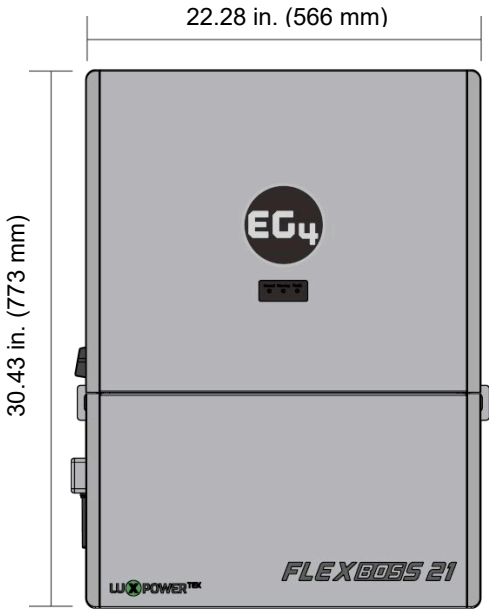

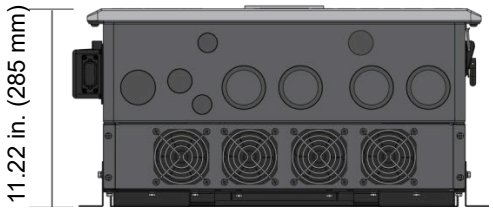

EG4® FLEXBOSS21 HYBRID INVERTER

The EG4 FlexBOSS21 is a versatile 48V split-phase, hybrid inverter/charger that offers the same dependable power as the 18kPV with enhanced flexibility. Powerful enough to start a 5-ton AC unit, the FlexBOSS21 supports up to 21kW of PV input. Capable of paralleling up to 10 units together, the FlexBOSS21 has an impressive total output of 160kW. Able to provide 16kW of continuous output power with PV & battery, and up to 12kW continuous output by using battery alone. Three individual MPPTs give users optimal control over their solar needs, while the updated EG4 monitoring software allows for convenient total remote management, complete with mobile notifications and remote setting. Seamless interaction with the EG4 GridBOSS gives users control over the entire Energy Storage System (ESS).

HIGH FREQUENCY SPLIT-PHASE DESIGN

*10-YEAR WARRANTY

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 3 MPPTs and a maximum recommended PV input of 24kW, eliminating the need for a combiner box.

PLUG-IN WI-FI DEVICE

Enables wireless connection between our monitoring platform and the FlexBOSS21 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 batteries.

RAPID SHUTDOWN

The FlexBOSS21 is CSA C22.2#330:2017 and NEC 690.12 ready with its built-in RSD capabilities.

VERSION 1.2.1 | INFORMATION SUBJECT TO CHANGE WITHOUT NOTICE.
MODEL#: IV-16000-HYB-AW-FX-**XX** (**XX** is a number between 00-99)

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

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TECHNICAL SPECIFICATIONS

INVERTER TYPE & MODEL #	
HYBRID	IV-16000-HYB-AW-FX-**XX** (**XX** is a number between 00-99)
AC INPUT/OUTPUT	
NOMINAL GRID VOLTAGE (INPUT & OUTPUT)	120/240 VAC; 120/208 VAC (L1/L2/N required)
FREQUENCY	60 Hz (Default) | 50 Hz
MAX. CONTINUOUS OUTPUT POWER	12kW
MAX. APPARENT POWER	12KVA
MAX. CONTINUOUS CURRENT @ 25°C	66.7A
MAX. CONTINUOUS DISCHARGE W/ PV & GRID ONLY @ 25°C	w/ PV: 16000W @240V | 13800kW @208V w/ out PV: 12000W @240V | 12000W @208V
POWER FACTOR (OUTPUT)	.99 @ Full Load
PEAK POWER	24000W (.5 sec) | 18000W (1 sec) 15000W (6 min) | 13200W (12 min)
MAX OUTPUT FAULT CURRENT	156A
MAX PASSTHROUGH FROM GRID	90A
THD V (VOLTAGE)	<5% at full load
THD I (CURRENT)	<5% at full load
BACKUP SWITCHING TIME (TRANSFER TIME)	20ms (Default), 10ms (Configurable)
OPEN LOOP RESPONSE TIME (OLRT)	<2 sec
TIME TO STEADY STATE	10 sec
MAX CONTINUOUS LINE WATTAGE	6000W
MAX. AC CURRENT	50A @ 240V | 57.7A @ 208V
MAX. AC INPUT POWER	12kW
MAX. CONTINUOUS PER-LINE WATTAGE	6000W
EFFICIENCY	
BATTERY TO GRID/LOAD	94%
PV TO GRID/LOAD	97%
PV TO BATTERY	94.5%
CEC EFFICIENCY (CALIFORNIA ENERGY COMMISSION)	96.9%
SOLAR TECHNICAL SPECS	
MAX. SOLAR STC INPUT POWER	21kW
MAX. PV INPUT VOLTAGE	600VDC
MPPT VOLTAGE RANGE (*)	120 – 440 VDC
MPPT FULL POWER VOLTAGE RANGE	250 – 440 VDC
# OF MPPTS | # OF STRINGS PER MPPT	3 | 2 (MPPT 1) | 2 (MPPT 2) | 1 (MPPT 3)
MAX. CURRENT PER MPPT	26A (MPPT 1) | 26A (MPPT 2) | 15A (MPPT 3)
MAX. SHORT CIRCUIT CURRENT RATING PER MPPT	31A (MPPT 1) | 31A (MPPT 2) | 19A (MPPT 3)
NOMINAL MPPT VOLTAGE	360 VDC
LOAD OUTPUT MINIMUM VOLTAGE	>140 VDC
UNIT STARTUP VOLTAGE	100 VDC
BATTERY TECHNICAL SPECS	
COMPATIBLE BATTERY TECHNOLOGIES	Lead-acid/Lithium
OPERATING VOLTAGE	40-60VDC
NOMINAL VOLTAGE	48V
MAX CHARGE/DISCHARGE CURRENT	250ADC
BATTERY COMMUNICATION PROTOCOL	CAN/RS485

ENVIRONMENTAL	
OPERATING TEMPERATURE RANGE	-13° – 140°F (-25° – 60°C)
OPERATING HUMIDITY	0-100% relative humidity
MAX ALTITUDE OF OPERATION	<6561 ft (<2000 m)
ENCLOSURE RATING	NEMA 4X
STORAGE TEMPERATURE RATING	-13° – 140°F (-25° – 60°C)
COOLING (OR COOLING CONCEPT)	Fans
GENERAL SPECIFICATIONS	
DIMENSIONS (H x W x D)	30.43 × 22.28 × 11.22 in. (773 × 566 × 285 mm)
TOTAL WEIGHT	121 lbs. (55 kg)
MOUNTING OPTION(S)	Wall mount
USER INTERFACE	APP/WEB/LCD (optional)
SCALABILITY	10 units
INVERTER IDLE CONSUMPTION @ NO LOAD	<65W @ 25C
NOISE	<50dB @ 3 ft
LOCKED ROTOR AMPS	195A
COMPLIANCE	
CERTIFICATIONS	UL1741, SA, SB, PCS CRD California Rule 21 Phase I, II, III CSA 22.2.107.1:2016 Ed. 4 CSA 22.2.330:2017 Ed. 1 IEEE 1547.1:2020; IEEE 1547:2018 Hawaii Rule 14H [HECO SRD IEEE 1547.1-2020 Ed.2]
PROTECTIONS	Arc-Fault Circuit Interrupter (AFCI) NEC 2020:690.11/UL1699B Ground Fault Monitoring (GFDI) NEC 2020:690.41(B) Rapid Shutdown (RSD) NEC 2020:690.12
WARRANTY (**)	10 years
EMISSIONS	FCC Part 15, Class B
SAFETY	Integrated DC disconnect, Reverse polarity protection, Output over-voltage protection varistor, Output over current protection, Ground fault monitoring, Grid monitoring, Pole sensitive leakage current monitoring unit, AFCI, RSD

When sizing the system, it is best practice to follow the nominal MPPT voltage specifications and not the minimum/maximum voltage of the MPPT voltage range.

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CHANGELOG

V1.2.1

- Added an asterisk to MPPT Operating Voltage Range line in spec sheet
- Added note after the spec sheet regarding MPPT Voltage Range asterisk

V1.2.0

- Added Load Output Minimum Voltage line and value to spec sheet

v1.1.9

- Reformatted Spec Sheet
- Added OLRT & Time to Steady State to Spec Sheet
- Corrected typos
- Modified max # of units in parallel from 16 to 10

v1.1.8

- Added surge capacity ratings
- Modified weight of unit

v1.1.7

- Added Locked Rotor Amps (LRA) value to spec sheet

v1.1.6

- Added “Full Power MPPT Voltage Range” to PV input data section
- Removed (pending) from FCC Part 15, Class B

v1.1.5

- Modified Nominal Power Output in spec sheet

v1.1.4

- Modified model # format on cover page

v1.1.3

- Modified intro. paragraph for clarity on paralleling output wattage

v1.1.2

- Updated Warranty Information

v1.1.1

- Correct QR code on cover page
- Modified verbiage in top paragraph to better highlight key features
- Modified FCC Part 15, Class B to show (pending)

v1.0

- Published