

Commercial: 60K-3P-480V



French Cleat for easy installation

X2 Built-in solar array disconnect

Remote WIFI / Ethernet and local monitoring

Outdoor rated NEMA 3R

Perfect for Heavy Commercial

Simplifies adding energy storage to commercial buildings

Native 277/480 3 phase output simplifies installation

Helps meet your corporate renewable energy goals and decarbonizations efforts

AC/DC Coupling Capability

Enabling seamless integration with existing solar PV systems

Seamless integration with new arrays

Modular & Scalable Energy

Modular and flexible design allowing for easy energy expansion

Accommodates growing energy needs from 60kW to 600kW

Seamless Backup Power

Provides reliable blazing fast 5ms transfer and backup power during grid outages

200A grid pass-through for simple grid-tied and backup applications

Ensures business continuity

DATASHEET

60K-480V

C&I Hybrid Inverter

Inverter Model Name:

60K-3P-480V

Sol-Ark Product SKU:

60K-3P-480V

Input Data (PV)

Max. Allowed PV Power (STC)	78,000W
MPPT Voltage Range	150-850V
Startup Voltage	180V
Max. Input Voltage ¹	1,000V
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	60,000W

Output Data (AC)

Nominal AC Voltage (3Φ)	277/480V
Grid Frequency	50 / 60Hz
Real Power, max continuous (3Φ)	60,000W
Max. Output Current	72.3A
Peak Apparent Power (10s, off-grid, 3Φ)	90,000VA
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	≥ 600V
Operating Voltage Range	160 - 800V
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
Ambient Temperature	-40 – 60°C, >45°C Derating
Noise	< 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 ⁴
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.

4. Pending listing.