



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.

SCAN FOR
UPDATED
SPEC SHEET



6000XP SPECIFICATION SHEET

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 35A		
AC OUTPUT DATA			
OUTPUT VOLTAGE	120/240VAC		
OUTPUT FREQUENCY	50/60Hz		
MAX. CONTINUOUS OUTPUT CURRENT @ 240V	25A		
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	10,000W		
EFFICIENCY			
MPPT EFFICIENCY	99%		
BATTERY CHARGING EFFICIENCY	93%		
BATTERY DISCHARGING EFFICIENCY	93%		
IDLE CONSUMPTION (STANDBY MODE*)	w/ PV <30W	w/ Battery ≈50W	w/ AC <50W
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	59VDC (Lithium) 60VDC (Lead-acid)		

HIGH DC RECOVERY VOLTAGE		57.4VDC(Lithium) 58VDC(Lead-Acid)
LOW DC WARNING VOLTAGE (LEAD-ACID)	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 (LEAD-ACID)		Low DC Warning Voltage @Different Load +2V
LOW DC CUT-OFF VOLTAGE (LEAD-ACID)	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 (LEAD-ACID)	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
STANDARDS AND CERTIFICATIONS		
UL1741		
FCC Part 15, Class B		
INGRESS PROTECTION RATING		
IP20		

*Idle consumption value tested with constant 300VDC PV source

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

***See EG4 Warranty Registration for terms and conditions