

WHOLE HOME SOLAR STORAGE INVERTER

FORTRESS POWER ENVY TRUE 12 KW



- All-In-One Solution (PV, Generator, On/Off Grid, AC/DC Coupling)
- Whole Home 200A AC Passthrough and Backup
- Max. 18 kW PV Power Delivered to Battery & AC Outputs
- 12 kW (50A @240V) Backup Power
- Integrated AC & DC Breakers for Fast Installation & Commissioning
- Built-in APsmart Rapid Shutdown Transmitter and Button

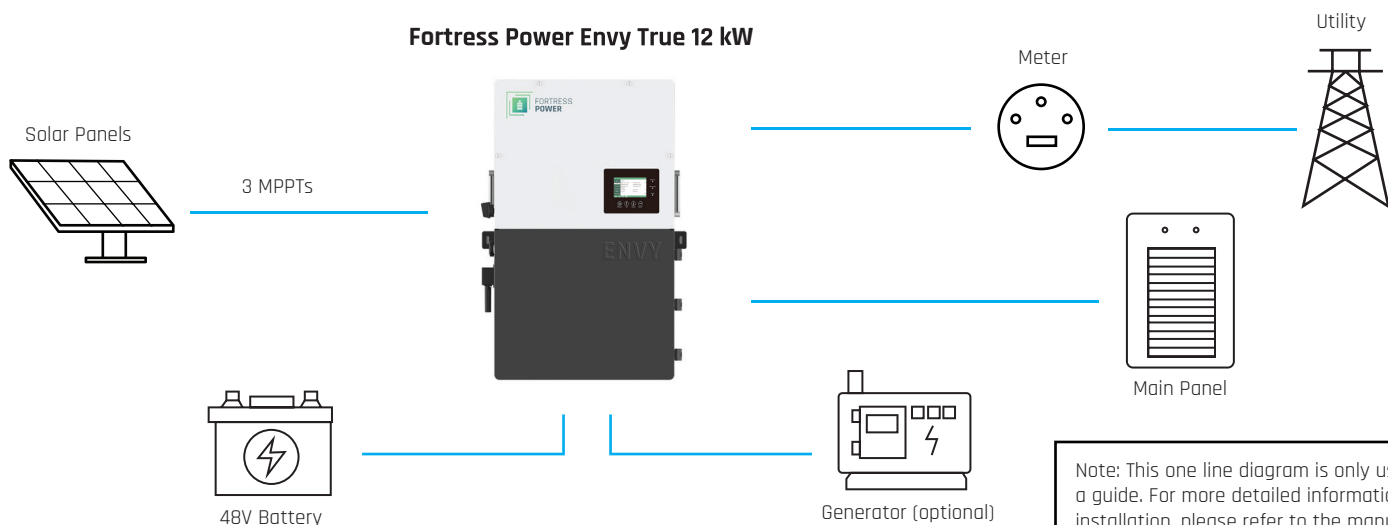
KEY FEATURES:

- 200A AC passthrough current for whole home backup
- 3 MPPT output for max. 21 kW PV array
- AC, DC and AC/DC combined coupling
- IP65 rated for Indoor & Outdoor Installation
- Built-in Generator Input
- 10 units in parallel
- Local and remote monitoring/app
- Color LCD touch screen
- Batch Settings

SUPPORTED APPLICATIONS:

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

WHOLE HOME BACKUP LINE DIAGRAM



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

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Input DC (PV Side)

Max. DC Input Power for Single MPPT	12000W/7000W/7000W 1 x 12kW, 2 x 7kW
Max. PV Input Power	21000W
Max. PV Power Delivered to Battery & AC Outputs	18000W
DC Input Voltage Range	100V-600V (550V Max Recommended)
Nominal DC Input Voltage	360V
Full Power MPPT Voltage Range	230V-500V
Max. DC Input Current	25A/15A/15A
MPPT Number/(Strings per MPPT)	3(2/1/1)

Output/Input AC (Grid)

Continuous AC Power to Grid	12000W (240V)
Continuous AC Power to Load with Grid or Generator	48000W (240V) AC Passthrough/ 21000W GEN
Nominal Output Voltage	120V/240V
Max. Continuous AC Current	50A @ 240V
Nominal AC Frequency	50Hz/60Hz

Output AC (Off-Grid)

Max. Output Power	12000W (240V)
Nominal Output Voltage	120V/240V
Nominal Output Frequency	50Hz/60Hz
Nominal Output Current	50A @ 240V
Peak Power	14kW 10 minutes / 16kW 5 minutes / 20kW 500ms
Switching Time	<20 ms
Dedicated Auto-start Generator Port	100A Max / 90A Continuous

Battery Parameters

Compatible Battery Type	Lithium and Lead Acid Batteries
Nominal Battery Voltage	48V
Battery Voltage Range	40V-60V
Maximum Charging/Discharging Current	250A
Maximum Charging/Discharging Power	12000W

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 Also Compatible with Tigo Transmitters (refer to manual)

General Data

Dimensions	34.2 x 20.5 x 11.2 in (870 x 520 x 285 mm)
Weight	127 lbs (58 kg)
Display	Color Touch LCD
Ambient Temperature Range	-4 to 140 ° (-20 to 60 °C)
Cooling	FAN
Communication	RS485/Wi-Fi/CAN

Standard & Certification

Certifications	UL1741, UL1741SB, IEEE1547A, Rule 21, ISO-NE, FCC15 class B, HECO, CEC, Luma
Warranty	10 Years / Lead Acid, Lithium Batteries or Fortress Lithium Batteries

