

Sol-Ark Commercial Energy Solutions

A global energy technology leader with over 6 generations of hybrid inverters

Deep engineering expertise in smart energy solutions

A track record of results. For over a decade, Sol-Ark has been solving complex energy challenges with innovation and technology

Powered by a vast ecosystem including thousands of distributors, installers, EPCs, integrators, and battery manufacturers

Trusted by global Fortune 500 companies in telecommunications, retail, big tech, restaurants, and the largest space agency in the world

DATASHEET

60K-3P-480V

C&I Hybrid Inverter

Insuch Dieter (DV)	
Input Data (PV)	70.000
Max. Allowed PV Power (STC)	78,000W
Nominal Voltage Range	150-850V
Startup Voltage	150V
Max. Input Voltage ¹	1,000V
Max. operating input current per MPPT	36А
Max. short circuit current per MPPT	55A
No. of MPP Trackers	4
No. of PV Strings per MPPT	2
Max. AC Coupled Input	120,000W
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 (7s, off-grid, 3Φ)	120,000VA @ 144A
Max. Grid Passthrough Current	200A
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 12 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	79.4 kg (172 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	10 Years (15 Years ⁴⁾
Category	
Contifications and Listings	UL 1741-2021 (incl UL1741SB),
Certifications and Listings (Grid Support Interactive Inverter)	CSA C22.2 No 107.1-16, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0), UL1699B, CEC ³ , SGIP ³
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
	t voltage is based on the voltage open-circuit of the array at the minimum design temperature.

 See Installation Guide for more details on sizing array strings, the highest input voltage is based on the voltage open-circul
Active BMS communication is required for all lithium batteries. A list of compatible batteries can be found on our website.
Currently pending listing.
5-year extension is available for purchase by registered Gold level installers only. of the array at the minimum design tempera