



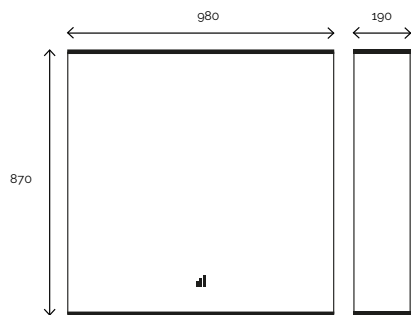
SEMS Square Pro



All you need for your self-consumption installation.

SEMS Square Pro is a single-phase, all-in-one energy management system with an attractive and compact design. With a storage capacity of up to 6 kWh and power of up to 6 kW.

With two MPPT and a wide voltage range, installation is facilitated by the flexibility to connect different strings of panels, allowing the product to be installed in homes with pitched roofs and with pitched roofs and with limited space for the installation of the panels. Thanks to the simultaneous delivery of power from the battery and the panels, higher consumption can be compensated with higher savings.



All-in-One System (All-in-One)

Everything you need in a single "plug & play" system. Hybrid inverter, battery modules, intelligent energy management SEMS (Smart Energy Management System) and AMPi (Artificial Intelligence Software). Both design and technology together to make life easier. Parallelisable* system up to 3 devices.



Peer to Peer*

The units are set up so that you can share your energy with other users, therefore benefiting from this transaction economically.



Artificial Intelligence and energy independence

Ampere Energy systems are powered by AMPi (Artificial Intelligence software) and are designed to achieve maximum energy independence from the grid.



Appliance monitoring

It uses an innovative technology called NILM* (Non-Intrusive-Load-Monitoring) that allows you to know the real time consumption of your appliances without the need to invest in smart plugs.



Peak Shaving

Our system reduces power peaks, allowing you to contract a lower power or avoid financial penalties, saving on the fixed term of the electricity bill.



Back-Up

Even in the event of a power failure, the installation has a system that ensures the continuity of the activity of the equipment connected to the back-up output.

No more power cuts!



Increased efficiency and energy savings. Always!

Day and night. With sunshine, and even without sunshine. The Ampere systems, connected to the Internet, thanks to their SEMS and AMPi software, provide a weather and consumption forecast and track the price per kWh, achieving the maximum possible savings and efficiency.



My Ampere

Thanks to our APP MyAmpere (iOS / Android) you can monitor and manage your system remotely from any mobile device.

* Available soon.

SEMS SQUARE PRO

General Specifications	SEMS SQUARE PRO			SEMS SQUARE M PRO	
	6.3 (PV)	6.6 PV	3.3 (PV)	0.3 (PV)	0.6 PV
IP degree of protection	IP20				
Isolation class	Class I				
Working temperature	-5°C to +40°C				
Relative humidity	5% - 85%				
Dimensions (cm)	87 x 98 x 19				
Weight* (kg)	90 kg		72 kg	46 kg	
Maximum usable PV power	6 kW	9 kW	4,5 kW	3 kW	6 kW
Communications Ports	Ethernet RJ45, Wireless (802.11a/g/n), USB, RS485 MODBUS				
I/O Ports (isolated) (TBD))	1x NO Output /NC (Genset ON/OFF), 4x NO Output (Auxiliary)				
Power Management	SEMS with AMPI software				
Power Meter	Single-phase bidirectional Energy Meter included (100ARMS - cable <25mm2). RS-485 MODBUS				
Warranty**	10 years				
Battery module	6.3 (PV)	6.6 PV	3.3 (PV)	0.3 (PV)	0.6 PV
Useful Capacity (kWh)	6 kWh		3 kWh	-	
Useful Capacity (Ah)	116 Ah		58 Ah	-	
Max. Charge/Discharge Power ***	3 kW		1,5 kW	-	
Max. Depth of Discharge (DoD)	0,95				-
Battery Type	Li-Ion				-
Nominal voltage	51,8 V				-
Working Voltage	42 - 58,8 V				-
Number of cycles (95% DoD, 250C / 770F)	> 6000				-
Estimated life	> 16 years				-
Power Inverter	6.3 (PV)	6.6 PV	3.3 (PV)	0.3 (PV)	0.6 PV
Type	Bidirectional hybrid inverter				
Rated Power**	3 kW	6 kW	3 kW	3 kW	6 kW
Number of MPPT	2				
MPPT Voltage Range	125-480V				
Maximum PV Voltage (Voc max):	550V				
Maximum Current per MPPT (Isc)	12A				
Rated AC Voltage	230 VRMS				
Rated AC Current	13 ARMS	26 ARMS	13 ARMS	13 ARMS	26 ARMS
Rated Frequency			50/60 Hz		
EMC, electrical safety and regulations	6.3 (PV)	6.6 PV	3.3 (PV)	0.3 (PV)	0.6 PV
Battery cells	IEC 62133				
Battery modules	CE / IEC 62619				
Transport	UN 38.3				
EMC/Electrical Safety	EN 61000-6-1/2/3/4, EN 61000-3-11/12, EN 62109-1/2, IEC 62103, EN 61439-1:2011, EN 61439-2:2011				
Grid connection standards	RD 647/2020 (NTS V1), RD 1699/2011, UNE 206007, Portaria n.o 73/2020, G99, C10/11, IEC 62116, IEC62040 EN 50438, CEI 0-21, DIN V VDE V 0126, VDE-AR-N 4105 AS4777.2, AS4777.3				

*Weight of each additional 6kWh battery module: 44kg

** According to current Ampere warranty available at www.ampere-energy.com

*** Instantaneous power delivery is managed by the SEMS depending on available PV power and battery condition.

DISCLAIMER: Specifications are subject to change without notice for product improvement.