

# INVERTER / CHARGERS

**FX series**

The OutBack FX series is a modular "building block" sine wave inverter/charger that can be used for both small and large power systems. Each OutBack FX inverter/charger is a complete power conversion system - DC to AC inverter, battery charger and AC transfer switch. Additional FX inverter/chargers can be connected at any time in either parallel (120 VAC), series (120/240 VAC), or three-phase (120Y208 VAC) configurations. This allows a system to be tailored to meet the specific power conversion requirements of the application, both at the time of the installation and in the future. The OutBack FX series is also available in export versions with 230 VAC, 50 Hz output that can be connected in parallel (230 VAC) or in three phase (230Y400 VAC) configurations.

The OutBack FX is designed to survive harsh environments anywhere in the world. Our unique sealed, gasketed die-cast aluminum chassis protects and keeps the power conversion components cool - without requiring outside air to be blown through the sensitive electronics. This reduces the major causes of inverter failure - corrosion, dust, insect and animal damage.

The FX can be used in high ambient applications up to 60°C with reduced output ratings.

The OutBack FX series inverter/charger system is designed for both residential and commercial stand-alone or back-up power applications with battery energy storage. It is designed to operate as a coordinated system with the other OutBack products i.e. the PS2DC, PSDC, PS2AC, PSAC and PSR enclosures as well as the MX60 MPPT charge controllers and MATE system controller and display.



SPECIFICATIONS	FX2012E	FX2024E	FX2348E
Continuous Power Rating at 25°C	2000 VA	2000 VA	2300 VA
Nominal DC Input Voltage	12 VDC	24 VDC	48 VDC
Nominal AC Voltage / Frequency	230 VAC / 50 Hz	230 VAC / 50 Hz	230 VAC / 50 Hz
Continuous Output Current at 25°C	8.7 amps AC RMS	8.7 amps AC RMS	10 amps AC RMS
Idle Power (typical at no AC load) (sleep - 3 watts)	18 to 20 watts DC	18 to 20 watts DC	21 to 23 watts DC
Efficiency (typical at 25°C and 75% resistive load)	90%	92%	93%
Total Harmonic Distortion (voltage typical / maximum)	2% / 5%	2% / 5%	2% / 5%
Output Voltage Regulation	+/- 2% typical	+/- 2% typical	+/- 2% typical
Surge Power Capability - AC Output			
Peak (1mSec)	28 amps AC	35 amps AC	35 amps AC
RMS (100mSec)	20 amps AC	25 amps AC	25 amps AC
Overload Capability (from 25°C start)			
5 second	4000VA	4800 VA	4800VA
30 minutes	2500 VA	3100 VA	3100 VA
Automatic AC Transfer Relay (at nominal AC)	30 amps AC	30 amps AC	30 amps AC
AC Input Current (adjustable limits)	30 amps AC max	30 amps AC max	30 amps AC max
AC Input Voltage Range (adjustable limits)	200 - 260 VAC	200 - 260 VAC	200 - 260 VAC
Frequency Range - AC Input	40 - 60 Hz	40 - 60 Hz	40 - 60 Hz
DC Input Range (adjustable low battery cut-out)	10 - 16.5 VDC	20 - 33 VDC	40 - 66 VDC
Recommended DC Breaker	OBDC-250	OBDC-175	OBDC-100
Continuous Battery Charger Output	100 amps DC	55 amps DC	35 amps DC
Battery Charging Method	5 stage (bulk / absorb / float / silent / manual EQ)		
Operating Temperature Range	-40°C to 60°C (derate 20 VA/°C over 25°C)		
Environmental Rating	Waterproof to IEC 529 IP 65		
Inverter Dimensions (L x W x H)	16.3" (41 cm) x 8.3" (21 cm) x 11.5" (29 cm)		
Shipping Box Dimensions (L x W x H)	21.6" (55 cm) x 13" x (33 cm) x 15.5" (39 cm)		
Shipping Weight	60 lbs (27.2 kg)		
Standard Warranty	Two Years Parts and Labor		
Optional Extended Warranty	Five Years Parts and Labor		

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*Specifications subject to change without notice*