

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 20.10

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 20.10

20 kWh / 10 kW



Illustrative photo

Technical specifications
of 20 kWh energy storage

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Nominal energy	20,7 kWh
Dimensions (height x width x depth)	1051 mm x 277 mm x 438 mm
Estimated weight	~170 kg
Output voltage range	40 VDC ÷ 60 VDC
Maximum discharge current @ 25°C	200 A
Maximum charge current @ 25°C	200 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 lat

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.

Illustrative photo



Technical specifications of 10 kW hybrid inverter

Battery Input Data

Battery Type	Li-Ion
Battery Voltage Range	40 V~60 V
Max. Charging Current	210 A
Max. Discharging Current	210 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	13 000 W
Rated PV Input Voltage	550 V (160 V~800 V)
Start-up Voltage	160 V
MPPT Voltage Range	200 V-650 V
Full Load DC Voltage Range	350 V-650 V
PV Input Current	26 A+13 A
Max. PV ISC	34 A+17 A
Number of MPPT / Strings per MPPT	2/2+1

AC Output Data

Rated AC Output and UPS Power	10 000 W
Max. AC Output Power	11 000 W
AC Output Rated Current	15,2 A
Max. AC Current	22,7 A
Max. Continuous AC Passthrough	45 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; 3L/N/PE 220/380, 230/400 Vac
Grid Type	Three 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 10 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

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

Safety EMC / 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

smart cooling

Noise

<45 dB

Communication with BMS

RS485; CAN

Weight

33,6 kg

Size (W x H x D)

422,0 mm x 699,3 mm x 279,0 mm

Protection Degree

IP65