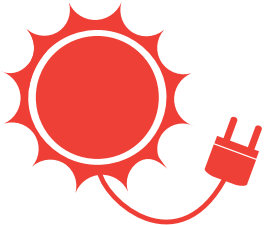




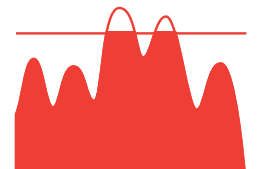
- ⤴ 10 YEAR WARRANTY
- ⤴ LONG SERVICE LIFE: LIFEPO4
- ⤴ 5 - 15 - 20 - 29 - 48 - 67 - 77 - ... UP TO 308 KWH
- ⤴ > 8.000 CYCLES @ 25°C
- ⤴ AFTER-SALES SERVICE
- ⤴ ANALYSIS TOOLS FOR OPTIMAL BATTERY SIZING

The use of batteries for large-scale storage of (renewable) energy in industry and related sectors has been on the rise in recent years. This is influenced by **regulations, rising energy prices and grid costs, outdated grid infrastructure, power shortages due to large consumers and growing ecological awareness**. These batteries are recovered in the following three areas:

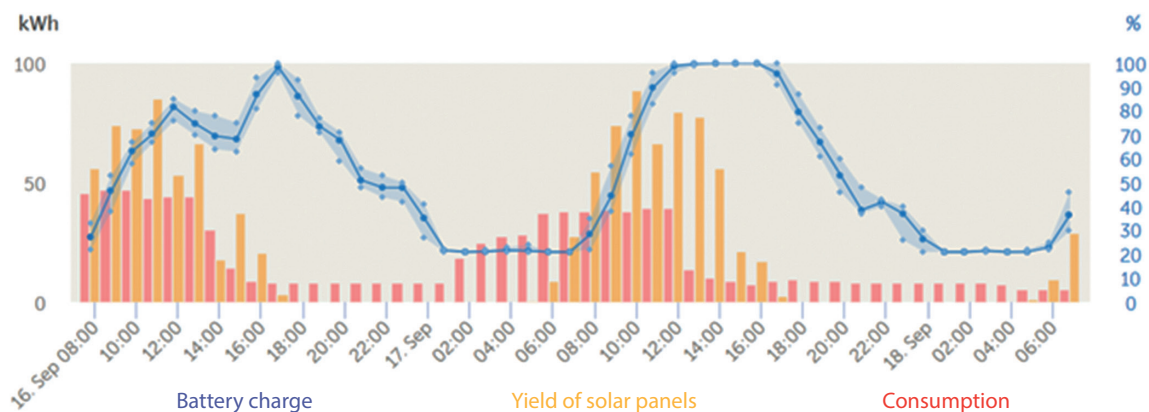


The surplus energy production is stored and later used in case of shortages. This increases the self-consumption of the company and less energy is injected and taken from the grid. This **increase in self-consumption is the battery's main profit factor**.

Companies are heavily penalized financially for their **peak consumption**. A battery controlled by an intelligent EMS (Energy Management System) can smooth out these peaks (**peak-shaving**). In this way, you can save on your energy bill without having to change your operation/behavior.



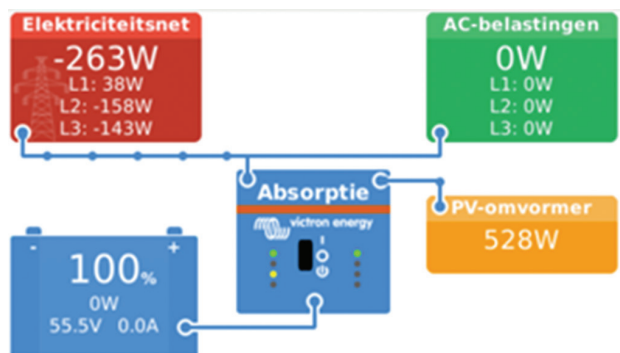
The **variable energy prices** (arbitrage) react very erratically in function of the general consumption but also in function of the presence of sun and wind. The battery can store **cheap energy from the grid and its own production** to consume itself at peak times when energy is again more expensive. Optionally, with the addition of a dedicated EMS, key opportunities in the imbalance market can be taken advantage of.




AUTONOMOUS AND AUTOMATED

Thanks to the automated operation of our system, our installations are completely **maintenance free**. You can monitor your entire system via a handy app on your smartphone or PC. You don't have to do anything yourself to save on your energy bill!

The temperature of the batteries is automatically kept stable thanks to a built-in climate control. In combination with our specially designed cabinet, this provides optimal conditions to guarantee a long life.



ENERGY MANAGEMENT SYSTEM

In addition to a pure technical controller named **AQ-Smart® Multi-EnergyRack**, we offer additional options to **optimize the battery and achieve faster payback**. We recommend upgrading to an intelligent controller. On the one hand, you can implement **the AQ-Smart® Dynamic and Multi-EnergyRack** controls to take advantage of Day-Ahead pricing. In cooperation with any **variable energy contract**, this control via the Internet link will ensure additional optimization. If you want to **fully optimize battery control and reduce payback time**, we recommend the **AQ-Smart® Yuso® Inside (Only in BENELUX and UK), Dynamic and Multi-EnergyRack** as the absolute ultimate. This regulates battery charging and discharging **via algorithms** based on  energy prices, weather forecast and its own consumption pattern. The AQ-Smart Yuso® Inside control works in conjunction with an energy contract through aggregator Yuso® and **combines Day-Ahead prices with imbalance market opportunities**.

**PYLONTECH IS THE LEADING BRAND FOR ENERGY STORAGE
ALSO POSSIBLE AT 3X230V!**



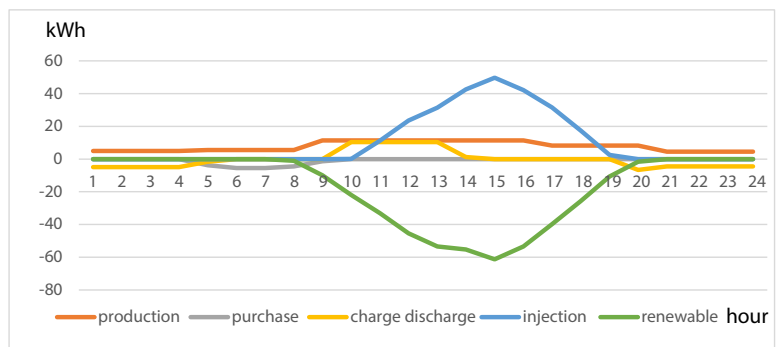
YOUR BATTERY SYSTEM FULLY CUSTOMIZED!

Thanks to the modular structure of our Pylontech® EnergyRack, many different configurations are available ranging from **5 - 15 - 20 - 29 - 48 - 67 - 77 - ... up to 308 kWh**.

Our batteries are supplied with matching industrial inverters that are perfectly dimensioned for the installation. The possibilities are listed at the bottom of this brochure.

SIMULATION TOOL

Installing an industrially balanced energy storage system is our main concern. through our **simulation tool** Battery Supplies is able, provided some parameters, to quickly answer the **correct sizing of the battery and inverters**. Using the simulation we show the **real yields and payback time**, linked to market representative energy tariffs and energy yields. Here we take into account PV and possible wind turbine production, consumption profile and local specific situations. In the report you will find the savings on self-consumption, peak consumption, possible additional savings when using dynamic tariffs and savings on the imbalance market.



TECHNICAL DATA

	5 kWh	15 kWh	20 kWh	29 kWh	48 kWh	67 kWh	77 kWh
Reference	BAT/51035	48ER15PT	48ER20PT	48ER29PT	48ER48PT	48ER67PT	48ER77PT
Technology	Li-Ion (LiFePO4 or LFP)						
Battery Module	Pylontech® US5000 - 4,8kWh - 48V						
No. of modules	1	3	4	6	10	14	16
Nominal voltage (V)	48						
Nominal capacity (Ah)	100	300	400	600	1000	1400	1600
Capacity (Wh)	4800	14400	19200	28800	48000	67200	76800
Power (kW)	3840	11520	15360	23040	38400	53760	61440
Dimensions (mm)	442x420x161	600x600x700	585x510x860	660x650x2185	660x650x2185	1320x650x1985	1320x650x1985
Weight (kg)	39,7	147,5 ± 1%	190,8 ± 1%	358,6 ± 2%	517,4 ± 2%	771,2 ± 2%	864,4 ± 2%
D.O.D. (%)	95						
Cycle Life	> 8000 @ 25°C						
Communications Port	RS485, CAN						
Warranty	10 years (warranty) daily cycle*						

* Subject to registration of Pylontech EnergyRack at: <https://en.pylontech.com.cn/service/support/>

CHARGE AND DISCHARGE TABLES

CHARGE POWER (KW) - CHARGE TIME (H) RELATIVE TO BATTERY SIZE (KWH) AT 25°C

Art	Descr.	Victron Productrange	kW	"In combination with PylonTech® EnergyRack"					
				15	20	29	48	67	77
SOL/VIC3R3T1	Converter kit 3x 3kVA	Multiplus II	5,376	2,8	3,7	5,4			
SOL/VIC3R5T1	Converter kit 3x 5kVA	Multiplus II	10,752			2,7	4,5		
SOL/VIC3R8T1	Converter kit 3x 8kVA	Quattro	16,896				2,8	4,0	4,6
SOL/VIC3R10T1	Converter kit 3x 10kVA	Quattro	21,504					3,1	3,6

DISCHARGE POWER (KW) - DISCHARGE TIME (H) IN RELATION TO BATTERY SIZE (KWH) AT 25°C

Art	Descr.	Victron Productrange	kW	"In combination with PylonTech® EnergyRack"					
				15	20	29	48	67	77
SOL/VIC3R3T1	Converter kit 3x 3kVA	Multiplus II	7,2	2,1	2,8	4,0			
SOL/VIC3R5T1	Converter kit 3x 5kVA	Multiplus II	12			2,4	4,0		
SOL/VIC3R8T1	Converter kit 3x 8kVA	Quattro	19,2				2,5	3,5	4,0
SOL/VIC3R10T1	Converter kit 3x 10kVA	Quattro	24					2,8	3,2

Inverter power at an ambient temperature of 25°C. See link to know the effect of power versus temperature.

ENG

<https://www.victronenergy.nl/upload/documents/Datasheet-MultiPlus-II-inverter-charger-EN.pdf>

<https://www.victronenergy.nl/upload/documents/Datasheet-Quattro-3kVA-15kVA-EN.pdf>

ES

<https://www.victronenergy.nl/upload/documents/Datasheet-MultiPlus-II-inverter-charger-ES.pdf>

<https://www.victronenergy.nl/upload/documents/Datasheet-Quattro-3kVA-15kVA-ES.pdf>