



30K-3P-208V-N Spec Sheet



Battery (optional) Output Power 30,000W	
Type Number of Inputs	Li-Ion 2 Inputs
Nominal DC Input	> 300V
Capacity	50 — 9900Ah
Voltage Range	150V—550V
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
Communication to Lithium Battery*	CanBus & RS485

*ONLY works with Li-Batteries under Closed-Loop Communications

Solar Input Power 39,000W	
Max Allowed PV Power	39,000W
Max PV Power Delivered to Battery & AC Outputs	30,000W
Max DC Voltage (Voc)	500V @ 36A
MPPT Voltage Range	170-500V
Starting Voltage	150V
Number of MPPT	4
Max Solar Strings Per MPPT	2
Max DC Current per MPPT (Self Limiting)	36A
Max AC Coupled Input into GEN terminal (Micro / String Inverters)	60kVA w/ no PV _{DC} ** 30kVA w/ 39kW PV _{DC}

** Software Limitation: 180A x 120V x 3

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

AC Output Power 30kW On-Grid & Off-Grid	
Connections	120V / 208V Three Phase
Continuous AC Power with PV	30,000W 83.4A (208V)
Continuous AC Power from Batteries	30,000W 83.4A (208V) TBD
Surge AC Power 7 sec	60,000VA 167A x120V x 3
Parallel Stacking	Yes—Up to 12
Frequency	60/50Hz
Continuous AC Power with Grid or Generator	72,000W 200A L-L (208V) ** 36,000W 200A L-N (120V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption Typical—No Load	TBD
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

Protections & Certifications	
Electronics Certified Safety by SGS Labs to NEC & UL Specs - NEC 690.4B & NEC 705.4/6	Pending
Grid Sell Back — UL1741-2010/2018, IEE-E1547a-2003/2014, FCC 15 Class B, UL1741SB, CA Rule 21, HECO Rule 14H	Pending
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 II