Inverter Chargers

Inside the "Master of the Off-Grid"

The heart of any renewable or back-up energy system, an inverter takes DC electricity from a source such as a solar panel, water or wind turbine, and converts it into useable AC that can run lighting, appliances, communications, entertainment—and also keep back-up batteries fully-charged and ready. OutBack bi-directional inverters/chargers, unlike grid-direct inverters, can also convert electricity from the utility grid or a generator to DC power to recharge batteries. This allows the user the maximum flexibility in configuring and providing power with or without the grid being available.

OutBack's FX and GFX-series inverters earned their reputation not by being "built like tanks" in the clichéd sense—they are actually built better than that, with selected models used on tanks and other fighting vehicles for power in the field. Unprecedented build-quality in this case is no luxury. It is a necessity in order to achieve the reliability users demand in harsh operating conditions where failure is never an option and a spare might be days or even weeks away.

Because OutBack specializes in off-grid and grid-interactive inverters which inherently have higher levels of operational sophistication and on-board intelligence than simple grid-tied inverters, the OutBack inverter design is purely form following function—in this case, the perfect form for achieving the optimum balance between energy-management brains and power-conversion muscle.

FX/VFX Off-Grid True Sinewave Sealed & Vented Inverter/Chargers

OutBack Power true sinewave FX/VFX inverter/chargers are a complete off-grid power solution, integrating a DC to AC sinewave inverter, battery charger and AC transfer switch in a single hardened die-cast aluminum chassis. They represent the platform upon which OutBack earned the title "masters of the off-grid," and are found at the heart of energy systems around the globe through their wide variety of input/output voltages and frequencies.

Intelligent multi-stage battery charging decreases generator run-times and prolongs battery life. Built-in networked communications enables multiple units to be stacked and connected with other OutBack Power electronics providing industry-leading integration and unprecedented application flexibility. OutBack's exclusive scalable, modular system architecture means that increased power output is just an additional inverter/charger away, for a system that can grow with users' needs.

The flagship FX series uses a sealed chassis that can operate in the harshest environmental conditions such as high humidity and corrosive salt air. The VFX series uses a vented chassis with "bug proof" screened openings to enable high-output AC power in the hottest operating conditions.

OutBack Power Inverter/Chargers remain the first choice in a true sinewave, powerful, modular and reliable power solution for any residential, commercial, industrial or extreme application.

Sealed Inverter/Chargers

Vented Inverter/Chargers

FX & VFX Series Specifications - 60Hz / 230V

		Sealed Models		*Vented Models*	
		FX2024WT	FX2348WT	VFX3024W	VFX3048W
Nominal DC Input Voltage		24VDC	48VDC	24VDC	48VDC
Continuous Power Rating at 25°C		2000VA	2300VA	3000VA	3000VA
AC Voltage/Frequency		230VAC 60Hz	230VAC 60Hz	230VAC 60Hz	230VAC 60Hz
Continuous AC RMS Output at 25°C		8.7 amps AC	10 amps AC	13 amps AC	13 amps AC
Idle Power	Full	≈ 20W	≈ 23W	≈ 20W	≈ 23W
	Search	≈ 6W	≈ 6W	≈ 6W	≈ 6W
Typical Efficiency		92%	93%	92%	93%
Total Harmonic Distortion	Typical (V)	2%	2%	2%	2%
	Maximum (V)	<5%	<5%	<5%	<5%
Output Voltage Regulation		± 2%	± 2%	± 2%	± 2%
Maximum Output Current	Peak	35 amps AC	35 amps AC	35 amps AC	35 amps AC
	RMS	25 amps AC	25 amps AC	25 amps AC	25 amps AC
AC Overload Capability	Surge	5750VA	5750VA	5750VA	5750VA
	5 Second	4800VA	4800VA	4800VA	4800VA
	30 Minutes	3100VA	3100VA	3100VA	3100VA
AC Input Current Maximum		30 amps AC	30 amps AC	30 amps AC	30 amps AC
AC Input Voltage Range (MATE Adjustable)		160 to 300VAC	160 to 300VAC	160 to 300VAC	160 to 300VAC
AC Input Frequency Range		54 to 66Hz	54 to 66Hz	54 to 66Hz	54 to 66Hz
DC Input Voltage Range		21.0 to 34.0VDC	42.0 to 68.0VDC	21.0 to 34.0VDC	42.0 to 68.0VDC
Continuous Battery Charge Output		55 amps DC	35 amps DC	85 amps DC	45 amps DC
Temperature Range	Rated	0°C to 50°C (power derated above 25°C)		0°C to 50°C (power derated above 25°C)	
	Maximum*	-25°C to 60°C		-25°C to 60°C	
Warranty		Standard 5 year		Standard 5 year	
Weight	Unit	62 lbs (31 kg)		61 lbs (31 kg)	
	Shipping	67 lbs (31 kg)		67 lbs (31 kg)	
Dimensions (H x W x L)	Unit	13 x 8.25 x 16.25" (33 x 21 x 41 cm)		12 x 8.25 x 16.25" (30 x 21 x 41 cm)	
	Shipping	21.75 x 13 x 22" (55 x 33 x 56 cm)		21.75 x 13 x 22" (55 x 33 x 56 cm)	

* Functions, but does not necessarily meet all component specifications.

J-Series 50Hz / 120V — For Jamaica and other markets

		Sealed Models	*Vented Models*
		FX2024JT	**VFX3024J**
Nominal DC Input Voltage		24VDC	24VDC
Continuous Power Rating at 25°C		2000VA	3000VA
AC Voltage/Frequency		120VAC 50Hz	120VAC 50Hz
Continuous AC RMS Output at 25°C		16.7 amps AC	25 amps AC
Idle Power	Full	≈ 20W	≈ 20W
	Search	≈ 6W	≈ 6W
Typical Efficiency		92%	92%
Total Harmonic Distortion	Typical (V)	2%	2%
	Maximum (V)	<5%	<5%
Output Voltage Regulation		± 2%	± 2%
Maximum Output Current	Peak	70 amps AC	70 amps AC
	RMS	50 amps AC	50 amps AC
AC Overload Capability	Surge	6000VA	6000VA
	5 Second	4800VA	4800VA
	30 Minutes	3100VA	3100VA
AC Input Current Maximum		60 amps AC	60 amps AC
AC Input Voltage Range (MATE Adjustable)		80 to 150VAC	80 to 150VAC
AC Input Frequency Range		44 to 56Hz	44 to 56Hz
DC Input Voltage Range		21.0 to 34.0VDC	21.0 to 34.0VDC
Continuous Battery Charge Output	55 amps DC	55 amps DC	85 amps DC
Temperature Range	Rated	0°C to 50°C (power derated above 25°C)	0°C to 50°C (power derated above 25°C)
	Maximum*	-25°C to 60°C	-25°C to 60°C
Warranty		Standard 5 year	Standard 5 year
Weight	Unit	62 lbs (29 kg)	61 lbs (28 kg)
	Shipping	67 lbs (31 kg)	67 lbs (31 kg)
Dimensions (H xW x L)	Unit	13 x 8.25 x 16.25" (33 x 21 x 41 cm)	12 x 8.25 x 16.25" (30 x 21 x 41 cm)
	Shipping	21.75 x 13 x 22" (55 x 33 x 56 cm)	21.75 x 13 x 22" (55 x 33 x 56 cm)

* Functions, but does not necessarily meet all component specifications.