



6 kW Power Pack

◀ **FLEXware™ 500**

FLEXware™ 1000 ▶



12 kW Power Pack

- *Sinewave Inverter / charger*
- *Charge Controller*
- *System display and controller*



OUTBACK SINEWAVE INVERTER / CHARGER

- Next generation advanced power management systems
- Produces true sinewave AC electricity for stand-alone and back-up power needs
- Off Grid Models, Grid Tie / Interactive Models
- Mobile and Marine Models
- Modular system architecture and ability to increase from 2 kW to 30 kW
- Parallel series and 3 phase stacking capabilities
- Three phase configuration - option
- Sealed and vented models
- Non Volatile memory
- Network communication
- High Surge Power – Can handle air conditions and pumps



SYSTEM DISPLAY AND CONTROLLER

- Complete management tools for the Outback power systems
- 8 cm LCD is backlit for dark operating conditions – easy to read
- Four soft keys for easy context based navigation of menus and functions
- Two hot keys for immediate access to AC and inverter functions
- Built-in clock and calendar function enables time based programming of inverter and charger operation



Inverter – 50 Hz Model Specifications	Sealed Models			Vented Models			
	FX2012ET	FX2024ET	FX2348ET	VFX2612E	VFX3024E	VFX3048E	
Nominal DC Input Voltage	12 VDC	24 VDC	48 VDC	12 VDC	24 VDC	48 VDC	
Continuous Power Rating at 25° C	2000 VA	2000 VA	2300 VA	2600 VA	3000 VA	3000 VA	
AC Voltage/Frequency	230 VAC 50 Hz	230 VAC 50 Hz	230 VAC 50 Hz	230 VAC 50 Hz	230 VAC 50 Hz	230 VAC 50 Hz	
Continuous AC RMS Output at 25° C	8.7 amps AC	8.7 amps AC	10.0 amps AC	11.3 amps AC	13.0 amps AC	13 amps AC	
Idle Power	Full	≈ 20 Watts	≈ 20 Watts	≈ 20 Watts	≈ 20 Watts	≈ 23 Watts	
	Search	≈ 6 Watts	≈ 6 Watts	≈ 6 Watts	≈ 6 Watts	≈ 6 Watts	
Typical Efficiency	90%	92%	93%	90%	92%	93%	
Total Harmonic Distortion	Typical	2%	2%	2%	2%	2%	
	Maximum	5%	5%	5%	5%	5%	
Output Voltage Regulation	± 2%	± 2%	± 2%	± 2%	± 2%	± 2%	
Maximum Output Current	Peak	28 amps AC	35 amps AC	35 amps AC	28 amps AC	35 amps AC	
	RMS	20 amps AC	25 amps AC	25 amps AC	20 amps AC	25 amps AC	
AC Overload Capability	Surge	4600 VA	5750 VA	5750 VA	4600 VA	5750 VA	
	5 Second	4000 VA	4800 VA	4800 VA	4000 VA	4800 VA	
	30 Minutes	2500 VA	3100 VA	3100 VA	3100 VA	3300 VA	
AC Input Current Maximum	30 amps AC	30 amps AC	30 amps AC	30 amps AC	30 amps AC	30 amps AC	
AC Input Voltage Range (MATE Adjustable)	160 to 300 VAC	160 to 300 VAC	160 to 300 VAC	160 to 300 VAC	160 to 300 VAC	160 to 300 VAC	
AC Input Frequency Range	44 to 56 Hz	44 to 56 Hz	44 to 56 Hz	44 to 56 Hz	44 to 56 Hz	44 to 56 Hz	
DC Input Voltage Range	10.5 to 17.0 VDC	21.0 to 34.0 VDC	42.0 to 68.0 VDC	10.5 to 17.0 VDC	21.0 to 34.0 VDC	42.0 to 68.0 VDC	
Continuous Battery Charge Output	100 amps DC	55 amps DC	35 amps DC	120 amps DC	85 amps DC	45 amps DC	
Warranty	Standard 2 year / Optional 5 year			Standard 2 year / Optional 5 year			
Weight	Unit	62 lbs (25 kg)			61 lbs (25 kg)		
	Shipping	67 lbs (30 kg)			64 lbs (28 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)		

• Specifications subject to change without notice. Use appropriate wire size in accordance with NEC.



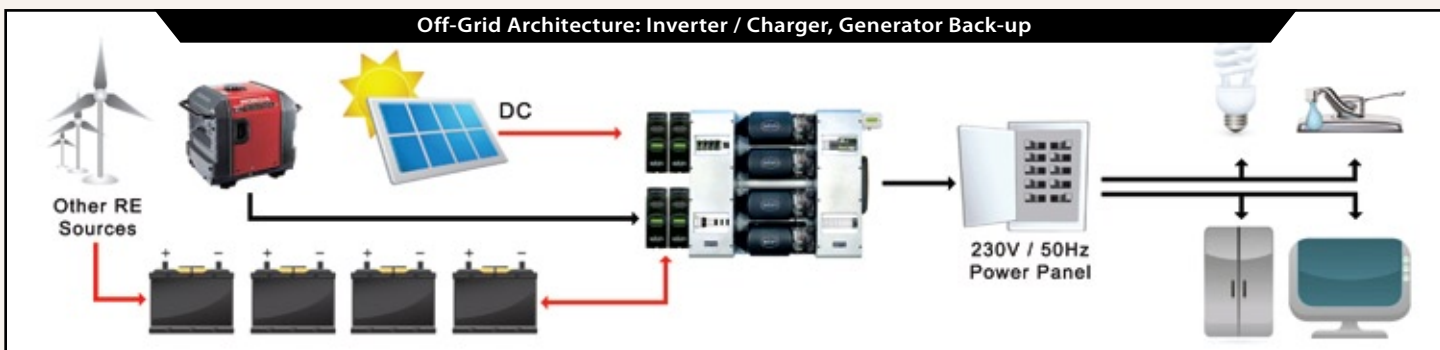
OUTBACK CHARGE CONTROLLERS

- Industry leading Maximum Power Point Tracking (MPPT) charge controllers
- Increases renewable energy yield by up to 30%
- Innovative solar harvesting and battery charging - maximize systems potential
- Allows higher input voltage up to 120 Volts DC for a balance system voltage of 24, 48 or 60 Volts
 - Reduction in cable cost and losses
- Warranty – 5 years

Charge Controller FLEXmax™ Specifications

Nominal Battery Voltages		12, 24, 36, 48, or 60 VDC (Single model - selectable via field programming at start-up)	
Maximum Output Current		60 amps @ 104° F (40°C) with adjustable current limit / 80 amps @ 104° F (40°C) with adjustable current limit	
Maximum Solar Array STC Nameplate	FLEXmax 60	12 VDC systems 800 Watts / 24 VDC systems 1600 Watts / 48 VDC systems 3200 Watts / 60 VDC Systems 4000 Watts	
	FLEXmax 80	12 VDC systems 1250 Watts / 24 VDC systems 2500 Watts / 48 VDC systems 5000 Watts / 60 VDC Systems 6250 Watts	
NEC Recommended Solar Array STC Nameplate	FLEXmax 60	12 VDC systems 750 Watts / 24 VDC systems 1500 Watts / 48 VDC systems 3000 Watts / 60 VDC Systems 3750 Watts	
	FLEXmax 80	12 VDC systems 1000 Watts / 24 VDC systems 2000 Watts / 48 VDC systems 4000 Watts / 60 VDC Systems 5000 Watts	
PV Open Circuit Voltage (VOC)		150 VDC absolute maximum coldest conditions / 145 VDC start-up and operating maximum	
Standby Power Consumption		Less than 1 Watt typical	
Power Conversion Efficiency - Typical	FLEXmax 60	98.1% @ 60 Amps in a 48 VDC System	
	FLEXmax 80	97.5% @ 80 Amps in a 48 VDC System	
Charging Regulation		Five Stages: Bulk, Absorption, Float, Silent and Equalization	
Voltage Regulation Set points		10 to 80 VDC user adjustable with password protection	
Equalization Charging		Programmable Voltage Setpoint and Duration - Automatic Termination when completed	
Battery Temperature Compensation		Automatic with optional RTS installed / 5.0 mV per °C per 2V battery cell	
Voltage Step-Down Capability		Can charge a lower voltage battery from a higher voltage PV array - Max 150 VDC input	
Programmable Auxiliary Control Output		12 VDC output signal which can be programmed for different control applications (Maximum of 0.2 amps DC)	
Status Display		3.1" (8 cm) backlit LCD screen - 4 lines with 80 alphanumeric characters total	
Remote Display and Controller		Optional Mate or Mate2 with RS232 Serial Communications Port	
Network Cabling		Proprietary network system using RJ 45 Modular Connectors with CAT 5e Cable (8 wires)	
Data Logging		Last 128 days of Operation - Amp Hours, Watt Hours, Time in Float, Peak Watts, Amps, Solar Array Voltage, Max Battery Voltage Min Battery Voltage and Absorb for each day along with total Accumulated Amp Hours, and kW Hours of production	
Hydro Turbine Applications		Consult factory for approved Turbines	
Positive Ground Applications		Requires two Pole Breakers for switching both positive and Negative Conductors on both Solar Array and Battery Connections (HUB-4 and HUB-10 can not be used in positive ground applications)	
Operating Temperature Range		Minimum -40° to maximum 60° C (Power capacity of the controller is automatically derated when operated above 40° C)	
Environmental Rating		Indoor Type 1 (IP 30)	
Conduit Knockouts		One 1" (35mm) on the back; One 1" (35mm) on the left side; Two 1" (35mm) on the bottom	
Warranty		Standard 5 year	
Weight	Unit	FLEXmax 80	11.6 lbs (5.3 kg) / 12.20 lbs (5.56 kg)
	Shipping		14 lbs (6.4 kg) / 15.75 lbs (7.10 kg)
		FLEXmax 60	11.65 lbs (5.3 kg)
			14.55 lbs (6.4 kg)
Dimensions	Unit (H x W x D)	FLEXmax 80	13.5 x 5.75 x 4" (40 x 14 x 10 cm) / 16.25" x 5.75" x 4" (41.3 x 14 x 10 cm)
	Shipping		18 x 11 x 8" (46 x 30 x 20 cm) / 21" x 10.5" x 9.75" (53 x 27 x 25 cm)
		FLEXmax 60	13.5 x 5.75 x 4" (40 x 14 x 10 cm)
			18 x 11 x 8" (46 x 30 x 20 cm)
Options		Remote Temperature Sensor (RTS), HUB 4, HUB 10, MATE, MATE 2	

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Outback Inverter / Charger, Controller By Outback Power Systems, USA



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