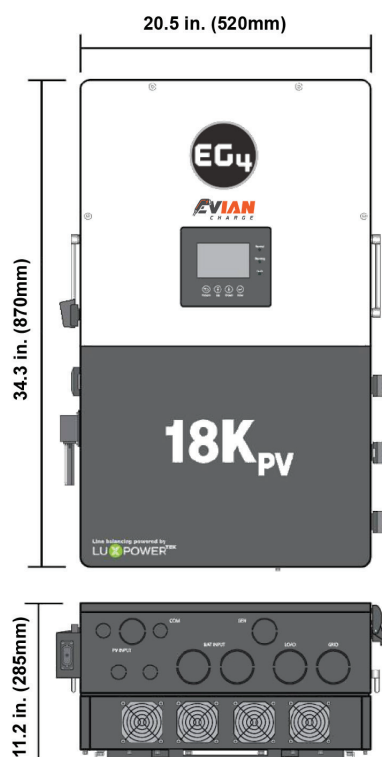


EV-EG4 18KPV

HYBRID INVERTER



The **EG4 18kPV** is a 48V split-phase, hybrid inverter/charger capable of utilizing 18kW of PV and efficiently outputting 12kW of power while charging the battery bank. Parallel up to 10 units for 120kW of AC power. Control multiple stations and units using the new EG4 monitoring software.



ALL-IN-ONE HYBRID INVERTER

Capable of running entirely off the grid, using grid assist, or selling power back to the grid.

UP TO 600VDC INPUT

The extra high voltage enables lower cable sizing for the 3 MPPTs with a recommended maximum PV input of 21kW, eliminating the need for a combiner box.

MOUNTABLE WI-FI DEVICE

Enables wireless connection between our new monitoring platform and the 18kPV through the EG4 app or EG4 Monitor system.

CLOSED-LOOP COMMUNICATIONS

Able to communicate with EG4 48V batteries and other battery brands. A battery firmware update is required for closed-loop communications with LifePower4 batteries.

HIGH FREQUENCY, SPLIT-PHASE OUTPUT

Allows for 120/240V single unit or 120/208 service operation.

- AC COUPLING CAPABILITY
- REMOTE ADJUSTMENT VIA EG4 SOFTWARE



EV-EG4 18KPV



HYBRID INVERTER

AC INPUT DATA

NOMINAL AC VOLTAGE	120/240VAC; 120/208VAC (L1/L2/N required)
FREQUENCY	50/60Hz
MAX. AC CURRENT	50A @ 240VAC
MAX. AC INPUT POWER	12000W
MAX. AC BYPASS	200A

AC GRID OUTPUT DATA

MAX. OUTPUT CURRENT	50A
OUTPUT VOLTAGE	120/240VAC; 120/208VAC (L1/L2/N required)
OPERATING VOLTAGE RANGE	180-270VAC
NOMINAL POWER OUTPUT	@240V 12000W @208V 10400W
FREQUENCY	50/60Hz
POWER FACTOR	0.99 @ Full Load
REACTIVE POWER ADJUST RANGE	(-0.8) $\approx$ (+0.8) Leading Adjustable
MAX CONT. LINE WATTAGE	6000W
PEAK POWER (SURGE CAPACITY)	w/ PV: 14700W (10 min), 15500W (5 min) W/O PV: 13500W (10 min)
THD @FULL LOAD	<5%
TRANSFER TIME	20ms (Default), 10ms (Configurable) Parallel - 20ms

BACKUP/UPS AC OUTPUT DATA

RATED OUTPUT CURRENT (240/208VAC)	50A
AC BYPASS (GENERATOR)	90A
NOMINAL OUTPUT VOLTAGE	240 120/240 120/208VAC
RATED OUTPUT POWER	@240VAC 12000W @208VAC 10400W
MAX. CONTINUOUS LINE WATTAGE	8000W per 120V
PEAK POWER	w/ PV: 14700W (10 min), 15500W (5 min) w/o PV: 13500W (10 min)
THDV (TOTAL HARMONIC DISTORTION VOLTAGE)	<5%
SWITCHING TIME	10ms

EV-EG4 18KPV



HYBRID INVERTER

PV INPUT DATA

NUMBER OF MPPTS	3
INPUTS PER MPPT	2 (MPPT 1) 1 (MPPT 2) 1 (MPPT 3)
MAX. USABLE INPUT CURRENT	25A (MPPT 1) 15A (MPPT 2) 15A (MPPT 3)
MAX. SHORT CIRCUIT INPUT CURRENT	31A (MPPT 1) 19A (MPPT 2) 19A (MPPT 3)
DC INPUT VOLTAGE RANGE	100-600 VDC
UNIT STARTUP VOLTAGE	100 VDC
MPPT OPERATING VOLTAGE RANGE	140-500 VDC
NOMINAL MPPT VOLTAGE	360 VDC
MAXIMUM UTILIZED SOLAR POWER	18000W
RECOMMENDED MAXIMUM SOLAR INPUT	21000W

EFFICIENCY

CEC	3
MAXIMUM EFFICIENCY (PV TO GRID)	2 (MPPT 1) 1 (MPPT 2) 1 (MPPT 3)
MAXIMUM EFFICIENCY (BATTERY TO GRID)	25A (MPPT 1) 15A (MPPT 2) 15A (MPPT 3)
MAXIMUM EFFICIENCY (PV TO BATTERY)	31A (MPPT 1) 19A (MPPT 2) 19A (MPPT 3)
IDLE CONSUMPTION (NORMAL STANDBY MODE)	100-600 VDC

BATTERY DATA

COMPATIBLE BATTERY TYPES	Lead-acid/Lithium
MAX. CHARGE/DISCHARGE CURRENT	250A
NOMINAL VOLTAGE	48 VDC
VOLTAGE RANGE	40-60 VDC (Lithium); 40-60 VDC (Lead-acid)
RECOMMENDED BATTERY CAPACITY PER INVERTER	>200Ah

EV-EG4 I8KPV



HYBRID INVERTER

GENERAL DATA

MAX. UNITS IN PARALLEL	10
PRODUCT DIMENSIONS (H×W×D)	34.3×20.5×11.2 in (870×520×285mm)
UNIT WEIGHT	121 lbs. (55kg)
DESIGN TOPOLOGY	High Frequency - Transformerless
RELATIVE HUMIDITY	0-100%
OPERATING ALTITUDE	<2000m (<6561ft)
OPERATING AMBIENT TEMPERATURE RANGE	-13°F - 140°F (-25°C - 60°C)
STORAGE AMBIENT TEMPERATURE RANGE	-13°F - 140°F (-25°C - 60°C)
NOISE EMISSION (TYPICAL)	68dB @ 3ft
COMMUNICATION INTERFACE	RS485/Wi-Fi/CAN
STANDARD WARRANTY*	10-year standard warranty
OUTDOOR RATING	NEMA 4X
SAFETY FEATURES	PV Arc Fault Protection, PV Ground Fault Protection, PV Reverse Polarity Protection, Pole Sensitive Leakage Current Monitoring Unit, Surge Protection Device, Integrated PV Disconnect

STANDARDS AND CERTIFICATIONS

UL1741B RULE 21

RAPID SHUT DOWN (RSD) NEC 2020:690.12

ARC-FAULT CIRCUIT INTERRUPTER (AFCI) NEC 2020:690.11 / UL1699B

GROUND FAULT MONITORING (GFDI) NEC 2020:690.41(B)

CSA 22.2.107.1

CSA 22.2.330

IEEE 1547.1:2020; IEEE 1547:2018

HAWAII RULE 14H

CALIFORNIA RULE 21 PHASE I, II, III

FCC PART 15, CLASS B