

# EmiratesGreen

الامارات الخضراء لتجارته المعدات الكهربائية والميكانيكية  
**EmiratesGreen** Electrical & Mechanical Trading Est.

P.O. Box: 110507 | Phone: +971 2 491 0 757 | Abu Dhabi, U.A.E  
Email: [solar@emiratesgreen.com](mailto:solar@emiratesgreen.com) | Web: [www.emiratesgreen.ae](http://www.emiratesgreen.ae)



# FLEXcoupled

AC-Coupling Solution



**OutBack FLEXcoupled Complete AC-Coupling System**

- UL1741 End-to-End
- Greater Dynamic Stability
- Better Performance with Generators
- Universal Design; More Compatibility with Other Inverter Brands for More Flexibility
- Split/Phase Design; No Transformers Required for Easier Residential and Light Commercial Integration
- Fully Integrated System from An Industry-Leading Brand

**Grid-interactive or Grid/Hybrid renewable energy systems with more sophisticated inverter/chargers and battery storage capabilities can provide off-grid performance when grid power is unstable, expensive, or even down altogether due to outages or emergencies.**

But those benefits were out of reach to owners of more common grid-tied systems with simple inverters, which must disconnect when the utility grid is not present for safety reasons—until now. Growing interest in having the best of both worlds—combining grid-tied savings with off-grid independence—is behind the adoption of AC-coupling, which enables an existing grid-tied inverter system to “couple” as another energy source to a second grid-interactive inverter (with connected battery storage) and share their combined energy while providing battery back-up security and flexibility.

Now with OutBack Power’s FLEXcoupled solution based on its acclaimed Radian inverter/charger, this “new grid” energy solution has a new performance standard set by the off-grid leader, leveraging technology and quality proven in countless installations in mission-critical applications.

The OutBack FLEXcoupled system is unique from other AC-coupling types in that its foundation is a superior split-phase inverter/charger with dual AC inputs, transfer switching, power management flexibility and multiple operational modes for a wide range of energy scenarios, and greater dynamic stability.

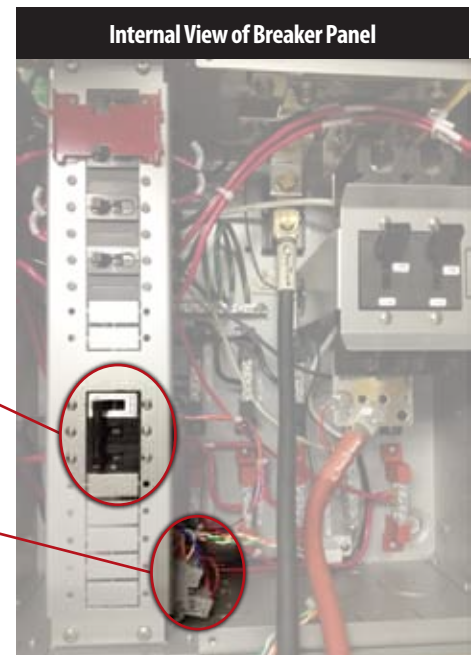
This allows use of a more elegant, advanced electro-mechanical coupling center (the GSLC175-AC-120/240) to achieve AC-coupling instead of relying on extra frequency circuitry, transformers and diversion loads used in conventional systems which are more costly and complex. Since the OutBack approach is more cost-effective, users have the option of investing in superior, professional-grade energy storage such as OutBack’s EnergyCell GH batteries and IBR-2 integrated battery rack—and enjoying the utility and security of a system that meets the UL1741 standard from end-to-end.

## AC-Coupling System Components

Product/Model	Description	Quantity
GSLC175-AC-120/240	AC-Coupling GS load center	1
Radian GS8048	Inverter/charger 8000W 120/240VAC grid-interactive and standalone solution with dual AC inputs	1
MATE3	Advanced system display and controller	1
FW-MB3	MATE3 mounting bracket	1
EnergyCell 220GH	Full system requires 8	8
IBR-2-48-175	2-shelf Integrated Battery Rack (IBR)	1

## GSLC175-AC-120/240 AC-Coupling Center Specifications

<b>Maximum Input Voltage</b>	600V
<b>Maximum Input Current</b>	500A
<b>Operating Frequency Range</b>	50/60Hz to DC
<b>Dimensions H x W x D (in/cm)</b>	<b>Unit:</b> 17 x 16 x 8.5 / 43.2 x 40.6 x 21.6 <b>Shipping:</b> 23.25 x 20.5 x 13.25 / 59.1 x 52.1 x 33.7
<b>Minimum Weight (lb/kg)</b>	<b>Unit:</b> 40 / 18.1 <b>Shipping:</b> 45 / 20.4
<b>Enclosure Type</b>	Indoor Type 1 (IP30)
<b>Certifications</b>	UL1741, CSA 22.2, No. 107.1-01
<b>Warranty</b>	Standard 5 year



GS Load Center factory pre-wired for AC-Coupled applications, with inverter DC overcurrent protection and disconnect, dual AC inputs, grid-tied inverter connection and 120/240 VAC maintenance bypass. For use with the Radian GS8048 inverter/charger to provide backup power for grid-tied systems with up to 6kW of AC-Coupled PV input.

**Includes:** Ground bus bar, 500 ADC shunt assembly, neutral bus bar, AC bus bars, two 175A panel mount breakers, remote-operated circuit breaker (ROCB), control relays, four 50A 120/240VAC double pole panel mount breakers, sliding bypass interlock, AC wiring, and enclosure mounting hardware.

The following components are sold separately for the GSLC175-AC -120/240:

- AC Load Circuit Breakers
- PV and DC Circuit Breakers
- PV Ground Fault Detector-Interrupter (GDFI)
- FLEXnet DC Battery Monitor
- Additional DC shunts and GS-SBUS (if desired)

Holds up to eighteen 0.75"(19mm) wide breakers (1 to 80A), two 1.5"(39 mm) wide breakers (included) and one FLEXnet DC. Support for optional AC Input-Output-Bypass Assembly. AC breakers are rated from 10-60 AAC current. New double pole 50 amp breaker is available to support 120/240V input and loads.



**OutBack GSLC 175-AC-120/240 AC-Coupling Center**

### Worldwide Corporate Offices

