

SimplBox

MicroStorage Solution by **Simpl.**

SimplBox is an energy storage system designed to be installed underneath individual solar panels. SimplBox optimizes the financial value of the energy generated by a solar panel by storing the right portion of this energy for use later when electricity is more expensive.

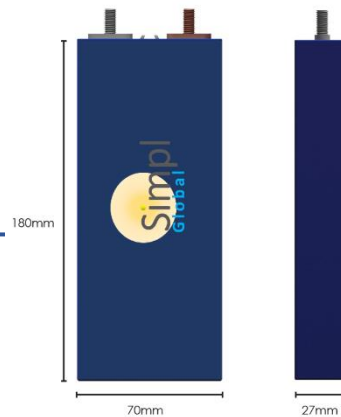


Applications

- Demand shaving
- Time-of-Use (TOU) arbitrage
- Solar self-supply
- Micro-grid
- Backup power
- Utility ancillary services

Key Differentiators

- Easy installation directly under the solar panel
- Does not take up any additional space
- Same unit works with all solar panels with a wide variety of voltage ranges from 30-cell to 96-cell
- Using Simpl's patented Balanced Impedance technology, SimplBox is 15% to 25% more efficient than other solar + storage systems in the marketplace.
- Patent-pending, fault-tolerant, and self-healing mesh networking as the basis of the control system
- Lithium Iron Phosphate (LFP) battery cells for ultimate in safety and durability
- SimplWeb, remote, web-based controls allowing for continuously adjusting system algorithms and controls to optimize savings.
- Sealed construction with no mechanical relays or electrolytic capacitors provides state-of-the-art reliability.
- Batteries are kept cool by using an engineered, non-metallic, thermally insulated material which is certified to UL 94 5VA.
- Battery casing is sealed at IP67 rating.
- 10-year standard battery warranty with available 20-year warranty



Battery Cell

25 Ah, LFP cells are procured by Simpl Global from two established, NASDAQ-listed battery manufacturers.

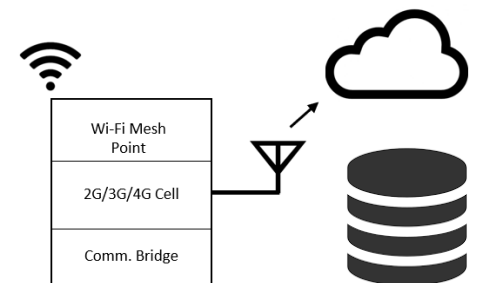
SimplBox

is manufactured in the USA using the above cells, our proprietary battery management system (BMS), engineered casing and our patented Balanced Impedance Control System.

System Configuration

Once a SimplBox is attached to a solar panel, it uses its mesh-networked core to wake up and automatically connect to the Simpl's web-hosted database and application, SimplWeb.

SimplWeb is designed to command and control your energy storage assets and to maximize its economic value.



SimplBox is equipped with fault-tolerant networking and SimplWeb which is a real-time database hosted by Simpl Global.

SimplBox	SimplBox Models
	SimplBox-Hub / SimplBox-4G / SimplBox-15
Battery Chemistry	Lithium Iron Phosphate (LFP)
Number of LFP Cells	18
Basic Ratings	25 Ah 59.99 V Rated: 1.50 kWh / Exact: 1.44 kWh
Depth of Discharge	100% is allowed for less than 500 cycles 80% is required for 5,000+ cycles
DC to DC Round Trip Efficiency	95%
Solar Input Ratings:	
Max Solar Panel Rated Power (W)	450
Solar Panel Input Voltage Range	25V – 59.99V
Solar Max Input Current	15A
Inverter Output Ratings:	
Inverter Max Power	350W
Inverter Output Voltage Range	25V – 59.99V
Inverter Max Output Current	15A
Battery Ratings:	
Max Battery Charge Power	350W
Max Battery Discharge Power	350W
"C" Rating	0.20
Mechanical and Environmental:	
Dimensions (L x W x T)	30.5" x 8.0" x 2.6"
Weight (lbs.)	32
Charge Temperature Range	0 °C to 45 °C
Discharge Temperature Range	-20 °C to 55 °C
Storage Temperature Range	-30 °C to 60 °C
Noise Level	No Noise; No moving parts
Communication Protocol	4G wireless (SimplBox-4G), Wi-fi Mesh (SimplBox-Hub) Network based on Simpl Global's patent-pending technology, and Bluetooth
Battery Casing Outdoor Rating	IP67
Certificate of Compliance	Battery Cells: UL 1642 Battery System: UL 1973 (pending) Battery Casing: UL 94 5VA
Grid Connection	SimplBox does not connect to the grid directly. It connects to the microinverter, string inverter or DC optimizer used for connecting the PV panel to the Grid.