

Socrates AC690

10 FT Integrated BESS for Grid Applications

0.8MW/1.6MWh (Configurable)



Top Modularity: Patented Architecture Design

- 4 rack units with independent PCS and BMS
- Independent rack-level management support max.4 applications
- Flexible configuration of different C/D duration



Economical Outperformer: Further Enhanced IRR 0.8%

- >99.9% system availability
- 90.8% Max. RTE
- 40% less auxiliary energy consumption



Safe and Reliable: Armor 2.0 Multi-Level Safety Design

- IP55 cabinet protection, ≤ 3 mm structural deformation during transportation and installation
- Robust multi-layer fire and explosion protection, fully compliant with NFPA
- Redundancy safety design



*UL 9540A certified

Successful Story

First CHP+PV+ESS Project in Europe



Capacity: **11,3MWh**



Location: **Castellón, Spain**

- ✓ Electricity Arbitrage
- ✓ Energy Shifting
- ✓ Co-location



Benefits:

**Reduce gas consumption, maximize energy to grid,
and bring higher payback.**

Note

All products are intended for delivery within Europe. The information contained in this document is subject to change without notice and may be incomplete or outdated. MARS Renewable reserves the right to revise specifications and other details without prior notification. For the latest updates, please consult MARS Renewable directly. © MARS Renewable 2025. All rights reserved.

SYSTEM SPECIFICATION

Nominal Energy	1,671.9kWh	1,629.4kWh
Nominal Voltage	1331.2V	
Operating Voltage Range	1040V-1500V	
System Configuration	4P416S	
Cell Type	LFP 314Ah	LFP 306Ah
Cell Charge/Discharge Rate	0.5P	
Max. DoD	100% (Recommended 90%)	
Rated Charge/Discharge Power per Rack	208.5kW/208.5kW	200kW/200kW

PCS SPECIFICATION

Operating DC Voltage Range	1050V~1500V
Max. AC Power	250kVA
Nominal AC Voltage	690V
AC Voltage Range	-15%~10% (Adjustable)
Nominal Frequency	50Hz / 45~55Hz, 60Hz / 55~65Hz
Max. Efficiency	98.8%
Harmonic (THDi)	<3% (at nominal power)
Power Factor	>0.99 / 1 leading ~ 1 lagging

GENERAL SPECIFICATION

Dimensions (L*W*H)	2991mm*2438mm*2896mm
Weight	≤16 Ton
Cooling Method	Liquid Cooling
IP Grade	IP55 (Battery & other ACC Compartments)
System Efficiency	Max. 90.8%
Altitude	< 2000m
Noise	<75dB (1m Away from Equipment)
Operating Temperature Range	-25 °C - +55 °C
Cetification	IEC 62619, IEC 63056, IEC 62477, IEC 61000, EN 50549, NTS 2.1, UN 38.3, UN 3536, RoHS, UL 9540A