



UL9540 Certified

Optim US-M1C-30/94-US

All-In-One System

- ◆ Peak Shaving and Load Management
- ◆ Grid-tied and Off-grid Applications
- ◆ Black Start Capability
- ◆ Certified to the Latest Standards
- ◆ Full of Safety Features
- ◆ Smart and Free Monitoring

General Data

Dimension (W*D*H In)	52*44*86
Weight (Lb)	7716
Operating Temperature (°C)	-20~50
Standby Temperature (°C)	-20~60
Cooling/Heating Concept	HVAC (2KW)
Cabinet Protection Rating	IP55 (NEMA 3R)
Noise (Db)	≤65
Corrosion Resistance Grade	C3 (Standard Configuration) C5 (Optional)
Relative Humidity	0-95%RH, non-condensing
Installation Type	Cabinet installed on the ground (Applicable for hoist and forklift handling)
Communication Type	Modbus TCP/IP

	Optim US-A1-M1C-A-30KW/47-US-05	Optim US-A1-M1C-A-30KW/47-US-05
AC Data		
Rated Power (kW)	30	
Nominal Ac Voltage (V)	120/208	
Max. Output Current (A)	83.4	
Rated Frequency (Hz)	60	
Wiring Method	Three-phase four wire +PE	
On-Off Grid Switching (Ms)	5ms	
Input Data (PV)		
Rated Power (kW)	39	
Max. Short Circuit Current/MPPT (A)	55+55+55+55	
Max. Operating Current/MPPT (A)	36+36+36+36	
Max. Open Circuit Voltage (V)	550	
Nominal Voltage Range (V)	150-500	
Startup Voltage (V)	180	
MPPT Qty./Strings per MPPT	4/2	
Input Data (Battery)		
Rated Energy (KWh)	47.36	94.72
Rated Voltage (V)	320	320
Battery Voltage Range (V)	270-360	270-360
Charge/Discharge Max. Current	100	100
MBMS Qty.	1	1
BMS Qty.	1	2
Battery String Qty.	1	2
Battery Module Qty.	10	10*2
System Efficiency		
Round-trip Efficiency	96%	
Protection and Safety		
PV DC Disconnect Switch	Integrated	
Ground Fault Detection	Integrated	
PV Rapid Shutdown Control	Integrated	
PV Arc Fault Detection	Integrated	
PV Input Lightning Protection	Integrated	
PV Reverse Polarity Protection	Integrated	
Surge Protection	DC type II / AC type II	
Fire Alarm	Smoke and Heat sensors	
Anti-Explosion Fan & Gas Detector	Integrated	
Water Fire Fighting System	Integrated	
Fire Extinguishing	Aerosol	
Certifications		
Grid Interconnection Standards	UL1741 SA, UL1741 SB, IEEE1574, CSAC22.2 No 107.1-16, HECO Rule 14H UL1699B	
FCC Compliance	Yes	
BESS Standards	UL9540	
Battery Standards	UL9540A, UL1973	