

OPTIM US A300-HY

M5-300kWh-1000V



172~1565kWh



50~500kW



0.5C



560~720Vac



Hybrid Inverter Integrated



Flexible Configuration



Long Time Backup



Easy Set-up & Maintenance



**Wide Temp
Range**



**Ancillary
Service**



**Electricity
Arbitrage**



**Demand
Response**



Backup

A300-HY

OPTIM US / A300-HY

General Data		M5-300kWh- 1000V
Dimension (W*D*H mm)	1500*1300*2200	
Weight (tons)	3.5	
Working Temperature Range (°C)	-20~55*	
Protection Class	IP55	
Altitude (m)	≤3000	
Humidity (RH)	0~95%	
Fire Extinguishing	Aerosol	
Cooling System	Air Cooling	
Cooling System Consumption (kW, Cooling / Heating)	5 /6.4	
Aux. Power Consumption (kW, continuous / peak, incl. HVAC)	2.35 /4.26	
Max. Parallel No.	5	
Anti-Corrosion	C3	
Certification	UN38.3/UN 3480/IEC62619/IEC62040-1/CE/UKCA(EMC/RED)/VDE2510-50/UL1973/UL9540A G99, VDE-AR-N 4105 / EN 50549-1/EN 50549-10 / EHS 2018.2/ IEC 62116/ IEC 61727/ IEC 60068/ IEC 61683/ EN 50530	

Battery Data	
Battery Type	Li-ion (LFP)
Nominal Capacity (kWh)	313
Depth of Discharge	98% (single string)
Continuous Operation C-rate	0.5C
Cycle Life	>7000
DC Voltage Range (Vdc)	560~720 (single string)
Round-trip Efficiency@ 0.5C-rate	96%
Nominal operation current (A)	122.5 * 2
Max. Operation Current (A)	180*2
Efficiency@ 0.5C-rate	96%

Hybrid Data On-grid Mode	
Rated AC Power (kW)	50/100
Rated AC Output Voltage (Vac)	400
Rated AC Output Frequency (Hz)	50/60
Max AC Current (A)	76A (Linear Load)
Overload Capacity	110%
AC PF	>0.99 (0.8 leading ~ 0.8 lagging)
CEC Efficiency	97.4% (Max.97.8%)
Isolation Type	Non-isolation
Response Time (On-Grid to Off-Grid)	<10ms

Operation Mode	
Communication Type	RS485 (MODBUS RTU)/LAN (MODBUS TCP/IP)/CAN
Operation Logic	Peak Shaving/Energy Shifting/Self-Consumption/Backup

*Degradation at temperatures below 10°C or above 40°C

		System configuration									Min. configuration	Optional configuration	Standard configuration	
		Inverter Type	50kW											
		Inverter QTY	1	2	3	4	5	6	8	10				
A300- HY	Cabinet QTY	kWh	50	100	150	200	250	300	400	500				
	1	172												
	1	313												
	2	626												
	3	939												
	4	1252												
	5	1565												

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