



## EG4® - 6000XP OFF - GRID INVERTER

The 6000XP is a 48V split-phase, off-grid inverter/charger capable of utilizing 8kW of PV and efficiently outputting 6kW of power while also charging your battery bank. Parallel up to 16 units for 96kW worth of output power and control multiple stations and units using the new EG4 monitoring software.

**HIGH FREQUENCY  
SPLIT-PHASE DESIGN**

**REMOTE  
ADJUSTMENTS VIA  
EG4® SOFTWARE**

**5-YEAR WARRANTY**

### ALL-IN-ONE SOLAR INVERTER

Capable of running entirely off the grid, or with grid input for supplemental charging and output power.

### 480VDC MAX

The extra high voltage enables lower cable sizing for the 2 MPPTs with recommended PV input of 8kW eliminating the need for a combiner box.

### MOUNTABLE WI-FI DEVICE

Enables wireless connection between our new monitoring platform and the 6000XP through the app or online website.

### CLOSED-LOOP COMMUNICATIONS

Able to communicate with EG4 48V batteries and other battery brands.

*\*A firmware update is required for closed-loop communications with LifePower4 batteries.*

### HIGH FREQUENCY, SPLIT PHASE OUTPUT

Transformerless, high frequency, split-phase design allowing 120/240V with a single unit.



MANUALS AND SPEC SHEETS

6000XP  
SPECIFICATION SHEET**AC INPUT DATA**

|                            |                |
|----------------------------|----------------|
| NOMINAL AC VOLTAGE         | 120-240VAC     |
| FREQUENCY                  | 50/60Hz        |
| MAX. CONTINUOUS AC CURRENT | 37.5A @ 240VAC |
| MAX. AC INPUT POWER        | 9000W          |

**AC GRID OUTPUT DATA**

|                                       |                                    |
|---------------------------------------|------------------------------------|
| MAX. CONTINUOUS OUTPUT CURRENT @ 240V | 25A                                |
| AC BYPASS (GRID)                      | 50A                                |
| OUTPUT VOLTAGE                        | 120/240VAC                         |
| NOMINAL POWER OUTPUT                  | 6000W                              |
| OUTPUT FREQUENCY                      | 50/60Hz                            |
| POWER FACTOR                          | 0.99 @ full load                   |
| REACTIVE POWER ADJUST RANGE           | (-0.8) – (+0.8) leading adjustable |

**BACKUP/UPS AC OUTPUT DATA**

|                             |                                             |
|-----------------------------|---------------------------------------------|
| RATED OUTPUT CURRENT @ 240V | 25A                                         |
| AC BYPASS (GENERATOR)       | 30A                                         |
| RATED OUTPUT POWER          | 6000W                                       |
| MAX CONT. LINE WATTAGE      | 3000W                                       |
| SURGE CAPACITY              | 12kW for ≈3.5 seconds   11kW for ≈5 seconds |
| OPERATING FREQUENCY         | 50/60Hz                                     |
| THD (V)                     | <3%                                         |
| SWITCHING TIME              | <15ms @ Single / <30ms @ Parallel           |

**PV INPUT DATA**

|                                  |                        |
|----------------------------------|------------------------|
| NUMBER OF MPPTS                  | 2                      |
| INPUTS PER MPPT                  | 1                      |
| MAX. USABLE INPUT CURRENT        | 17/17A                 |
| MAX. SHORT CIRCUIT INPUT CURRENT | 25/25A                 |
| DC INPUT VOLTAGE RANGE           | 100-480 VDC            |
| UNIT STARTUP VOLTAGE             | 100 VDC ± 10 VDC       |
| MPP OPERATING VOLTAGE RANGE      | 120-385 VDC            |
| NOMINAL MPPT VOLTAGE             | 320 VDC                |
| MAXIMUM UTILIZED SOLAR POWER     | 8000W (4000W per MPPT) |
| RECOMMENDED MAXIMUM SOLAR INPUT  | 10,000W                |

## EFFICIENCY

|                                   |               |                    |               |
|-----------------------------------|---------------|--------------------|---------------|
| MPPT EFFICIENCY                   | 99%           |                    |               |
| BATTERY CHARGING EFFICIENCY       | 93%           |                    |               |
| BATTERY DISCHARGING EFFICIENCY    | 93%           |                    |               |
| IDLE CONSUMPTION (STANDBY MODE) * | w/ PV<br><30W | w/ Battery<br>≈50W | w/ AC<br><50W |

## BATTERY DATA

|                                    |                                                |                                       |
|------------------------------------|------------------------------------------------|---------------------------------------|
| TYPE                               | Lead-acid/Lithium                              |                                       |
| MAX. CHARGE CURRENT                | 125A **                                        |                                       |
| MAX. DISCHARGE CURRENT             | 140A                                           |                                       |
| NOMINAL VOLTAGE                    | 48 VDC                                         |                                       |
| BATTERY VOLTAGE RANGE              | 46.4-60 VDC (Lithium); 38.4-60 VDC (Lead-Acid) |                                       |
| REC. BATTERY CAPACITY PER INVERTER | >200Ah                                         |                                       |
| HIGH DC CUT-OFF VOLTAGE            | 59VDC (Lithium)   60VDC (Lead-acid)            |                                       |
| HIGH DC RECOVERY VOLTAGE           | 57.4VDC(Li)   58VDC(Lead-Acid)                 |                                       |
| LOW DC WARNING VOLTAGE             | 57.4VDC (Lithium)                              |                                       |
|                                    | LOAD<20%                                       | 44.0 VDC (Configurable)               |
|                                    | 20%≤LOAD<50%                                   | Warning Voltage @Load <20% - 1.2V     |
|                                    | LOAD≥50%                                       | Warning Voltage @Load <20% - 3.6V     |
| LOW DC WARNING VOLTAGE RETURN      | Low DC Warning Voltage @Different Load +2V     |                                       |
| LOW DC CUT-OFF VOLTAGE             | LOAD<20%                                       | 42.0VDC (Configurable)                |
|                                    | 20%≤LOAD<50%                                   | Cut-Off Voltage @Load <20% - 1.2V     |
|                                    | LOAD≥50%                                       | Cut-Off Voltage @load <20% - 3.6V     |
| LOW DC CUT-OFF RETURN VOLTAGE      | CUT-OFF VOLTAGE @LOAD <20% ≥45V                | Low DC Cut-Off Voltage @load <20% +3V |
|                                    | CUT-OFF VOLTAGE @LOAD <20% <45V                | 48V                                   |
| LOW DC WARNING SOC                 | 20% SOC (Configurable)                         |                                       |
| LOW DC WARNING RETURN SOC          | Low DC Warning SOC +10%                        |                                       |
| LOW DC CUT-OFF SOC                 | 15% SOC (Grid ON) (Configurable)               |                                       |
|                                    | 15% SOC (Grid OFF) (Configurable)              |                                       |
| LOW DC CUT-OFF RETURN SOC          | Low DC Cut-Off SOC +10%                        |                                       |
| CHARGE CUT-OFF VOLTAGE             | 58.4VDC                                        |                                       |

## GENERAL DATA

|                                |                                 |  |  |
|--------------------------------|---------------------------------|--|--|
| MAX. UNITS IN PARALLEL         | 16                              |  |  |
| INTEGRATED DISCONNECT          | Yes                             |  |  |
| DC SWITCH RATING FOR EACH MPPT | Yes                             |  |  |
| DIMENSIONS                     | 18×25.5×5.25 in (457×648×132mm) |  |  |
| WEIGHT                         | 52.9 lbs. (24kg)                |  |  |
| COOLING CONCEPT                | Fan                             |  |  |
| TOPOLOGY                       | TL (Transformerless)            |  |  |
| RELATIVE HUMIDITY              | 5-95%                           |  |  |
| ALTITUDE                       | <6561ft                         |  |  |

|                                                                                                                                                                                  |                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| OPERATING TEMPERATURE RANGE                                                                                                                                                      | 32 – 113°F (0 – 45°C)        |
| STORAGE TEMPERATURE RANGE                                                                                                                                                        | 5 – 140°F (-15 – 60°C)       |
| NOISE EMISSION (TYPICAL)                                                                                                                                                         | <58 dB                       |
| DISPLAY                                                                                                                                                                          | LCD + LED                    |
| COMMUNICATION INTERFACE                                                                                                                                                          | RS485/Wi-Fi/CAN              |
| STANDARD WARRANTY                                                                                                                                                                | 5-year standard warranty *** |
| PV REVERSE POLARITY PROTECTION, POLE SENSITIVE LEAKAGE CURRENT MONITORING UNIT, SURGE PROTECTION DEVICE, OUTPUT OVER-VOLTAGE PROTECTION, OUTPUT OVER-VOLTAGE PROTECTION VARISTOR | Yes                          |
| <b>STANDARDS AND CERTIFICATIONS</b>                                                                                                                                              |                              |
| UL1741                                                                                                                                                                           |                              |
| FCC PART 15, CLASS B                                                                                                                                                             |                              |
| <b>INGRESS PROTECTION RATING</b>                                                                                                                                                 |                              |
| IP20                                                                                                                                                                             |                              |

*\*\*Idle consumption value tested with constant 300VDC PV source*

*\*\*115A @ 48VDC (AC), 125A @48VDC (PV)*

*\*\*\*See EG4® Warranty Registration for terms and conditions*