

# AESS Air-cooled

## 500kW Specification



**AESS  
Battery ESS**



Model	1075 kWh	1290 kWh	1720 kWh
<b>Battery Cell Data</b>			
Battery Chemistry	Lithium Iron Phosphate (LFP)		
Cell Cycle Life	8000 Cycles, 0.5C 25°C, 70% EOI		
Cell Specification	3.2V/280Ah		
<b>Battery Rack Data</b>			
Type	Rack II		
Nominal Voltage	768 V		
Voltage Range	672- 864 V		
DC Energy Capacity	1075.20 kWh	1290.24 kWh	720.32 kWh
Number of Racks	5	6	8
<b>Bi-Directional Power Conversion System (PCS)</b>			
Rated Power	500 kW		
Maximum Power	550 kw		
Max Charging/Discharging Current	880 A		
Battery Switch-off Mode	Switch		
Rated On-Grid Voltage	380VAC or 400VAC		
Rated On-Grid Frequency	50/60 Hz(+2.5%) or 60 Hz(+0.5%)		
Rated Off-Grid Voltage	380VAC(+10% configurable) or 400VAC(+10% configurable)		
Rated Off-Grid Frequency	50/60Hz or 60 Hz		
Power Factor	Listed: 0.8~1 leading or lagging Actual: 0.11 leading or lagging		
Off-Grid Overload Capacity	105%~115% 10 min 115%~125% 1 min 125%~150% 200 ms		
THDi	<3%		
Peak Efficiency	98.20%		
CEC Measured Efficiency	97% w/o transformer		
<b>DC/DC for PV Input</b>			
Rated Power	750 kw		
PV Voltage Range	500 -1500 V		
Current to DC Bus	750 A		
Peak Efficiency	98.96%		
Protection	OTP, EPO, Fan/Relay Failure, OLP, Reverse Connection Protection		
Configurable Protection Limits	Battery EOD voltage		
Compliances	CE LVD IEC 62109/62477, CE EMC IEC 61000, UL1741 (Pending)		



Model	1075 kWh	1290 kWh	1720 kWh
<b>General Specifications</b>			
Cooling	Forced air cooling for power electronics 7.5 kW Air-conditioned for battery system with heater and dehumidifier		
Noise	70 dB		
Enclosure	NEMA 3R		
Max elevation	3000 m/10000 ft (> 3000 m/10000 ft De-rating)		
Humidity	-20°C to 50°C (De-rating over 45°C)		
Operating ambient temperature	0~95%(No condensing)		
Size (W×H×D)	6058x2591x2438 mm/20x8.6x8 ft		12192x2591x2438 mm/40x8.6x8 ft
Weight	≤5.5T	≤17.5T	vv≤22.6T
<b>Other</b>			
Fire Fighting System	Smoke detector and heat detector, Fire Suppression via NOVEC 1230 or FM200 or water		
Salt spray prevention	Optional salt spray prevention version with special coating and filter		
Certifications	UL9540 (On Demand), UL1973, UL9540A		
AC Connection	3-Phase 3-Wire+PE at Inverter Connection/3-Phase 4-Wire+PE at System Connection		
AC System Output Voltage	480 VAC		
Isolation	Isolation Transformer		

Images are representative and may not match the final product. Specifications are subject to change without notification

