

OPTIM US A100-HY

M1C 100kW/104kWh



52~520kWh



25~500kW



1C



400Vac



Hybrid Inverter Integrated



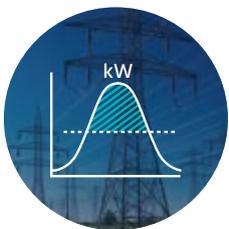
Superior Safety



Flexible Configuration



Easy Set-up & Maintenance



Peak Shaving



Energy Shifting



Self-Consumption



Backup

A100-HY

OPTIM US / A100-HY

General Data		M1C 100kW/104kWh
Dimension (W*D*H mm, w/o inverter)		1500*1125*2195
Weight (tons)		1.9 (Inc. Battery)
Working Temperature Range (°C)		-20-50*
Protection Class		IP55
Altitude (m)		≤2000
Humidity		0~95%
Fire extinguishing		Aerosol
Cooling System		air cooling
Cooling system consumption (kW,Cooling/Heating)		2/1
Aux. Power Consumption (kW, continuous/peak, incl. HVAC)		1.5/3
Max.parallel No.		5
Anti-corrosion		C3(C5 Optional)
Certification	UN38.3/UN3481/IEC62619/IEC62040-1/CE/UKCA(EMC/RED)/VDE2510-50/UL1973/UL9540A/UL9540 G99/VDE-AR-N 4105/EN 50549-1/EN 50549-10/EIFS 2018.2/IEC 62116/IEC 61727/ IEC 60068/IEC 61683/EN 50530	

Battery Data	
Battery Type	Li-ion (LFP)
Nominal Capacity (kWh)	104
Max. /Continuous Operation C-rate	1/0.5
Depth of Discharge	98% (single string)
Cycle Life	>7000
DC Voltage Range (Vdc)	594~792 (single string)
Max. /Continuous Operation Current (A)	148/74
Round-trip Efficiency@ 0.5C-rate	95%

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)	76 (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	Modbus TCP/IP, Modbus RTU
Operation Logic	Peak Shaving/Energy Shifting/Self-Consumption/Backup

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

		System configuration										Min. configuration
		Inverter Type	25kW			50kW						
Cabinet QTY	kW	INVERTER QTY	1	1	2	3	4	5	6	8	10	Optional configuration
		A100-HY	52	1	1	2	3	4	5	6	8	
	104	2	2	3	4	5	6	8	10			
	208	4	4	6	8	10	12	15	20			
	312	6	6	9	12	15	20	25	30	40		
	416	8	8	12	16	20	25	30	40	50		
	520	10	10	15	20	25	30	40	50	60		