

Air-Cooled Containerized C&I ESS

480 kW |



What is the Air-Cooled Containerized ESS? The ESS-C-20-2180A-F is an integrated AC/DC containerized air-cooled ESS built for easy deployment. It adopts high-capacity LFP cells, while the battery system uses advanced air-cooling thermal management and aerosol fire suppression to ensure operational safety and extend system cycle life — a 20 ft outdoor container that arrives pre-integrated and site-ready.

480 kW

Rated PCS Power

2,180 kWh

Battery Capacity

LFP 314 Ah

Cell Type

IP54

Outdoor Rating

KEY FEATURES

- ✓ **Containerized Plug & Play**
Standard 20 ft container with integrated AC/DC conversion, pre-commissioned to cut deployment complexity, time and cost on site.
- ✓ **Higher Energy Density**
Upgraded 314 Ah cell capacity with CTP technology and space optimization packs 2,180 kWh into a single 20 ft unit.
- ✓ **Safety & Reliability**
Multi-level protection from cell to system on high-cycle-stability LFP, with aerosol fire suppression built in.
- ✓ **Optimized Modular Design**
Configurable for any project size and application — expand or re-deploy as your site grows.
- ✓ **Smart Management**
Remote monitoring with OTA updates and an intelligent EMS keep the system tuned — fewer site visits, lower O&M cost.

TECHNICAL SPECIFICATION

Parameter	ESS-C-20-2180A-F
AC Input/Output	
Rated Power	480 kW
AC Rated Voltage	230 V / 400 V, 3P+N+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	0.8 (Leading) ~ 0.8 (Lagging)
THDi	< 3% (Rated Power)
Off-grid	Support
Battery Parameters	
Rated Capacity	2,180 kWh
Max. DC Current	84 A × 8
Battery Type	LFP 3.2 V / 314 Ah
DC Rated Voltage	870.4 V
DC Voltage Range	761.6 V – 979.2 V
Battery Module	51.2 V / 16.07 kWh
System Configuration	1P272S

Parameter	ESS-C-20-2180A-F
General Data	
Dimension (W × D × H)	6,058 × 2,438 × 2,896 mm
Weight	~28 t
Cooling Method	Air-Cooling
IP Rating	IP54
Operating Temperature	-20 °C ~ +45 °C
Relative Humidity	5% – 95% (Non-condensing)
Altitude	≤ 2,000 m
Noise Emission	≤ 75 dB
Fire Extinguishing Media	Aerosol
Certificates	IEC/EN62477-1, IEC/EN61000-6-2, IEC/EN61000-6-4, IEC62619, G99, G100, AS4777.2, EN50549-1, VDE-AR-N4105, UN38.3

Model ESS-C-20-2180A-F — full datasheet and per-project configuration available on request.
Specifications are subject to change without notice.