

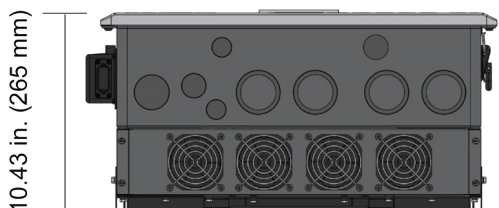
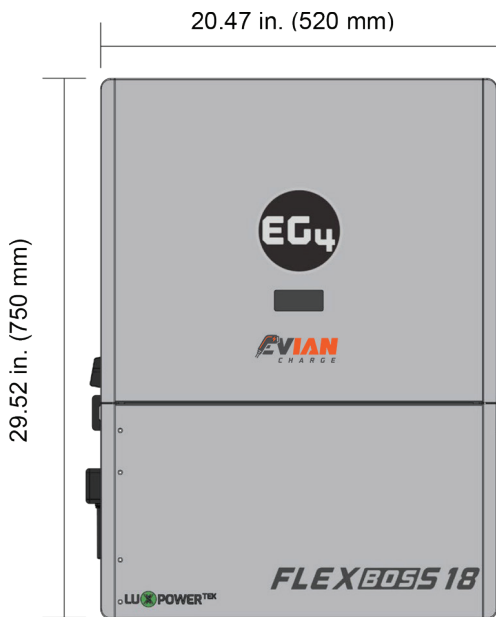
# EV-FLEXBOSS 18



## HYBRID INVERTER

The **EV-FLEXBOSS 18** is a 13kW, 120/240VAC split-phase, all-in-one hybrid sine wave inverter, designed for residential and small commercial applications. It supports up to 18kW (STC) of solar PV input across two MPPTs (26A each) and can deliver 10kW of continuous power from the battery or 13kW with solar PV assistance when grid-connected. The FlexBOSS18 also features a 90A grid bypass capability, allowing seamless power flow from the grid to connected loads.

As the more affordable, entry-level counterpart to the FlexBOSS21, the FlexBOSS18 offers a powerful solution for energy independence. While fully capable as a standalone inverter, it is optimized for use with EG4's GridBOSS power gateway, unlocking enhanced functionality and performance for the end user.



- HIGH FREQUENCY SPLIT-PHASE DESIGN
- REMOTE ADJUSTMENT VIA EG4 SOFTWARE

### ALL-IN-ONE HYBRID INVERTER

Capable of running entirely off grid, using grid electricity, and selling power back to the grid.

### UP TO 600VDC INPUT

The extra high voltage enables lower cable sizing for the 2 MPPTs and a maximum recommended PV input of 18kW, eliminating the need for a combiner box.

### PLUG-IN WI-FI DEVICE

Enables wireless connection between our monitoring platform and the FlexBOSS18 through the EG4® app or EG4 Monitor system for remote system management.

### 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 V1 batteries.

### RAPID SHUTDOWN

The FlexBOSS18 is CSA C22.2#330:2017 and NEC 690.12 ready with its built-in RSD capabilities.



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## HYBRID INVERTER



### INVERTER TYPE & MODEL #

HYBRID	IV-13000-HYB-AW-FX-XX (XX is a number between 0-99)
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### AC GRID OUTPUT DATA

NOMINAL GRID VOLTAGE (INPUT & OUTPUT)	240 VAC   208 VAC
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FREQUENCY	60Hz Default (50Hz Capable)
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MAX. CONTINUOUS DISCHARGE RATE	10kW
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MAX. APPARENT POWER	13kW (54A @240V) / 11.2kW (54A @208V)
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MAX. CONTINUOUS CURRENT @ 45°C	54A
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MAX. CONTINUOUS DISCHARGE W/ PV & GRID ONLY @ 45°C	10kW   13kW
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POWER FACTOR (OUTPUT)	0.6 - 1.0
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PEAK POWER	20000W (.5 sec)   15000W (1 sec)   135000W (1 min) 12500W (6 min)   11000W (12 min)
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MAX. OUTPUT FAULT CURRENT	w/ PV: 14700W (10 min), 15500W (5 min) W/O PV: 13500W (10 min)
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MAX. PASSTHROUGH FROM GRID	90A
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THD V (VOLTAGE)	<3% @ full load
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THD I (CURRENT)	<5% @ full load
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BACKUP SWITCHING TIME (TRANSFER TIME)	20ms (Default), 10ms (Configurable), 20ms (Parallel)
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OPEN LOOP RESPONSE TIME (OLRT)	≤2 sec
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TIME TO STEADY STATE	<10 sec
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MAX. CONTINUOUS PER-LINE WATTAGE	6500W
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### EFFICIENCY

BATTERY TO GRID/LOAD	94%
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PV TO GRID/LOAD	97.5%
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PV TO BATTERY	94.5%
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CEC EFFICIENCY (CALIFORNIA ENERGY COMMISSION)	Pending
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### SOLAR TECHNICAL SPECS

MAX. SOLAR STC INPUT POWER	18kW
MAX. PV INPUT VOLTAGE	600 VDC
MPPT VOLTAGE RANGE	120V – 440 VDC
MPPT FULL POWER VOLTAGE RANGE	250V – 440 VDC
# OF MPPTS   # OF STRINGS PER MPPT	2/2
MAX. CURRENT PER MPPT	26A/26A
MAX. SHORT-CIRCUIT CURRENT RATING PER MPPT	31A/31A
NOMINAL MPPT VOLTAGE	360 VDC
UNIT STARTUP VOLTAGE	200 VDC

### BATTERY TECHNICAL SPECS

COMPATIBLE BATTERY TECHNOLOGIES	18kW
OPERATING VOLTAGE	600 VDC
NOMINAL VOLTAGE	120V – 440 VDC
MAX. CHARGE/DISCHARGE CURRENT	250V – 440 VDC
# OF MPPTS   # OF STRINGS PER MPPT	2/2
MAX. CURRENT PER MPPT	26A/26A
MAX. SHORT-CIRCUIT CURRENT RATING PER MPPT	31A/31A
NOMINAL MPPT VOLTAGE	360 VDC
UNIT STARTUP VOLTAGE	200 VDC

### ENVIRONMENTAL

OPERATING TEMPERATURE RANGE	-13°F – 140°F (-25°C – 60°C); > 45°C Derating
OPERATING HUMIDITY	0 – 100%
MAX. ALTITUDE OF OPERATION	<2000m (<6561ft)
ENCLOSURE RATING	NEMA 4X
STORAGE TEMPERATURE RATING	-13°F – 140°F (-25°C – 60°C)
COOLING (OR COOLING CONCEPT)	Fans

# EVian-EG4<sup>®</sup> FLEXBOSS18

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### GENERAL SPECIFICATIONS

DIMENSIONS (H x W x D)	30.43 x 22.8 x 11.2 in. (773 x 579 x 285 mm)
TOTAL WEIGHT	115 lbs. (52 kg)
MOUNTING OPTION(S)	Wall mount
USER INTERFACE	APP/Web/LCD (optional)
SCALABILITY	10
INVERTER IDLE CONSUMPTION @ NO LOAD	<60W (Standby) @ 25°C
NOISE	<50dB @ 3 ft.
LOCKED ROTOR AMPS (LRA)	195A

### COMPLIANCE

CERTIFICATIONS	Conforms to ULSTD.1741,1741SA,1741SB, 1741 PCS CRD Conforms to IEEE STD.1547.1547a and 1547.1 Conforms to HECO SRD-IEEE-1547.1:2020 Ed.2.0 Conforms to CSA 22.2#107.1:2016 Ed. 4 Conforms to CSA 22.2#330:2017 Ed. 1
PROTECTIONS	Over current/voltage protection, PV reverse polarity protection, Anti-islanding protection, AC short-circuit protection, Leakage current protection, AC/DC surge protection
WARRANTY (*)	12 years
EMISSIONS	FCC Part 15 Class B
SAFETY	RSD NEC 2020:690.12 AFCI NEC 2020:690.11/UL1699B GFCI NEC 2020:690.41 (B)

\*For information regarding warranty registration on EG4<sup>®</sup> Electronics products, please navigate to <https://eg4electronics.com/warranty/> and select the corresponding product to begin the registration process.