



Silent Backup Power for critical loads

Designed for home and small business use, the Xantrex Backup Power System (BPS) automatically provides power to critical circuits for several hours when utility power fails. It instantly transfers power from its battery bank to a customer's designated critical circuits in the home or small business. The system can run household AC electrical appliances or electronic devices including computers, cash registers, lights, microwave ovens, televisions, furnaces, phones, refrigerators, and fax machines. Run times depend on system capacity, size of the battery and the load. Using the latest power electronics, the system is designed to provide the higher quality output required to power sensitive electronic devices. When utility power returns, the system automatically transfers your home appliances back to utility power and recharges the batteries.

Product Features

- ▶ Seamless, synchronized transfer to backup power
- ▶ Silent operation while in backup power mode
- ▶ No engine exhaust
- ▶ Automatic, and safe transfer to/from utility power grid
- ▶ Maintenance free, intelligent battery charger
- ▶ Power quality monitoring 24/7 of incoming utility line
- ▶ Expandable battery capacity for extended silent run time
- ▶ Easy to install in a basement or garage, requires only an electrical permit
- ▶ Renewable energy ready, accepts solar or wind dc input

The BPS by itself is a battery-based system, which will operate until the batteries are depleted. Backup time is determined by how much backup power is needed and the battery capacity.

Power Module Selection

There are three power options for the Xantrex Backup Power System. The Power Module (PM) 2012 is suitable for powering a wide range of small appliance loads in a home, as long as multiple and simultaneous operation is limited. We recommend selecting a PM of sufficient wattage/power to avoid overload. However, accidentally overloading a Xantrex Backup Power System would simply result in a controlled electrical protection shutdown and may require a reset of circuit breakers by the homeowner. The PM 4024 and 5548 will operate a wider selection of household loads than the PM 2012 and these models will deliver higher starting surges for operating pumps and larger loads.

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Load vs. Backup Run Time

Load Appliance	Actual Watts	Duty Cycle	Avg. Watts	Cumulative avg. Watts	Run Time (hours)*		Recommended Power Module
					4kWhours (2 batteries)	8kWhours (4 batteries)	
Lights (20x20W Fluor.)	400	40%	160	160	25	50	2012 or 4024
Phone/Security System	5	100%	5	165	24	48	2012 or 4024
TV/Home Theater	300	30%	90	255	16	31	2012 or 4024
Computer & printer	150	30%	45	300	13	27	2012 or 4024
Microwave or toaster oven	1500	3%	45	345	12	23	2012 or 4024
Gas Furnace 1/4-1/2hp	400	30%	120	465	9	17	2012 or 4024
Refrigerator 20cuft	150	55%	83	548	7	15	2012 or 4024
Freezer 10cuft	100	45%	45	593	6	14	4024 or 5548
Sump/water/well pump	400	5%	20	613	6	13	4024 or 5548
Garage door/gate opener	300	2%	6	619	5	13	4024 or 5548

To help you size a system, this table shows typical loads in a home and the power modules suitable to run the loads. (This is a small sample of appliances that can be supported by a backup power system.) Most electrical loads are not operated continuously or started simultaneously. For example, refrigerators, pumps or furnace type loads normally use power in a cyclical manner: they are on for a short period then off for a longer period (referred to as "duty cycle"). Xantrex power modules have surge ratings from 4500 to over 9000 Watts peak. Backup times vary and electrical conservation can greatly extend the battery backup run-time.

Loads that consume high power may be operated up to the power rating of the inverter but overall runtime may be reduced to under 2 hours. Such loads are typically not placed on battery backup. These loads include electric range/oven, electric 240V laundry dryer, electric home heating systems, heat pump, whole house air-conditioning system, pool pump etc.

*Run times are based on 100% battery discharge and are only provided as a guideline. Please follow battery manufacturer's recommendations for regular discharge levels that will extend the life of the battery bank.

System Specifications

Model	BPM2012	BPM4024	BPM5548
Inverter			
Input	120V/30A	120V/60A	120V/60A
Output	120/240V single split phase, dual pole 25A breaker		
Peak Watts	4500	9000	9000
Nominal Output Rating (watts)	2000	4000	5500
Continuous Output Power (watts)	1600	3600	4600
Power Quality THD	2%	5%	5%
Environmental Impact (noise)	less than 25dB	less than 25dB	less than 25dB
Series Stackable (2x power)	Yes	Yes	Yes
Power Transfer			
Power Quality Window	Yes	Yes	Yes
Transfer Capacity	30A	60A	60A
Transfer Time (mS)	16-32mS	Zero ⁽¹⁾	Zero ⁽¹⁾
Generator Auto-start Ready	No	Yes	Yes
Charger			
DC System Voltage	12V	24V	48V
Max Charge Current	100A	120A	70A
Power Factor Corrected	Yes	No	No
Mechanical⁽²⁾			
Dimensions (H x W x D)	24"H x 29.5"W x 14.8"D (37.6cm x 75cm x 61cm)		
Weight	120 lb./54kg	220 lb./100kg	230 lb./107kg
Part Number	805-7006	805-7007	805-7008

(1) 16-32mS under supply line short circuit only. System must be programmed for zero transfer time.

(2) BE Battery Enclosure: P/N 808-7011. The BE mates under the Power Module and accommodates a variety of battery models including two Xantrex XS12-200 Sealed VRLA/AGM lead calcium batteries. The BE, including batteries, weighs 350 lbs.