

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		120/240\/AC (I 1/I 2/N required)
FREQUENCY		120/240VAC (L1/L2/N required) 50/60Hz
MAX. CONTINUOUS AC CURRENT		37.5A @ 240VAC
MAX. AC INPUT POWER		9000W
AC BYPASS (GRID GENERATOR)		50A
AC OUTPUT DATA		30A
OUTPUT VOLTAGE		120/240VAC
OUTPUT FREQUENCY		50/60Hz
MAX. CONTINUOUS OUTPUT CURRENT @ 240V		25A (per line)
MAX CONT. LINE WATTAGE		3000W
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% - 3.6V
LOW DC CUT-OFF RETURN VOLTAGE (LEAD-ACID)	CUT-OFF VOLTAGE @LOAD <20% ≥45V CUT-OFF VOLTAGE	Low DC Cut-Off Voltage @load <20% +3V
	@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		58.4 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		Fan
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 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
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		
IP20		

*Idle consumption value tested with constant 300 VDC PV source **115A @ 48 VDC (AC), 125A @48 VDC (PV) ***See EG4 Warranty Registration for terms and conditions