SMA

SYSTEM CONFIGURATIONS

The following table shows the scalability of the battery-storage system and the battery inverter.

	60 kW	120 kW	180 kW	240 kW	300 kW	360 kW	420 kW	480 kW	540 kW	600 kW
2680 kWh										●
2412 kWh									●	●
2144 kWh								●	●	●
1876 kWh							●	●	●	●
1608 kWh						●	●	●	●	●
1340 kWh					●	●	●	●	●	●
1072 kWh				●	●	●	●	●	●	●
804 kWh			●	●	●	●	●	●	●	●
737 kWh			●	●	●	●	●	●	●	●
670 kWh			●	●	●	●	●	●	●	●
603 kWh			●	●	●	●	●	●	●	
536 kWh		●	●	●	●	●	●	●		
469 kWh		●	●	●	●	●	●			
402 kWh		●	●	●	●	●				
335 kWh		●	●	●	●					
268 kWh	●	●	●	●						
201 kWh	●	●	●							
134 kWh	●	●								
67 kWh	●									
Storage Package – Business	60 kW	120 kW	180 kW	240 kW	300 kW	360 kW	420 kW	480 kW	540 kW	600 kW
SMA STPS 60 →	1 x	2 x	3 x	4 x	5 x	6 x	7 x	8 x	9 x	10 x

Scope of delivery of STORAGE PACKAGE – BUSINESS

Battery inverter	Sunny Tripower Storage 60
Storage und battery management system	SMA Storage Business
Communication units (including voltage supply)	SMA Inverter Manager SMA Data Manager M
Power analyzer	JANITZA UMG 604
SMA ordering code	ES-SYS-TS70-10

THE BENEFITS AT A GLANCE:

» All system components from a single source

» All system components are perfectly harmonized

» Equipped for future applications thanks to the modular structure of ennexOS, the IoT platform for energy management

» Optimal investment security thanks to the optional extended warranty up to 10 years

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Flexible
- Modular scalability up to the MW range
- Can be used with and without PV integration

Efficient
- Active battery balancing up to 100 times faster than conventional systems
- Highest system efficiency in its class of up to 92%

Future-proof
- Complete, perfectly harmonized entire system from a single source
- Simple and fast integration into the ennexOS energy management system with Sunny Portal connection

STORAGE PACKAGE – BUSINESS

Highly flexible battery-storage system for commercial and industrial applications

The new STORAGE PACKAGE – BUSINESS is the most innovative solution in its class for commercial and industrial storage applications. Customers benefit from system components perfectly harmonized from a single source with modular scalability up to the MW range. Thanks to integrated energy management functions and a universal Modbus interface, customers can now utilize new business models or couple their systems with PV diesel hybrid applications. A PV system connection is also possible as an option.

STORAGE PACKAGE – BUSINESS

Highly flexible battery-storage system for commercial and industrial applications

SMA STORAGE BUSINESS
Powerful storage system with an extremely long service life

Whether for increased self-consumption or peak load shaving, coupled to the utility grid or off-grid for optimizing diesel hybrid systems, SMA's Storage Business offers a commercial storage battery solution for every application. Its advanced, cost-optimized design ensures unbeatable efficiency without sacrificing power or quality. High-end battery cells from the automotive industry and innovative technologies such as the Active Battery Optimizer make SMA Storage Business one of the most durable products on the market.

SUNNY TRIPOWER STORAGE 60 AND SMA INVERTER MANAGER
Maximum power density for a diverse range of applications

The Sunny Tripower Storage 60 is the perfect solution for commercial and industrial storage applications. Thanks to its modular expandability, the Sunny Tripower Storage 60 ensures maximum flexibility up to the MW range. Commercial and industrial customers benefit from exceptional versatility at low cost.

DATA MANAGER M powered by ennexOS
Future-proof communication for decentralized PV systems

Data Manager M is the central, top-level communication interface between the system components, utility grid and monitoring portal (Sunny Portal powered by ennexOS). In combination with this, Data Manager M optimizes the monitoring and control of PV systems comprising up to 50 SMA devices. Within the STORAGE PACKAGE – BUSINESS, battery-specific values such as charging and discharging capacity, state of battery charge (SoC), temperature and state of battery health (SoH) in percentages are transferred to the portal.

Main components of the Storage Package – Business	Possible components of an SMA Energy System
① Sunny Tripower Storage 60	④ PV system on roof or in parking lot
② SMA Storage Business	⑤ Inverters (e.g., Sunny Tripower CORE1)
③ SMA Data Manager M / SMA Inverter Manager	⑥ Air-conditioning
	⑦ Heat pump
	⑧ Charging station for electric fleet
	⑨ Utility grid

Integration of an SMA storage system into a system landscape (here: the new SMA Energy System).

OPENING UP DIVERSE NEW BUSINESS MODELS

Supported by the new STORAGE PACKAGE – BUSINESS

The SMA solution for commercial and industrial storage applications opens up whole new business models for customers in these segments. Integrating the Storage Package – Business into a property's energy infrastructure helps significantly reduce energy costs — with or without the integration of solar energy.

Peak Load Shaving
The storage system can be used to reduce peak loads. This avoids costs arising from high energy prices for commercial and industrial customers.

Increase in PV self-consumption
Intermediate storage of temporarily unusable solar energy for later use reduces energy consumption from the utility grid and, in turn, cuts costs.

Tariff-dependent business models / arbitrage
Intermediate storage of energy in low-tariff periods and its later use in high-tariff periods helps cut energy costs.

Power trading
Energy storage increases the calculability of available PV energy for energy trading.

E-mobility:
Using stored energy for solar-powered, electric vehicle charging stations for public use is ideal for quick-charging systems.

Savings through increased self-consumption and peak load shaving — using SMA ENERGY SYSTEM Business as an example:

Data relating to the sample property:
Medium-sized supermarket (aktiv&irma) in Oldenburg*

Before

After

Simulation analogous to composition with new SMA Energy System
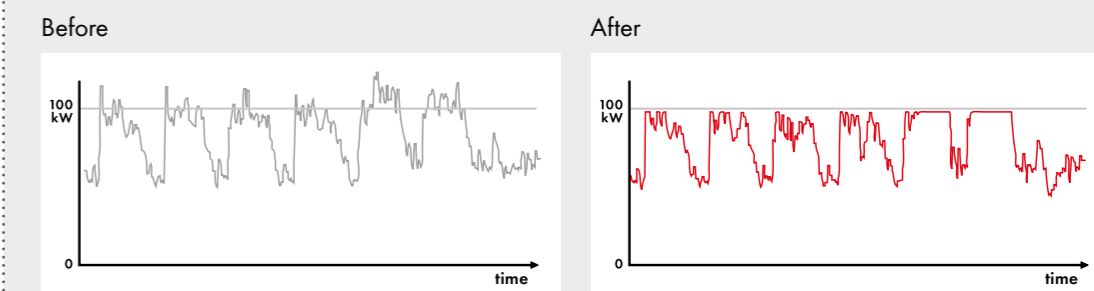
Cost savings in the first year: €34,685

Investment costs for turnkey PV system, including battery-storage system: €216,912
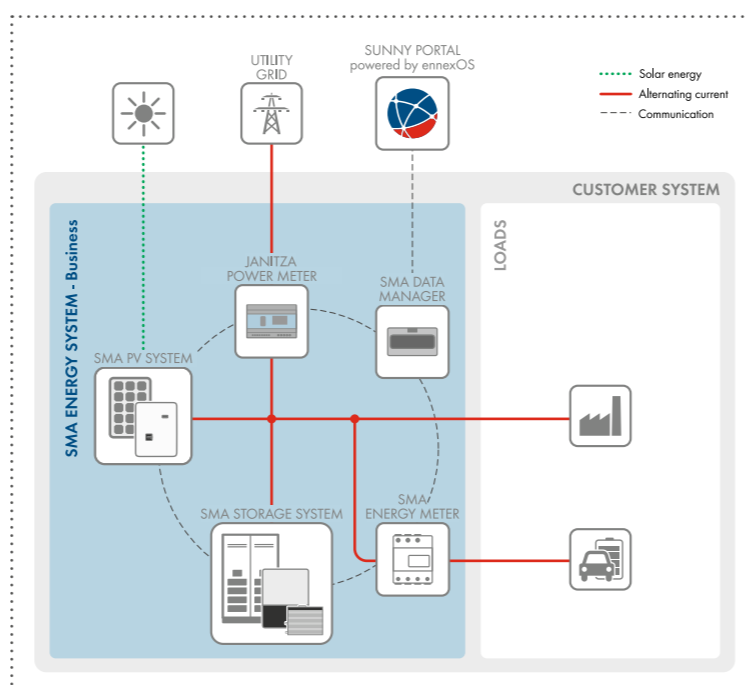
Payback time: approximately 6 years

* Data relating to the sample property: Medium-sized supermarket (aktiv&irma) in Oldenburg, Germany; planned energy system: PV system (199 kWp) with self-consumption; battery-storage system for peak load shaving (Sunny Tripower Storage 60, SMA Storage Business (14 modules), 67 kWh). Details regarding the simulation of the SMA Energy System "Business XL" can be found online at go.sma.de/SESde.