FXR/VFXR Renewable Series

A-Series 60Hz/120V Grid/Hybrid Inverter/Chargers

Vented VFXR

Sealed FXR

- Single-phase, 120V sinewave output in 12V, 24V or 48V versions
- 2000W, 2500W and 3000W sealed models
- 2800W, 3500W and 3600W vented models
- Intelligent battery charging
- Programmable for seven different modes, with generator assist
- Modular, stackable design up to nine inverter/chargers for three-phase and 10 inverter/chargers in grid-tied
- High operating efficiency at 93%
- Corrosion resistant internal components
- Field upgradable software
- Power factor corrected battery charging
- Standard 5 year warranty, optional 10 year warranty

The latest, most advanced features on the industry's most trusted and proven platform—that's the essence of OutBack's new FXR Series of Grid/Hybrid inverter/chargers. Capable of off-grid or grid-connected operation in a single model, the FXR Grid/Hybrid inverter/chargers provide system designers with unprecedented flexibility and compatibility for nearly any power conversion scenario.

The new FXR features and technologies on the acclaimed FX platform include:

- Both off-grid and grid-tied functionality in one unit
- Seven programmable modes, including GridZero and Support Mode, and built-in networked communications
- Advanced Battery Charging (ABC) with expanded charging voltages and time parameters, enabling system designers to accommodate the specific charging profiles and algorithms of new and emerging energy storage technologies including Lithium Ion, Aqueous Ion and Flow chemistry batteries
- Easy system upgradability in the field

FXR inverter/chargers can be paired with a MATE3 to add OPTICS RE to monitor and control system performance from any location. Available in power ranges from 2000W-3600W, multiple units may be stacked and connected with other OutBack Power electronics for more seamless system integration and the ability to function in a wide variety of applications, and system sizes. Up to nine inverters can be combined in a 3-phase system with the 12V, 24V or 48V models, and up to 36kW in a grid-tied 24V or 48V system. The exclusive modular system architecture means that increased power output is just an additional FXR inverter/charger away.

Available in sealed or vented units with NEMA type 1 die-cast aluminum chassis designed to operate in the harshest environmental conditions such as high temperatures, humidity or corrosive salt air, the FXR's continue in OutBack's tradition of absolute dependability in mission-critical installations no matter how harsh or challenging the conditions.

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FXR/VFXR 60Hz/120V Specifications

06/2015

	Sealed			Vented		
Models:	**FXR2012A**	**FXR2524A**	**FXR3048A**	**VFXR2812A**	**VFXR3524A**	**VFXR3648A**
Continuous Power Rating (@ 25° C)	2000VA	2500VA	3000VA	2800VA	3500 VA	3600 VA
AC Output Voltage (selectable)	120 VAC (100-130VAC)	120VAC (100-130VAC)	120VAC (100-130VAC)	120VAC (100-130VAC)	120VAC (100-130VAC)	120VAC (100-130VAC)
AC Output Frequency (selectable)	60Hz (50Hz)	60Hz (50Hz)	60Hz (50Hz)	60Hz (50Hz)	60Hz (50Hz)	60Hz (50Hz)
Nominal DC Input Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
Continuous AC RMS Output (@ 25° C)	16.7AAC	20.8AAC	25AAC	23.3AAC	29.2AAC	30AAC
Idle Power	**Full**: ~34W **Search**: ~9W **Off**: ~3W	**Full**: ~34W **Search**: ~9W **Off**: ~3W	**Full**: ~34W **Search**: ~9W **Off**: ~3W	**Full**: ~34W **Search**: ~9W **Off**: ~3W	**Full**: ~34W **Search**: ~9W **Off**: ~3W	**Full**: ~34W **Search**: ~9W **Off**: ~3W
Typical Efficiency	90%	92%	93%	90%	92%	93%
CEC Weighted Efficiency	—	—	91%	—	90.5%	91%
Peak Efficiency	—	—	—	—	—	95%
Total Harmonic Distortion	**Typical**: < 2% **Maximum**: < 5%	**Typical**: < 2% **Maximum**: < 5%	**Typical**: < 2% **Maximum**: < 5%	**Typical**: < 2% **Maximum**: < 5%	**Typical**: < 2% **Maximum**: < 5%	**Typical**: < 2% **Maximum**: < 5%
Output Voltage Regulation	± 2.5%	± 2.5%	± 2.5%	± 2.5%	± 2.5%	± 2.5%
Maximum Output Current	**Peak**: 56AAC **RMS**: 40AAC	**Peak**: 70AAC **RMS**: 50AAC	**Peak**: 70AAC **RMS**: 50AAC	**Peak**: 56AAC **RMS**: 40AAC	**Peak**: 70AAC **RMS**: 50AAC	**Peak**: 70AAC **RMS**: 50AAC
AC Overload Capability	**Surge**: 4800VA **5 Sec**: 4500VA **30 Min**: 2500VA	**Surge**: 6000VA **5 Sec**: 5400VA **30 Min**: 3200VA	**Surge**: 6000VA **5 Sec**: 5400VA **30 Min**: 3200VA	**Surge**: 4800VA **5 Sec**: 4500VA **30 Min**: 3200VA	**Surge**: 6000VA **5 Sec**: 5400VA **30 Min**: 4000VA	**Surge**: 6000VA **5 Sec**: 5400VA **30 Min**: 4000VA
AC Input Voltage Range (MATE3 Adjustable)	85 to 140VAC	85 to 140VAC	85 to 140VAC	85 to 140VAC	85 to 140VAC	85 to 140VAC
AC Input Frequency Range	54 to 66Hz (45 to 55Hz)	54 to 66Hz (45 to 55Hz)	54 to 66Hz (45 to 55Hz)	54 to 66Hz (45 to 55Hz)	54 to 66Hz (45 to 55Hz)	54 to 66Hz (45 to 55Hz)
AC Input Tare Loss	0 VA	0 VA	0 VA	0 VA	0 VA	0 VA
Grid-Interactive Voltage Range	—	106 to 132VAC	106 to 132VAC	—	106 to 132VAC	106 to 132VAC
Grid-Interactive Frequency Range	—	59.3 to 60.5Hz	59.3 to 60.5Hz	—	59.3 to 60.5Hz	59.3 to 60.5Hz
AC Input Current Maximum	60AAC	60AAC	60AAC	60AAC	60AAC	60AAC
Continuous Battery Charge Output	100ADC	55ADC	35ADC	125ADC	82ADC	45ADC
Maximum Battery Charging (AC/DC/Power)	14AAC / 100ADC / 1360VA	14AAC / 55ADC / 1500VA	14AAC / 35ADC / 1900VA	18AAC / 125ADC / 1700VA	20AAC / 82ADC / 2230VA	20AAC / 45ADC / 2450VA
DC Input Voltage Range	10.5 to 17VDC	21 to 34VDC	42 to 68VDC	10.5 to 17VDC	21 to 34VDC	42 to 68VDC
Warranty	Standard 5-yr / optional 10-yr	Standard 5-yr / optional 10-yr	Standard 5-yr / optional 10-yr	Standard 5-yr / optional 10-yr	Standard 5-yr / optional 10-yr	Standard 5-yr / optional 10-yr
Weight (lb/kg)	**Unit**: 62 / 29 **Shipping**: 67 / 30	**Unit**: 62 / 29 **Shipping**: 67 / 30	**Unit**: 62 / 29 **Shipping**: 67 / 30	**Unit**: 61 / 28 **Shipping**: 67 / 30	**Unit**: 61 / 28 **Shipping**: 67 / 30	**Unit**: 61 / 28 **Shipping**: 67 / 30
Dimensions H x W x L (in/cm)	**Unit**: 13 x 8.25 x 16.25 / 33 x 21 x 41 **Shipping**: 21.75 x 13 x 22 / 55 x 33 x 56			**Unit**: 12 x 8.25 x 16.25 / 30 x 21 x 41 **Shipping**: 21.75 x 13 x 22 / 55 x 33 x 56		
Temperature range	**Rated**: -20 to 50°C **Operating**: -40 to 60°C **Storage**: -40 to 60°C	**Rated**: -20 to 50°C **Operating**: -40 to 60°C **Storage**: -40 to 60°C	**Rated**: -20 to 50°C **Operating**: -40 to 60°C **Storage**: -40 to 60°C	**Rated**: -20 to 50°C **Operating**: -40 to 60°C **Storage**: -40 to 60°C	**Rated**: -20 to 50°C **Operating**: -40 to 60°C **Storage**: -40 to 60°C	**Rated**: -20 to 50°C **Operating**: -40 to 60°C **Storage**: -40 to 60°C
Releative Humidity rating	93%	93%	93%	93%	93%	93%
Listings/certifications	UL 1741, CSA C22.2 No. 107.1, UL 1778 Annex FF	UL 1741, CSA C22.2 No. 107.1, UL 1778 Annex F	UL 1741, CSA C22.2 No. 107.1, UL 1778 Annex FF	UL 1741, CSA C22.2 No. 107.1, UL 1778 Annex FF	UL 1741, CSA C22.2 No. 107.1, UL 1778 Annex FF	UL 1741, CSA C22.2 No. 107.1, UL 1778 Annex FF
RoHS Compliance	Yes	Yes	Yes	Yes	Yes	Yes

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