

## EG4 8KEXP-240V Hybrid Inverter/Charger

The EG4 8KEXP-240V is a standalone, split-phase output, 48volt, all-in-one hybrid inverter, AC charger, and solar MPPT charge controller unit. Parallel capacity is built in, with systems up to four units and 32kW capacity possible. The unit has a communication platform based on the integrated LCD control panel, allowing for on-site configuration, firmware updates, and WiFi-based cloud monitoring.



Closed Loop Communication with EG4 48V Batteries

8000W Continuous Output

#### **True Hybrid AC Output**

Sell excess power back to the grid.

#### 500 VDC Max

Extra high voltage means smaller wire size with 12,000W max PV input. No need for a combiner box.

#### Parallel up to 4 Units

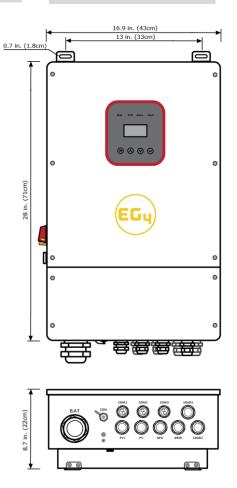
Stackable design to fulfill varying power needs.

#### Attachable Wi-Fi Unit

Wireless communication between the inverter and the monitoring platform. (App available in both Apple and Google Play Stores.)

### 120/240 AC Output in a Single Unit

The built-in pure copper transformer will produce 120/240V power in each unit.







# EG4 8KEXP-240V

#### Hybrid Inverter/Charger

Number of Stackable Inverters4Nominal AC Input Voltage120/240 VAC (11/L2/N required)Max AC Input Voltage Per Leg140VACNominal Input Frequency50Hz/60Hz (auto detection)Transfer TimeUPS Mode-10 ms typical   Appliance Mode-20 ms typicalBackup Mode Specifications8000WRated Output Power8000WOutput Voltage Regulation120/240VAC +/- 2%Output Voltage Regulation120/240VAC +/- 2%Output Voltage Regulation97% peakPV to Inverter Efficiency95% peakOverload Protection5s @ 150% load   10s @ 110% to 150% loadSurge Capacity12kW for 1 secondSurge Capacity120VDC - 500VDCMax PV Array Open Circuit500VDCMax PV Array Open Circuit120/215A (per MPPT)Input Draw4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental Specifications190AApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP Rating1P65/NEMA 3ROperating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP Rating1P65/NEMA 3ROperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications00% to 95% relative humidity (non-condensing)IP Rating1P65/NEMA 3ROber Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to	General Inverter Specifications	
Max AC Input Voltage Per Leg140VACNominal Input Frequency50Hz/60Hz (auto detection)Transfer TimeUPS Mode-10 ms typical   Appliance Mode-20 ms typicalBackup Mode Specifications8000WRated Output Power8000WOutput Voltage Regulation120/240VAC +/- 2%Output Voltage Regulation120/240VAC +/- 2%Output Voltage Regulation50Hz or 60Hz (selectable)Battery to Inverter Efficiency97% peakOverload Protection5s @ 150% load   10s @ 110% to 150% loadSurge Capacity12kW for 1 secondSolar Input Specifications120/00W (3000W per MPPT)Max PV Array Open Circuit500VDCMax PV Array Open Circuit500VDCMax PV Array Open Circuit12A/15A (per MPPT)Max PV Array Open Circuit190A(PV alone or combined AC and PV)190AEnvironmental Specifications190% to 95% relative humidity (non-condensing)IP Rating0% to 95% relative humidity (non-condensing)IP Rating1P65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty5 years with EG4 batteries in closed loop or	Number of Stackable Inverters	4
Nominal Input Frequency50Hz/60Hz (auto detection)Transfer TimeUPS Mode-10 ms typical   Appliance Mode-20 ms typicalBackup Mode Specifications8000WOutput Power8000WOutput Voltage Regulation120/240VAC +/- 2%Output Voltage Regulation120/240VAC +/- 2%Output Voltage Regulation50Hz or 60Hz (selectable)Battery to Inverter Efficiency97% peakOverload Protection5s @ 150% load   10s @ 110% to 150% loadSurge Capacity12kW for 1 secondSolar Input Specifications120/00W (3000W per MPPT)Max PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMax PV Array Open Circuit120/DC - 500VDCMax PX Array Open Circuit120/DC - 500VDCMax PX Array Open Circuit120/DC - 500VDCMax PX Array Open Circuit120/DC - 500VDCMax Charging Current190A(PV alone or combined AC and PV)190AEnvironmental Specifications-25°C to 60°COperating Temperature Range-25°C to 60°CApplication TypeOutdor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIde Power Consumption115W averageOperating Aftitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Nominal AC Input Voltage	120/240 VAC (L1/L2/N required)
Transfer TimeUPS Mode-10 ms typical   Appliance Mode-20 ms typicalBackup Mode Specifications8000WRated Output Power8000WOutput Voltage WaveformPure Sine Wave (<2% THD)	Max AC Input Voltage Per Leg	140VAC
Backup Mode SpecificationsRated Output Power8000WOutput Voltage RegulationPure Sine Wave (<2% THD)	Nominal Input Frequency	50Hz/60Hz (auto detection)
Rated Output Power8000WOutput Voltage WaveformPure Sine Wave (<2% THD)	Transfer Time	UPS Mode-10 ms typical   Appliance Mode-20 ms typical
Output Voltage WaveformPure Sine Wave (<2% THD)Output Voltage Regulation120/240VAC +/- 2%Output Frequency50Hz (selectable)Battery to Inverter Efficiency97% peakPV to Inverter Efficiency95% peakOverload Protection5s @ 150% load   10s @ 110% to 150% loadSuge Capacity12kW for 1 secondSolar Input Specifications8Rated Power12,000W (3000W per MPPT)Max PV Array Open Circuit500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental Specifications0wto 95% relative humidity (non-condensing)IP Rating0% to 95% relative humidity (non-condensing)IP Rating115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Operating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Warranty Information95 years with EG4 batteries in closed loop or	Backup Mode Specifications	
Output Voltage Regulation120/240VAC +/- 2%Output Frequency50Hz or 60Hz (selectable)Battery to Inverter Efficiency97% peakPV to Inverter Efficiency95% peakOverload Protection5s @ 150% load   10s @ 110% to 150% loadSurge Capacity12kW for 1 secondSolar Input Specifications500VDCMax PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMPP Range120VDC - 500VDCMax PV Array Open Circuit12A/15A (per MPPT)Input Draw190ANumber of MPPTs4Max Charging Current (PV alone or combined AC and PV)190AEnvironmental Specifications Operating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP Rating115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications Operating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications Operating Mititude0.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or		
Output Frequency50Hz or 60Hz (selectable)Battery to Inverter Efficiency97% peakPV to Inverter Efficiency95% peakOverload Protection5s @ 150% load   10s @ 110% to 150% loadSurge Capacity12kW for 1 secondSolar Input SpecificationsRated Power12,000W (3000W per MPPT)Max PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Input Draw190ANumber of MPPTs4Max Charging Current (PV alone or combined AC and PV)190AEnvironmental Specifications0% to 95% relative humidity (non-condensing)IP Rating1P65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Output Voltage Waveform	
Battery to Inverter Efficiency97% peakPV to Inverter Efficiency95% peakOverload Protection5s @ 150% load   10s @ 110% to 150% loadSurge Capacity12kW for 1 secondSolar Input Specifications12,000W (3000W per MPPT)Max PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Number of MPPTs4Max Charging Current (PV alone or combined AC and PV)190AEnvironmental Specifications0yet o 50% relative humidity (non-condensing)IP Rating0% to 95% relative humidity (non-condensing)IP Rating115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty5 years with EG4 batteries in closed loop or	Output Voltage Regulation	120/240VAC +/- 2%
PV to Inverter Efficiency95% peakOverload Protection5s @ 150% load   10s @ 110% to 150% loadSurge Capacity12kW for 1 secondSolar Input Specifications12,000W (3000W per MPPT)Rated Power12,000W (3000W per MPPT)Max PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental SpecificationsOutdoor/IndoorApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP Rating115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications00 to 9,842.5 ft. (0 to 3000m)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty5 years with EG4 batteries in closed loop or		
Overload Protection5s @ 150% load   10s @ 110% to 150% loadSurge Capacity12kW for 1 secondSolar Input Specifications12,000W (3000W per MPPT)Rated Power12,000W (3000W per MPPT)Max PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Input Draw12A/15A (per MPPT)Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental SpecificationsOutdoor/IndoorOperating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Dimensions (H×W>D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty5 years with EG4 batteries in closed loop or		
Surge Capacity12kW for 1 secondSolar Input Specifications12,000W (3000W per MPPT)Max PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Input Draw12A/15A (per MPPT)Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental Specifications0Operating Temperature Range-25°C to 60°CApplication Type0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Dimensions (H×W>D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty5 years with EG4 batteries in closed loop or	1	
Solar Input SpecificationsRated Power12,000W (3000W per MPPT)Max PV Array Open Circuit500VDCMax PV Array Open Circuit120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Input Draw12A/15A (per MPPT)Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental SpecificationsOperating Temperature Range-25°C to 60°CApplication Type0% to 95% relative humidity (non-condensing)IP Rating0% to 95% relative humidity (non-condensing)IP Rating0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0 to 9,842.5 ft. (0 to 3000m)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or		
Rated Power12,000W (3000W per MPPT)Max PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Input Draw12A/15A (per MPPT)Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental Specifications0Operating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or		12kW for 1 second
Max PV Array Open Circuit500VDCMPP Range120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Input Draw12A/15A (per MPPT)Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental Specifications0Operating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications0% to 91% relative functionsDimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Solar Input Specifications	
MPP Range120VDC - 500VDCMax Input Current Draw/Short Circuit12A/15A (per MPPT)Input Draw12A/15A (per MPPT)Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental Specifications0Operating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications28×17×8.6 in. (71×43×22 cm)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Rated Power	12,000W (3000W per MPPT)
Max Input Current Draw/Short Circuit12A/15A (per MPPT)Input Draw4Number of MPPTs4Max Charging Current190A(PV alone or combined AC and PV)190AEnvironmental SpecificationsOperating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications28×17×8.6 in. (71×43×22 cm)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Max PV Array Open Circuit	500VDC
Input DrawIZA/ISA (per MPPT)Number of MPPTs4Max Charging Current (PV alone or combined AC and PV)190AEnvironmental Specifications190AOperating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption0% to 9,842.5 ft. (0 to 3000m)Physical Specifications0Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	MPP Range	120VDC – 500VDC
Number of MPPTs4Max Charging Current (PV alone or combined AC and PV)190AEnvironmental SpecificationsOperating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical SpecificationsDimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty InformationWarranty5 years with EG4 batteries in closed loop or	•	12A/15A (per MPPT)
(PV alone or combined AC and PV)190AEnvironmental SpecificationsOperating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical SpecificationsDimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty5 years with EG4 batteries in closed loop or		4
Operating Temperature Range-25°C to 60°CApplication TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications28×17×8.6 in. (71×43×22 cm)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or		190A
Application TypeOutdoor/IndoorHumidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m) <b>Physical Specifications</b> 28×17×8.6 in. (71×43×22 cm)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Environmental Specifications	
Humidity0% to 95% relative humidity (non-condensing)IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications28×17×8.6 in. (71×43×22 cm)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Operating Temperature Range	-25°C to 60°C
IP RatingIP65/NEMA 3RIdle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications28×17×8.6 in. (71×43×22 cm)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Application Type	Outdoor/Indoor
Idle Power Consumption115W averageOperating Altitude0 to 9,842.5 ft. (0 to 3000m)Physical Specifications28×17×8.6 in. (71×43×22 cm)Dimensions (H×W×D)28×17×8.6 in. (71×43×22 cm)Net Weight90.3 lbs. (41 kgs)Warranty Information5 years with EG4 batteries in closed loop or	Humidity	0% to 95% relative humidity (non-condensing)
Operating Altitude 0 to 9,842.5 ft. (0 to 3000m)   Physical Specifications 0   Dimensions (H×W×D) 28×17×8.6 in. (71×43×22 cm)   Net Weight 90.3 lbs. (41 kgs)   Warranty Information 5 years with EG4 batteries in closed loop or	IP Rating	IP65/NEMA 3R
Physical Specifications   Dimensions (H×W×D) 28×17×8.6 in. (71×43×22 cm)   Net Weight 90.3 lbs. (41 kgs)   Warranty Information 5 years with EG4 batteries in closed loop or	Idle Power Consumption	115W average
Dimensions (H×W×D) 28×17×8.6 in. (71×43×22 cm)   Net Weight 90.3 lbs. (41 kgs)   Warranty Information   Warranty 5 years with EG4 batteries in closed loop or	Operating Altitude	0 to 9,842.5 ft. (0 to 3000m)
Net Weight 90.3 lbs. (41 kgs)   Warranty Information 5 years with EG4 batteries in closed loop or		
Warranty Information   5 years with EG4 batteries in closed loop or		28×17×8.6 in. (71×43×22 cm)
Warranty 5 years with EG4 batteries in closed loop or	Net Weight	90.3 lbs. (41 kgs)
	Warranty	

**Note:** Inverter <u>does not</u> support full *Zero Export* capability. Some power may be fed to the grid, especially due to surges.

