

# SkyBox™

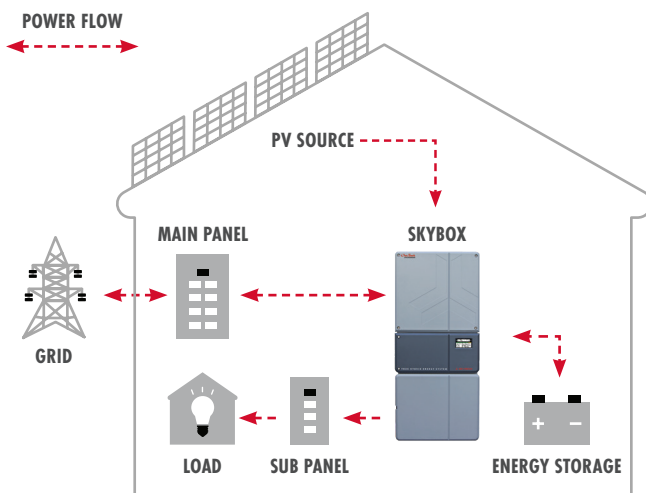
## True Hybrid Energy System with EMS 2.0



- Works with the widest variety of 48V battery chemistries, including lithium-ion
- EMS 2.0 provides easy configuration for EnergyCell and leading lithium-ion batteries
- Backup power and support for time-of-use optimization
- Easy and fast to install, with a clean balance-of-systems, all-in-one box
- Field upgradable software
- Compliant with California rule 21 and Hawaii 14H grid support requirements
- Extensive quality and reliability testing, including Highly Accelerated Life Testing (HALT)

### Easy to install and easy to own, SkyBox from OutBack Power brings a new level of resilience, simplicity, intelligence and adaptability.

SkyBox installs like a grid-tied inverter, but with support for energy storage, which is easy to install later. A fully integrated design eliminates external charge controllers and communication boxes, significantly cutting solar + energy storage installation time and cost. EMS 2.0 takes the guesswork out of battery installation. It supports external CTs and stacking multiple Skyboxes in parallel, each with their own battery. SkyBox intelligently measures and controls power to and from any connection point (utility, solar, battery, generator and load), dynamically optimizing energy distribution, consumption and utilization—perfecting the way power is created, consumed, stored and sold. With SkyBox you can leverage the economic benefits of energy storage for time-of-use optimization and peace of mind backup power. Not ready for batteries? Install SkyBox now and add energy storage later. No need in the future to retrofit the PV or AC coupling.



<b>Model:</b>	<b>SBX5048-120/240</b>
<b>Grids and Loads</b>	
AC Voltage	120/240V (split-phase)
AC Frequency	60Hz
Max Continuous AC Output Power (@45°C)	5000VA (derate above 45°C)
Max Continuous Output Current	24A @ 25°C
Total Harmonic Distortion	Typical: <2% Maximum: <5%
Integrated Arc Fault Detection, Ground Fault Detection & Isolation and Monitoring	Yes
Power Factor at Rated Power	1
<b>PV Input</b>	
Max PV System Voltage	600V
MPPT Voltage Range	250 to 600V
Max Input Current	20A
Max Short-Circuit Current	32A
Max Backfeed Duration (To Array)	<8ms
Reverse-Polarity Protection	Yes
CEC Weighted Efficiency	>94%
Typical Inverter Efficiency	>97%
Transformerless, Ungrounded	Yes
<b>Battery</b>	
Unassisted Load Support from Battery Only	5000VA
Nominal DC Battery Voltage	48V
Battery Voltage Range	42 to 60V
Reverse-Polarity Notification	Yes
<b>Operating Modes</b>	
Immediate Battery Backup Power	Yes
Grid Support (UL 1741 SA)	Yes
Islanding Protection	Yes
Net Metering	Yes
Non-Export	Yes
Maximum Independence	Yes
Configurable Battery Charging Parameters	Yes, to allow/disallow charging from AC for compliance with local regulations
Prioritized Charging from Renewables	Yes
<b>Additional Features</b>	
Listings/Certifications	UL 1741 SA, CSA 22.2 No. 107.1, UL 1778, HECO Rule 14H SRD, CA Rule 21 SRD, IEEE 1547-2003, IEEE 1547.1-2005
RoHS	Yes, directive 2011/65/EU
Weight (lb/kg)	Unit: 110.6 / 50.2 Shipping: 134 / 60.8
Dimensions H × W × D (in/cm)	47 × 21 × 9.4 / 119.4 × 53.3 × 23.9
Operating Temperature Range	-20 to 60°C
Non-Volatile Memory	Yes
Field-Upgradable Firmware	Yes
Chassis Type	NEMA 3R