

Commercial: 30K-3P-208V



Perfect for Light Commercial

Simplifies adding energy storage to small commercial buildings.

Native 120/208 3P output simplifies installation removing the need for bulky step-down transformers

AC/DC Coupling Capability

Enabling seamless integration with existing grid-tied PV systems

Allows for efficient DC coupling using the integrated 4x channel MPPT charge controller.

Modular & Scalable Energy

Modular and flexible design allowing for easy installation and expansion.

Accommodates a range of system sizes with outputs starting from 30kW going to 300kW

Seamless Backup Power

Helps met your corporate renewable energy goals and decarbonization efforts

Blazing fast 5ms transfer time with 200A grid relay allows for business continuity during grid outages.

DATASHEET

30K-208V

C&I Hybrid Inverter

Inverter Model Name:

30K-3P-208V

Sol-Ark Product SKU:

30K-3P-208V

Input Data (PV)

Max. Allowed PV Power (STC)	39,000W
MPPT Voltage Range	150-500V
Startup Voltage	180V
Max. Input Voltage ¹	550V
Max. operating input current per MPPT	36A
Max. short circuit current per MPPT	55A
No. of MPP Trackers	4
No. of PV Strings per MPPT	2
Max. AC Coupled Input Power	30,000W

Output Data (AC)

Nominal AC Voltage (3Φ)	120/208V
Grid Frequency	50 / 60Hz
Real Power, max continuous (3Φ)	30,000W
Max. Output Current	83.4A
Peak Apparent Power (10s, off-grid, 3Φ)	45,000VA
Max. Grid Passthrough Current (10min)	200A
Continuous Grid Passthrough Current	180A
Power Factor Output Range	+/- 0.8 adjustable
Backup Transfer Time	5ms (adjustable)
CEC Efficiency	96.5%
Max Efficiency	97.5%
Design (DC to AC)	Transformerless DC
Stackable	Up to 10 in parallel

Battery Input Data (DC)

Battery Chemistry	Lithium iron phosphate
No. of Battery Inputs	2
Battery Input Terminal Rating	50A
Nominal DC Voltage	≥300V
Operating Voltage Range	160 - 500V
Battery Capacity Range	50 – 9900Ah
Max. Battery Charge / Discharge Current	100A (50A per input)
Charge Controller Type	3-Stage with Equalization
Grid to Battery Charging Efficiency	96.0%
Automatic Generator Start (AGS)	2 Wire Start - Integrated
BMS Communication ²	CANBus & RS485

General Data

Dimensions (H x W x D)	894 x 528 x 295 mm (35.2 x 20.8 x 11.6 in)
Weight	80 Kg / 176 lb.
Enclosure	IP65 / NEMA 3R
Operating Temperature	-40 – 60°C, >45°C Derating
Noise Level	< 30 dB @ 25°C (77°F)
Idle Consumption - No Load	60W
Communication and Monitoring	Wi-Fi & LAN Hardware Included
Warranty ³	10 Years (15 Years)

Category

Certifications and Listings (Grid Support Interactive Inverter)	UL 1741-2021 (UL1741SB), CSA C22.2 No 107.1-16, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0), UL 1741 CRD-PCS, UL1699B, CEC, SGIP, CSIP
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

1. See Installation Guide for more details on sizing array strings. The highest input voltage is based on the open-circuit voltage of the array at the minimum design temperature.

2. Active BMS communication is required for all lithium batteries. A list of compatible batteries can be found on our website.

3. 5-year extension is available for purchase by registered Gold level installers only.