

60K-3P-480V Spec Sheet



Solar Input Power 78,000V	
Max Allowed PV Power	78,000W
Max PV Power Delivered to Battery & AC Outputs	60,000W
Max DC Voltage (Voc)	1,000V @ 36A
MPPT Voltage Range	200-850V
Starting Voltage	180V
Number of MPPT	4
Max Solar Strings Per MPPT	2
Max DC Current per MPPT (Self Limiting)	36A
Max AC Coupled Input (Micro / String Inverters)	120kVA w/ no PVdc 60kVA w/ 78kW PVdc

AC Output Power 60kW On-Grid & Off-Grid		
Connections	277V / 480V Three Phase	
Continuous AC Power with PV	60,000W 72.2A (480V)	
Continuous AC Power from Batteries	60,000W 72.2A (480V)	
Surge AC Power 7 sec	120,000VA 144.4A x 277V x 3	
Parallel Stacking	Yes - Up to 12*	
Frequency	60/50Hz	
Continuous AC Power with Grid or Generator	132,000W 160A L-N (277V)	
CEC Efficiency	96.5% (Peak 97.5%)	
Idle Consumption Typical—No Load	60W	
Sell Back Power Modes	Limited to Household/Fully Grid-Tied	
Design (DC to AC)	Transformerless DC	
Response Time (Grid-Tied to Off-Grid)	5ms	
Power Factor	+/- 0.8 - 1.0	

Battery (optional) Output Power 60,000V		
Type Number of Inputs	Li-lon 2 Inputs	
Nominal DC Input	>600V	
Capacity	50 — 9,900Ah	
Voltage Range	160V ~ 800V	
Continuous Battery Charging Output	100A (50A Per Input)	
Charging Curve	3-Stage w/ Equalization	
Grid to Batt Charging Efficiency	96.0%	
Battery Fuse	Integrated	
Current Shunt for Accurate % SOC	Integrated	
External Gen Start Based on Voltage or %SOC	Integrated	
REQUIRED communications to Lithi-	CanBus & RS485	

General	
Dimensions (H x W x D)	35.2" x 20.8" x 11.6"
Weight	172 lbs
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-40~60°C, >45°C Derating
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty (verified by HALT Testing)	10 years

Protections & Certifications	
Electronics Certified Safety by TÜV Labs to NEC & UL Specs - NEC 690.4B & NEC 705.4/6	Yes
This Grid support Interactive Inverter complies with UL 1741-2021 (incl UL1741SB), CSA C22.2 No 107.1-16, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0), UL1699B Arc-Fault Circuit-protection Type 1.	Yes
PV DC Disconnect Switch — NEC 240.15	Integrated
Ground Fault Detection — NEC 690.5	Integrated
PV Rapid Shutdown Control — NEC 690.12	Integrated
PV Arc Fault Detection — NEC 690.11	Integrated
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Surge Protection	DC Type II / AC Type III

^{*}Pending. Please contact Sol-Ark before designing or installing a parallel system.