

WHOLE HOME SOLAR STORAGE INVERTER

FORTRESS POWER ENVY 8/10K



- All-In-One Solution (PV, Generator, On/Off Grid)
- Max. 12kW PV Power Delivered to Battery & AC Outputs
- 8K (33.3A @ 240V) Backup Power
10k (41.6A @ 240V) Backup Power
- Built-in APsmart Rapid Shutdown Transmitter and Button
- Built in 63 Amp AC Breakers for Grid in, Load & Generator
- Built in 250 Amp DC Battery Breaker

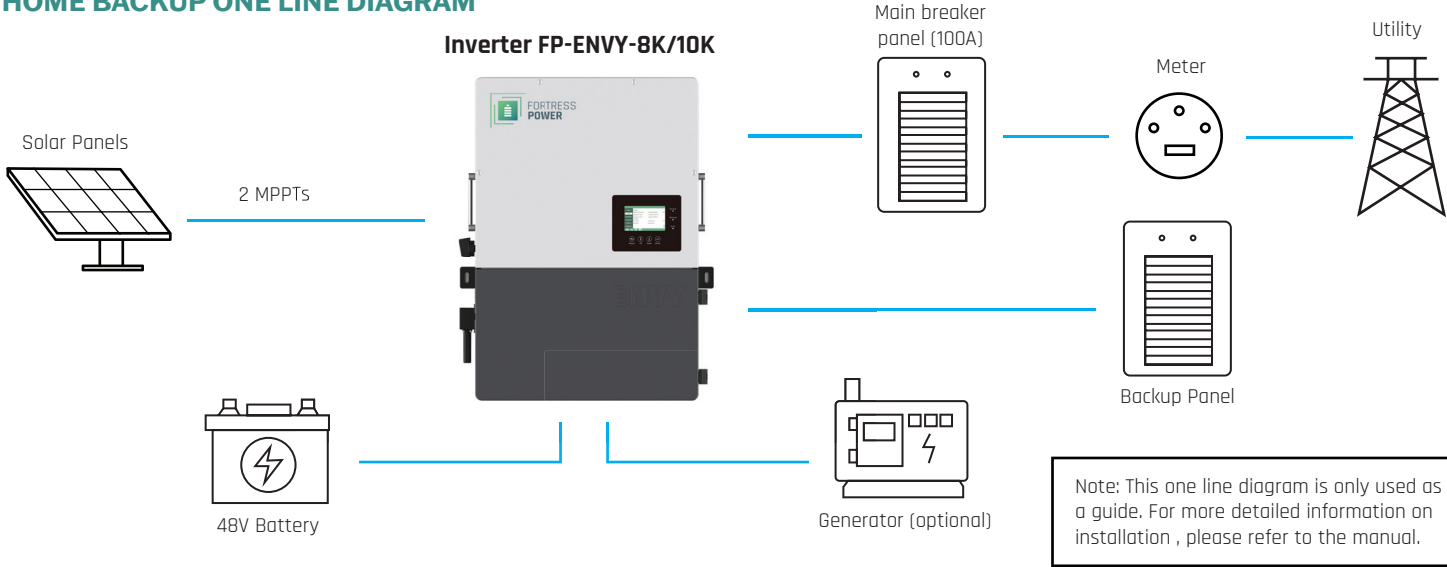
KEY FEATURES:

- IP65 rated for indoor & outdoor installations
- 8K: 2 MPPTs output for max Input 13KW PV array
10K: 2 MPPTs output for max Input 15KW PV array
- AC, DC and AC/DC combined coupling
- Built-in Generator Input
- 10 units in parallel
- Local and remote monitoring/app
- Color LCD touch screen
- Batch Settings

SUPPORTED APPLICATIONS:

- ✓ **BACKUP**
- ✓ **OFF-GRID**
- ✓ **ZERO EXPORT**
- ✓ **TIME-OF-USE**
- ✓ **VIRTUAL POWER PLANT READY**
- ✓ **PEAK SHAVING**
- ✓ **NET METERING**
- ✓ **SMART LOAD**
- ✓ **MICROGRID**

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	FP-ENVY-10K
Input DC (PV Side)		
Max. DC Input Power for Single MPPT	6000W / 6000 W	6000W / 6000 W
Max. PV Input Power	13000W	15000W
Max. PV Power Delivered to Battery & AC Outputs	12000W	12000W
DC Input Voltage Range	100V-600V (550V Max Recommended)	100V-600V (550V Max Recommended)
Nominal DC Input Voltage	360V	360V
Full Power MPPT Voltage Range	170V-500V	210V- 500V
Max. DC Input Current	25A / 25A	25A / 25A
MPPT Number/(Strings per MPPT)	2 / 2	2 / 2
Output/Input AC (Grid)		
Continuous AC Power to Grid	8000W (240V)	10000W (240V)
Continuous AC Power to Load w/ Grid or Generator	21000W (240V) AC Passthrough/ 12000W (240) GEN	21000W (240V) AC Passthrough/ 12000W GEN
Nominal Output Voltage	120V/240V	120V/240V
Max. Continuous AC Current	33.3A @ 240V	41.6A @ 240V
Nominal AC Frequency	50Hz/60Hz	50Hz/60Hz
Output AC (Off-Grid)		
Max. Output Power	8000W	10000W
Nominal Output Voltage	120V/240V	120V/240V
Nominal Output Frequency	50Hz/60hZ	50Hz/60hZ
Nominal Output Current	33.3A @ 240V	41.6A @ 240V
Peak Power	16kW / 500ms	20kW / 500ms
Switching Time	<20 ms	<20 ms
Dedicated Auto-start Generator Port	50A / 12kW	50A / 12kW
Battery Parameters		
Compatible Battery Type	eVault Max, eFlex, LFP-10 MAX, Other Lithium Batteries (Open-Loop), Lead Acid	eVault Max, eFlex, LFP-10 MAX, Other Lithium Batteries (Open-Loop), Lead Acid
Nominal Battery Voltage	48V	48V
Battery Voltage Range	40V-60V	40V-60V
Maximum Charging/Discharging Current	167A	210A
Maximum Charging/Discharging Power	8000W	10000W
Efficiency		
MPPT Efficiency	99.9%	99.9%
Max. Efficiency	97.5%	97.5%
CEC Efficiency	96.5%	96.5%
Protection		
Anti-islanding Protection	YES	YES
DC Switch	YES	YES
Ingress Protect Degree	NEMA 4X, IP65	NEMA 4X, IP65
SPD Protection	YES	YES
AFCI	YES	YES
RSD	Built-in APsmart Transmitter	Built-in APsmart Transmitter
	Also Compatible with Tigo Transmitters (refer to manual)	Also Compatible with Tigo Transmitters (refer to manual)
General Data		
Dimensions	29.5 x 20.5 x 11.23 in (750 x 520 x 285 mm)	29.5 x 20.5 x 11.23 in (750 x 520 x 285 mm)
Weight	110 lbs (50 kg)	110 lbs (50 kg)
Display	Color Touch LCD	Color Touch LCD
Ambient Temperature Range	-13 to 140 °F (-25 to 60 °C)	-13 to 140 °F (-25 to 60 °C)
Cooling	FAN	FAN
Communication	RS485/Wi-Fi/CAN	RS485/Wi-Fi/CAN
Standard & Certification		
Certifications	UL1741, UL1741SB, IEEE1547A, rule 21, ISO-NE, FCC15 class B, HECO, CEC, Luma	UL1741, UL1741SB, IEEE1547A, rule 21, ISO-NE, FCC15 class B, HECO, CEC, Luma
Warranty	10 Years	10 Years