

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 meet 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-ion |
| 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 | CC/CV - BMS Controlled |
| Grid to Battery Charging Efficiency | 96.0% |
| Automatic Generator Start (AGS) | 2 Wire Start - Integrated |
| BMS Communication ² | CAN (Controller Area Network) |

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 | 10 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 battery partners can be found on our website.

Sol-Ark has a policy of continuous improvement and reserves the right to modify its specifications at any time and without prior notice. Please visit sol-ark.com for the latest information.