

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

General Data	M5-300kWh-1000V
Dimension (W*D*H mm,w/o inverter)	1500*1300*2200
Weight (tons)	3.5
Working Temperature Range (°C)	-20~55*
Protection Class	IP55
Altitude (m)	≤3000
Humidity	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/IEFS 2018.2/IEC 62116/ IEC 61727/IEC 60068/IEC 61683/EN 50530

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

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