,500 A/1 A		
Cross-section area	/	25 mm² phase 1.5 mm² neutral		
CT clamp cross-section area	/	1.5 mm <sup>2</sup>		
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	IF	P21		
Relative humidity	≤ 85 % non condensing			
Operating temperature range	-25°C bis +45°C			
Protection class		II		
Measuring accuracy	Offse	t < 3 W		

AC-Sensor 63

+/- 32.0 kW

AC-Sensor Flex

+/- 2 MW

DIN top hat rail TS35, suitable for installation in electrical junction boxes

63 A per phase

Continuous monitoring of all cell voltages, cell temperatures and current. Shut-off of the system when parameter limits are exceeded.
The battery poles are voltage-free when the battery is removed.
The corresponding warranty conditions apply