

HOME SOLAR STORAGE BATTERY INVERTER

FORTRESS POWER ENVY 8K



- ALL-IN-ONE SOLUTION (PV, GENERATOR, ON/OFF GRID)
- BACKUP POWER WITH 90A AC PASSTHROUGH
- MAX. 12KW PV POWER DELIVERED TO BATTERY & AC OUTPUTS
- 8 KW (33.3A @240V) BACKUP POWER
- BUILT-IN APSMART RAPID SHUTDOWN TRANSMITTER

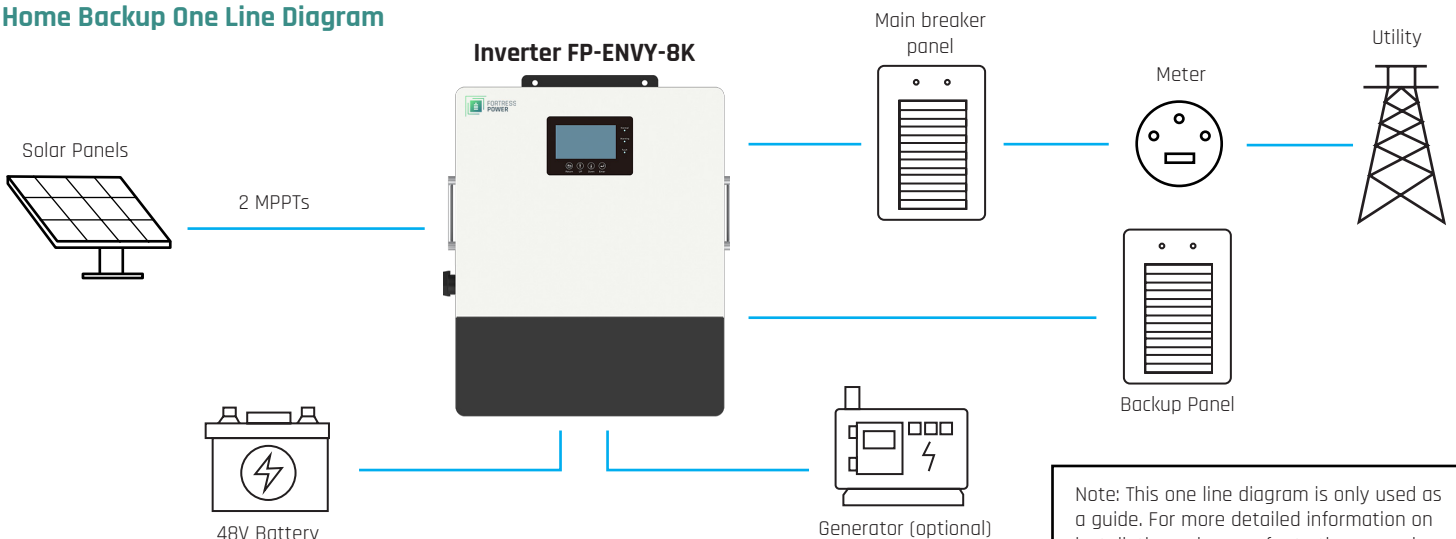
KEY FEATURES:

- IP65 rated for indoor & outdoor installations
- 2 MPPTs output for max Input 13KW PV array
- AC/DC Coupling
- 90A built-in auto transfer switch
- Built-in Generator Input
- 5 units in parallel
- Online monitoring/app
- Color LCD touch screen.
- 3 Phase Compatible (Upcoming Feature)

SUPPORTED APPLICATIONS:

- ✓ **BACKUP**
- ✓ **OFF-GRID**
- ✓ **ZERO EXPORT**
- ✓ **TIME-OF-USE**
- ✓ **VIRTUAL POWER PLANT**

Home Backup One Line Diagram



Note: This one line diagram is only used as a guide. For more detailed information on installation, please refer to the manual.

FP-ENVY-8K

Input DC (PV Side)

Max. DC Input Power for Single MPPT	6000W / 6000 W
Max. PV Input Power	13000W
Max. PV Power Delivered to Battery & AC Outputs	12000W
DC Input Voltage Range	100V-600V
Nominal DC Input Voltage	360V
Full Power MPPT Voltage Range	170V-500V
Max. DC Input Current	25A / 25A
MPPT Number/(Strings per MPPT)	2 / 2

Output/Input AC (Grid)

Continuous AC Power to Grid	8000W (240V)
Continuous AC Power to Load with Grid or Generator	21000W (240V) AC Passthrough/ 12000W (240) GEN
Nominal Output Voltage	120V/240V
Max. Continuous AC Current	33.3A @ 240V
Nominal AC Frequency	50Hz/60Hz

Output AC (Off-Grid)

Max. Output Power	8000W
Nominal Output Voltage	120V/240V
Nominal Output Frequency	50Hz/60Hz
Nominal Output Current	33.3A @ 240V
Peak Power	16kW / 500ms
Switching Time	Seamless
Dedicated Auto-start Generator Port	50A / 12kW

Battery Parameters

Compatible Battery Type	eVault Max, eFlex, LFP-10 MAX
Nominal Battery Voltage	48V
Battery Voltage Range	48V-56V
Maximum Charging/Discharging Current	167A
Maximum Charging/Discharging Power	8000W

Efficiency

MPPT Efficiency	99.9%
Max. Efficiency	97.5%
CEC Efficiency	96.5%

Protection

Anti-islanding Protection	YES
DC Switch	YES
Ingress Protect Degree	NEMA 4X, IP65
SPD Protection	YES
AFCI	YES
RSD	Built-in APsmart Transmitter

General Data

Dimensions	580 x 490 x 265mm (22.8 x 19.3 x 10.4 in)
Weight	44kg (97lbs)
Display	Color LCD
Ambient Temperature Range	-25 to 60 °C (-13 to 140 °F)
Cooling	FAN
Communication	RS485/Wi-Fi/CAN

Standard & Certification

Certifications	UL1741, UL1741SB, IEEE1547A, rule 21, ISO-NE, FCC15 class B, HECO, CEC, Luma
Warranty	5 Years (Optional 10 Years)