



# neoTower<sup>®</sup> Power Storage

for neoTower<sup>®</sup> combined heat and power plants  
from 2.0 to 50.0 kW el. output

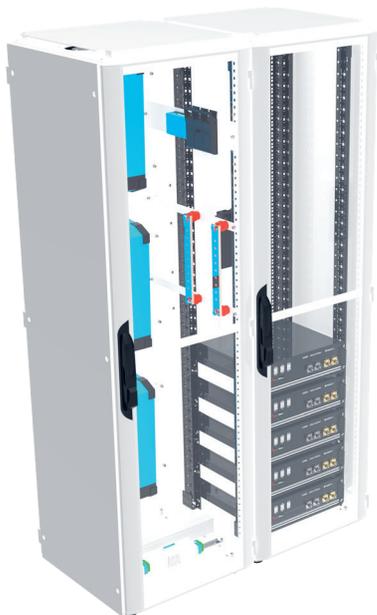


**RMB ENERGIE**

A **YANMAR** COMPANY

# THE POWER STORAGE

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## AN INTRODUCTION

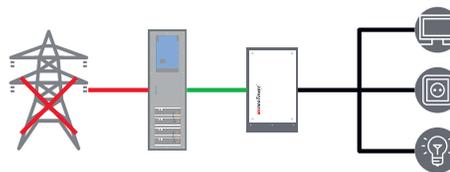
With your neoTower<sup>®</sup>, electricity and heat are generated directly where they are needed. The use of a specially developed power storage from RMB/ENERGIE GmbH increases the proportion of self-generated electricity.

The excess electricity produced is stored in high-quality LiFePo4 batteries. You are supplied even more effectively with your self-generated electricity.

## YOUR BACK-UP IN A POWER FAILURE

In the event of a power failure, the CHP is operated in grid substitution mode for an unlimited period of time. The CHP can now start independently by means of the power storage and ensure the power supply.

The "blackout start option" is installed as standard in all new CHP models.

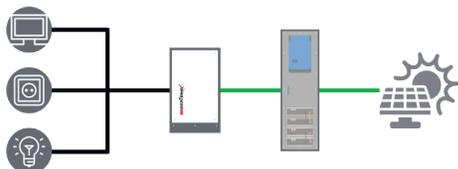


## A GOOD COMBINATION

The photovoltaic system for electricity generation perfectly complements the neoTower<sup>®</sup> power storage.

Your photovoltaic system mainly supplies electricity in the summer months. In the cooler months, your neoTower<sup>®</sup> takes over electricity and heat production. This potential, which is available throughout the year, is now perfectly utilised:

With the help of your neoTower<sup>®</sup> power storage!



## DELIVERING ENERGY SUPPLY SECURITY WITH POWER STORAGE

With the grid substitution mode, the degree of self-sufficiency increases even further and also provides a real safety plus. Unlike conventional blackout start solutions with asynchronous generators, we rely on the combination with a power storage system. In the event of a power failure, the system takes over the supply of the connected consumers. Switchover takes place within just a few milliseconds, ensuring uninterrupted operation of computers and other electronic devices.



### **Intuitive - Easy control**

The power storage can be easily controlled via the control unit of the CHP. All relevant values are conveniently shown on a display.



### **Adaptable - From power storage unit directly into electric cars**

The storage system is also useful in regular everyday operation. For example, an electric car can be charged with low-cost electricity via an electric charging station. In general, the costly use of electricity from the public grid can be significantly reduced or even avoided altogether.



### **Flexible - Individual storage capacity**

Our neoTower® power storage feature a modular design and can be adapted to the corresponding needs by combining several modules.



### **Cost saving**

The increased share of self-consumption means that less electricity is purchased - lowering your energy costs. In addition, surplus electricity no longer has to be fed into the public grid. And that means you will be less affected by rising electricity prices in the future.

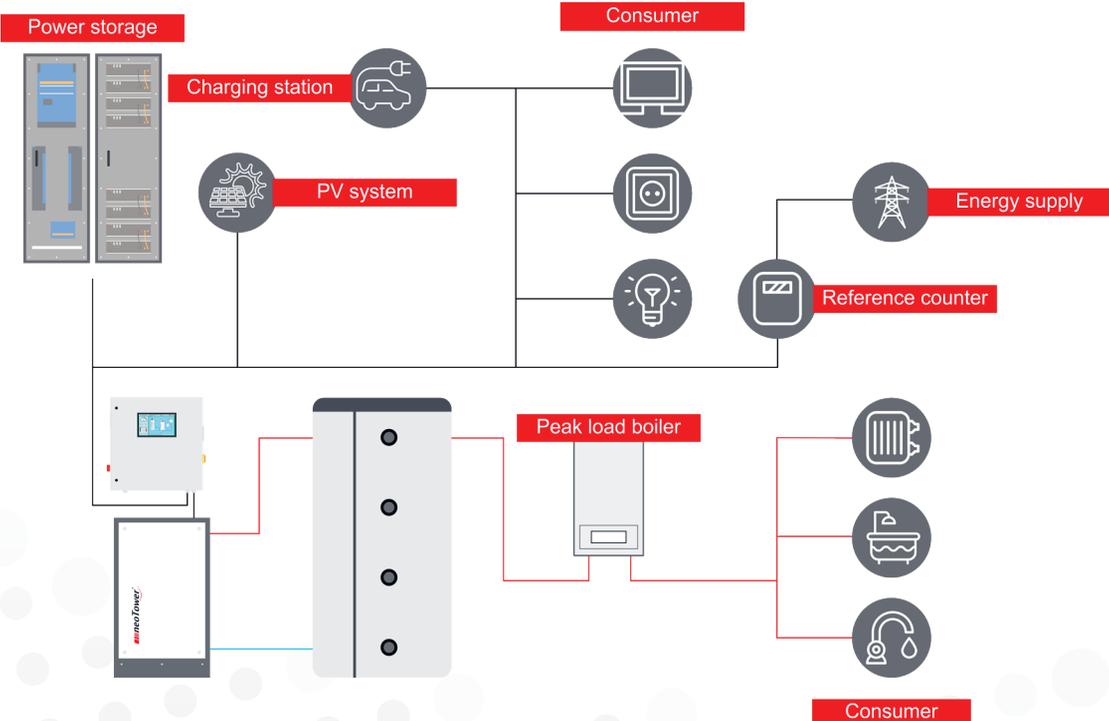


### **Reduce your carbon footprint**

With a power storage, you can significantly reduce your carbon footprint. As you can use your own electricity, you also require less grid electricity, which means less electricity is consumed from central power plants. This enables you to make your energy consumption more climate-friendly.



# neoTower® Power Storage / Battery storage system (BSS)





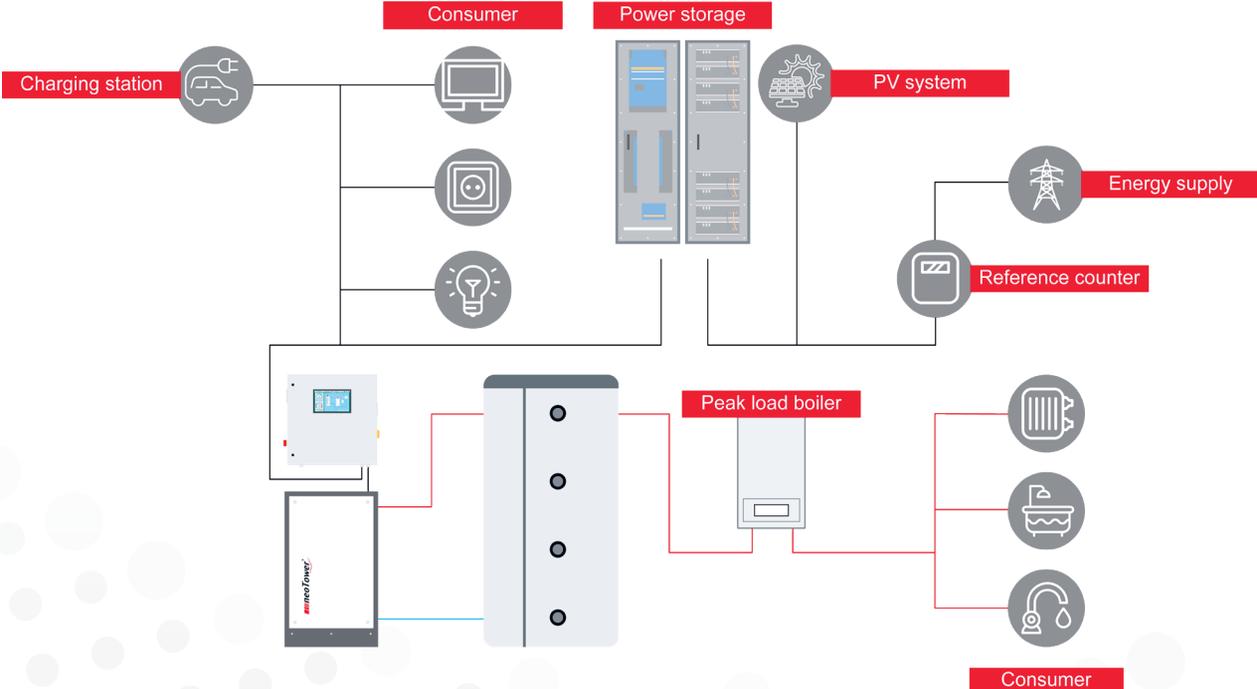
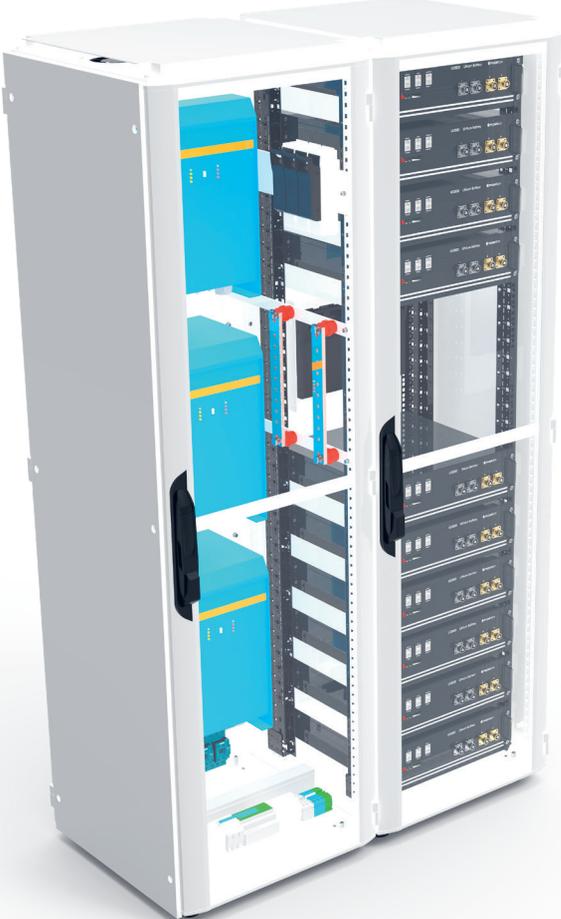
# TECHNICAL DATA SHEET

Power Storage BSS	7	11	21	25
Battery storage size (gross) [kWh]	7,1	10,7	21,3	24,9
Max. power output [VA]	3.000	5.000	10.000	10.000
Max. efficiency [%]	n.a.	n.a.	n.a.	n.a.
Continuous charging capacity [VA]	1.700	3.400	6.700	6.700
Connections	1x 230 V (AC in) 1x 230 V (AC out) 1x 48 V (DC)		2x 230 V (AC in) 2x 230 V (AC out) 1x 48 V (DC)	
Cable cross section (max. 50 m) [mm <sup>2</sup> ]	2,5	4	4	4
Fuse	16	25	25	25
PV connection	Grid parallel			
Storage function	Zero reference regulation via CHP			
Cooling	Fan ventilation			
Operating modes	Grid replacement, grid-forming isolated operation			
Operating temperature [°C]	5-30	5-30	5-30	5-30
Unit consumption [W]	11	18	36	36
Visualisation	Panel CHP	Panel CHP	Panel CHP	Panel CHP
Weight [kg]	237,15	281,31	499,36	532,42
Number of cabinets (Variante 1   Variante 2) <sup>1</sup>	1   1	1   1	2   2	2   2
Dimensions per cabinet Var. 1 (LxBxH) [mm]	706 x 602 x 2.080	706 x 602 x 2.080	706 x 602 x 2.080	706 x 602 x 2.080
Dimensions per cabinet Var. 2 (LxBxH) [mm]	706 x 602 x 1.880	706 x 602 x 1.880	706 x 602 x 1.880	706 x 602 x 1.880
Tilt dimension Var. 1 (front   lateral) [mm]	2.185   2.153	2.185   2.153	2.185   2.153	2.185   2.153
Tilt dimension Var. 2 (front   lateral) [mm]	1.996   1.962	1.996   1.962	1.996   1.962	1.996   1.962
	<b>INVERTER</b>			
Manufacturer	Victron	Victron	Victron	Victron
Power [kW]	3	5	10	10
	<b>BATTERY MODULES</b>			
Manufacturer	Pylontech	Pylontech	Pylontech	Pylontech
Gross capacity [Wh]	2x 3552	3x 3552	6x 3552	7x 3552
Operating voltage [V]	48	48	48	48
Cell type	LiFePo4	LiFePo4	LiFePo4	LiFePo4
Efficiency [%]	90-95	90-95	90-95	90-95

<sup>1</sup> The cabinets are available in 2 variants and differ in dimensions. The cabinets must always be positioned side by side.

Other systems are available on request.

# neoTower® Power Storage / Blackout Start (BOS)





# TECHNICAL DATA SHEET

Power Storage BOS	18	21	25	28
Power Storage size (gross) [kWh]	17,8	21,3	24,9	28,4
Max. output power [VA]	9.000	15.000	15.000	15.000
Max. total efficiency [%]	n.a.	n.a.	n.a.	n.a.
Continuous charging power [VA]	5.000	10.000	10.000	10.000
Connections	3x 230 V (AC in) 3x 230 V (AC out) 1x 48 V (DC)			
Cable cross section (max. 50 m) [mm <sup>2</sup> ]	6	10	10	10
Fuse [A]	32	50	50	50
Suitable CHP unit power size <sup>1</sup> [kWel]	2.0 - 4.0	2.0 - 4.0, 9.5		
PV connection	Grid parallel			
Storage function	Zero reference regulation via CHP			
Cooling	Fan ventilation			
Operating modes	Grid replacement, grid-forming isolated operation			
Measurements	Per phase current- and power measurement			
Display	LED display on the unit			
Protection class	IP 20	IP 20	IP 20	IP 20
Operating temperature [°C]	5-30	5-30	5-30	5-30
Humidity [%]	max. 95	max. 95	max. 95	max. 95
Unit consumption [W]	33	54	54	54
Visualisation	Panel CHP	Panel CHP	Panel CHP	Panel CHP
Weight [kg]	517,04	583,40	616,46	649,52
Number of cabinets (Variante 1   Variante 2) <sup>2</sup>	2   2	2   2	2   2	2   2
Dimensions per cabinet Var. 1 (LxBxH) [mm]	706 x 602 x 2.080	706 x 602 x 2.080	706 x 602 x 2.080	706 x 602 x 2.080
Dimensions per cabinet Var. 2 (LxBxH) [mm]	706 x 602 x 1.880	706 x 602 x 1.880	706 x 602 x 1.880	706 x 602 x 1.880
Tilt dimension Var. 1 (front   lateral) [mm]	2.185   2.153	2.185   2.153	2.185   2.153	2.185   2.153
Tilt dimension Var. 2 (front   lateral) [mm]	1.996   1.962	1.996   1.962	1.996   1.962	1.996   1.962
	<b>INVERTER</b>			
Manufacturer	Victron	Victron	Victron	Victron
Power [kW]	9	15	15	15
	<b>BATTERY MODULES</b>			
Manufacturer	Pylontech	Pylontech	Pylontech	Pylontech
Gross capacity [Wh]	5x 3552	6x 3552	7x 3552	8x 3552
Operating voltage [V]	48	48	48	48
Cell type	LiFePo4	LiFePo4	LiFePo4	LiFePo4
Efficiency [%]	90 - 95	90 - 95	90 - 95	90 - 95

<sup>1</sup> Technical inspection by the manufacturer required

<sup>2</sup> The cabinets are available in 2 variants and differ in dimensions. The cabinets must always be positioned side by side.

Other systems are available on request.

**YOUR PARTNER FOR ENERGY**



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