

FullSet Pro energy storage system data sheet

FullSet Pro is the only industrial, low-voltage energy storage system for residential applications.

We have used the best quality lithium-ion cells and top-class components to guarantee the safety and performance of your devices.

Energy is available whenever you need it: in the evening, at night, on a cloudy day or in the event of a grid failure. You can store the energy produced both from the photovoltaic installation and from the grid.



FullSet Pro 10.5

FullSet is a complete system:
energy storage + hybrid inverter

Why should you choose FullSet?



Lifetime

≥8000 cycles of charge and discharge;
more than 20 years of service under standard conditions.



Warranty

10 year warranty for entire system.



BMS

Battery management system that controls the efficiency of the device.



Safety

The products meet European safety standards and are certified.



Expansion

Possibility to expand the system with additional energy storages or inverters



Off grid

Energy storage from PV installations or from the grid.

Low-voltage
energy storage system

FullSet Pro 10.5

10 kWh / 5 kW

Illustrative photo



FES

Technical specifications of
10 kWh energy storage

Nominal energy	10,3 kWh
Dimensions (height x width x depth)	600 mm x 600 mm x 600 mm
Estimated weight	~75 kg
Output voltage range	40 VDC ÷ 60 VDC
Maximum discharge current @ 25°C	100 A
Maximum charge current @ 25°C	100 A
Certifications	UN38.3; CE
Operating temperature range	0°C ... +55°C
Recommended temperature	25°C
Communication interface	CAN Bus
IP class	54IP
High-current connection between battery blocks	Wire connection
Cycle life	≥8000 ¹
Level of discharge (DoD)	80%
Battery chemistry	Li-ion NMC
Installation	In a closed facility
Warranty	10 years

¹ At DoD=100%, the number of cycles is ≥6000.

The control system of the energy storage system does not need an external power supply.



Technical specifications of 5 kW hybrid inverter

Battery Input Data

Battery Type	Li-Ion
Battery Voltage Range	40 V~60 V
Max. Charging Current	120 A
Max. Discharging Current	120 A
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS

PV String Input Data

Max. DC Input Power	6 500 W
Rated PV Input Voltage	370 V (125 V~500 V)
Start-up Voltage	160 V
MPPT Voltage Range	150 V - 425 V
Full Load DC Voltage Range	300 V - 425 V
PV Input Current	13 A+13 A
Max. PV ISC	17 A+17 A
Number of MPPT / Strings per MPPT	2/1+1

AC Output Data

Rated AC Output and UPS Power	5 000 W
Max. AC Output Power	5 500 W
AC Output Rated Current	22.7 A
Max. AC Current	25 A
Max. Continuous AC Passthrough	35 A
Peak Power (off grid)	2 time of rated power, 10 S
Power Factor	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50/60 Hz; L/N/PE 220/230 Vac (one phase)
Grid Type	One Phase
DC injection current (mA)	THD<3% (Linear load<1.5%)

Efficiency

Max. Efficiency	97,6%
Euro Efficiency	97,0%
MPPT Efficiency	99,9%

Technical specifications of 5 kW hybrid inverter

Protection	
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection
Output overvoltage protection	DC type II / AC type III
Certifications and standards	
Grid regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11
EMC safety / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
General data	
Operating temperature range	-45°C~60°C, >45°C derating
Cooling	Natural cooling
Noise	<30 dB
Communication with BMS	RS485; CAN
Weight	20,5 kg
Size (W x H x D)	330 mm x 580 mm x 233 mm
Protection Degree	IP65