



**UL9540 Certified**

# Optim US-M1C-60/99-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

AC Data	
Rated Power (kW)	60
Nominal Ac Voltage (V)	277/480
Max. Output Current (A)	72.2
Rated Frequency (Hz)	60
Wiring Method	Three-phase four wire +PE
On-Off Grid Switching (Ms)	5ms
Input Data (PV)	
Rated Power (kW)	78
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 - 850V
Startup Voltage (V)	180
MPPT Qty./Strings per MPPT	4/2
Input Data (Battery)	
Rated Energy (KWh)	99.5
Rated Voltage (V)	672
Battery Voltage Range (V)	567-756
Charge/Discharge Max. Current	100
MBMS Qty.	1
BMS Qty.	1
Battery String Qty.	1
Battery Module Qty.	21
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 III
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 1071-16, HECO Rule 14H, UL1699B
FCC Compliance	Yes
BESS Standards	UL9540
Battery Standards	UL9540A, UL1973