



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 <30W	w/ Battery ≈50W	w/ AC <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)
			57.4VDC (Lithium)
LOW DC WARNING VOLTAGE	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

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*