FUL OF YOUR ENERGY

FullSet Pro energy storage system data sheet

FULLSET

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 is a complete system: energy storage + hybrid inverter

Why should you choose FullSet?



Lifetime

≥3000 cycles of charge and discharge.



10 year warranty for entire system.



FullSet Pro 14.10

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



Energy storage from PV installations or from the grid.

LaserTec | +48 724 311 777 | sales@fullsetenergy.com | www.fullsetenergy.com

FOLL OF YOUR ENERGY

FULLSET

Low-voltage energy storage system

FullSet Pro 14.10 14 kWh / 10 kW



Technical specifications of 14 kWh energy storage

Nominal energy	14,3 kWh
Dimensions (height x width x depth)	1027 mm x 239 mm x 400 mm
Estimated weight	~120 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 (at 90% DoD, 0.5C / 0.5C @ 25°C ± 3°C)	≥3000
Battery chemistry	Li-ion NMC
Installation	In a closed facility
Warranty	10 years

FUL OF YOUR ENERGY



FULLSET

Technical specifications of **10 kW hybrid inverter**

Battery Input Data	
Battery Type	Lead-acid or Li-lon
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
Max. AC Output Power AC Output Rated Current	
	11 000 W
AC Output Rated Current	11 000 W 15,2 A
AC Output Rated Current Max. AC Current	11 000 W 15,2 A 22,7 A
AC Output Rated Current Max. AC Current Max. Continuous AC Passthrough	11 000 W 15,2 A 22,7 A 45 A
AC Output Rated Current Max. AC Current Max. Continuous AC Passthrough Peak Power (off grid)	11 000 W 15,2 A 22,7 A 45 A 2 time of rated power, 10 S
AC Output Rated Current Max. AC Current Max. Continuous AC Passthrough Peak Power (off grid) Power Factor	11 000 W 15,2 A 22,7 A 45 A 2 time of rated power, 10 S 0.8 leading to 0.8 lagging
AC Output Rated Current Max. AC Current Max. Continuous AC Passthrough Peak Power (off grid) Power Factor Output Frequency and Voltage	11 000 W 15,2 A 22,7 A 45 A 2 time of rated power, 10 S 0.8 leading to 0.8 lagging 50/60 Hz; 3L/N/PE 220/380, 230/400 Vac
AC Output Rated Current Max. AC Current Max. Continuous AC Passthrough Peak Power (off grid) Power Factor Output Frequency and Voltage Grid Type	11 000 W 15,2 A 22,7 A 45 A 2 time of rated power, 10 S 0.8 leading to 0.8 lagging 50/60 Hz; 3L/N/PE 220/380, 230/400 Vac Three Phase
AC Output Rated Current Max. AC Current Max. Continuous AC Passthrough Peak Power (off grid) Power Factor Output Frequency and Voltage Grid Type DC injection current (mA)	11 000 W 15,2 A 22,7 A 45 A 2 time of rated power, 10 S 0.8 leading to 0.8 lagging 50/60 Hz; 3L/N/PE 220/380, 230/400 Vac Three Phase
AC Output Rated Current Max. AC Current Max. Continuous AC Passthrough Peak Power (off grid) Power Factor Output Frequency and Voltage Grid Type DC injection current (mA) Efficiency	11 000 W 15,2 A 22,7 A 45 A 2 time of rated power, 10 S 0.8 leading to 0.8 lagging 50/60 Hz; 3L/N/PE 220/380, 230/400 Vac Three Phase THD<3% (Linear load<1.5%)

Technical specifications of 10 kW hybrid inverter

FULLSET

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