

EG4® 6000XP

The 6000XP is a 208/240 VAC split-phase, 48 VDC off-grid inverter/charger capable of utilizing 8kW of PV and efficiently outputting 6kW of power while also charging the battery bank.

Parallel up to 16 units for 96kWs 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 may be 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.





EG4 ELECTRONICS

TECHNICAL SPECIFICATIONS

| AC INPUT DATA | | |
|---|--------------|---|
| NOMINAL AC VOLTAGE | | 120/240VAC (L1/L2/N required) |
| FREQUENCY | | 50/60Hz |
| MAX. CONTINUOUS AC CURRENT | | 37.5A @ 240VAC |
| MAX. AC INPUT POWER | | 9000W |
| AC BYPASS (GRID GENERATOR) | | 50A |
| AC OUTPUT DATA | | |
| OUTPUT VOLTAGE | | 120/240VAC |
| OUTPUT FREQUENCY | | 50/60Hz |
| MAX. CONTINUOUS OUTPUT CURRENT @ 240V | | 25A |
| NOMINAL POWER OUTPUT | | 6000W |
| SURGE CAPACITY | | 12,000W for ≈3.5 seconds 11,000W for ≈5 seconds |
| POWER FACTOR | | 0.99 @ full load |
| REACTIVE POWER ADJUST RANGE | | (-0.8) - (+0.8) leading adjustable |
| 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 | | 10000W |
| BATTERY DATA | | |
| TYPE | | Lead-acid/Lithium |
| MAX. DISCHARGE CURRENT | | 140A |
| MAX. CHARGE CURRENT | | 125A** |
| 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 | | 59 VDC (Lithium) 60 VDC (Lead-acid) |
| HIGH DC RECOVERY VOLTAGE | | 57.4 VDC(Lithium) 58 VDC(Lead-Acid) |
| | LOAD<20% | 44.0 VDC (Configurable) |
| LOW DC WARNING VOLTAGE (LEAD-ACID) | 20%≤LOAD<50% | Warning Voltage @Load <20% - 1.2V |
| | LOAD≥50% | Warning Voltage @Load <20% - 3.6V |
| LOW DC WARNING VOLTAGE RETURN (LEAD-ACID) | | Low DC Warning Voltage @Different Load +2V |

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| | LOAD<20% | 42.0 VDC (Configurable) |
|--|--|---|
| LOW DC CUT-OFF VOLTAGE (LEAD-ACID) | 20%≤LOAD<50% | Cut-Off Voltage @Load <20% - 1.2V |
| | LOAD≥50% | Cut-Off Voltage @load <20% - 3.6\ |
| LOW DC CUT-OFF RETURN VOLTAGE (LEAD-ACID) | CUT-OFF VOLTAGE @LOAD <20% ≥45V CUT-OFF VOLTAGE @LOAD <20% <45V | Low DC Cut-Off Voltage @load <20% +3\ |
| LOW DC WARNING SOC | @LOAD \2070 \43V | 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 | | 58.4 VDC |
| 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 | | Far |
| TOPOLOGY | | TL (Transformerless |
| RELATIVE HUMIDITY | | 5-95% |
| ALTITUDE | | <6561ft (2000m |
| OPERATING TEMPERATURE RANGE | | 32 – 113°F (0 – 45°C |
| STORAGE TEMPERATURE RANGE | | 5 – 140°F (-15 – 60°C |
| NOISE EMISSION (TYPICAL) | | <58 dE |
| 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 |
| EFFICIENCY | | |
| MPPT | | 99% |
| BATTERY CHARGING | | 93% |
| BATTERY DISCHARGING | | 93% |
| IDLE CONSUMPTION (STANDBY) | | w/ PV (<30W) w/ Battery (~50W) w/ AC (<50W) |
| STANDARDS AND CERTIFICATIONS | | |
| UL1741 | | |
| FCC PART 15, CLASS B | | |
| INGRESS PROTECTION RATING | | |
| | | |

*Idle consumption value tested with constant 300 VDC PV source **115A @ 48 VDC (AC), 125A @48 VDC (PV)

***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.