

## KiloVault<sup>®</sup> <u>Uniti EcoFreedom 10</u>

AC Battery Energy Storage System

## Fully pre-wired and pre-programmed energy storage solution.

The KiloVault Uniti EcoFreedom is an advanced power solution that utilizes either lithium or pure lead carbon batteries to provide reliable and efficient energy storage. With its built-in inverter, this system allows for seamless power conversion, ensuring a smooth and uninterrupted flow of electricity.

The EcoFreedom offers hassle-free maintenance, eliminating the need for frequent battery replacements or complicated upkeep. It is specifically designed to work seamlessly with solar panels, making it an ideal choice for renewable energy applications. It has the capability to efficiently store and discharge energy, making it a reliable choice for backup power needs.

Assembled

in the

Uniti EcoFreedom 10		
Physical Specifications		
Dimensions	78.74 in (2000 mm) X 28.34 in (720 mm) X 15.75 in (400 mm)	
Weight	745 lb Gross	
Enclosure Rating	IP20	
Operating Temperature	Charging: 14°F - 113°F (-10°C - 45°C) Discharging: 14°F - 113°F (-10°C - 45°C)	
Mounting	Free-Standing or Pad Mounted	
Warranty	Inverter: 2 year; Battery: 10 year; Cabinet: 10 year	
Certifications	Battery Module: UL1973, UL9540A	
Rated Energy	20.48 kWh (expandable to 30.7 kWh)	
Usable Energy	18.4 kWh (expandable to 27.6 kWh)	
Rated Output Power	10 kW	

## **Electrical Specifications**

SPECS	ITEM
Inverter	
Application	Off-Grid
Max Rated Power	10,000W Continuous
Surge Power	20,000W
Load Capacity of Motors	6HP
Input/Output Frequency	6oHz
Input Voltage Range	90-140VAC
Output Voltage	120/240Vac (split phase/single phase)
Output Waveform	Pure Sine Wave
Peak Efficiency	92% (Max Battery Inverter Efficiency)
Max AC Charging current	40A
Internal Bypass Current	63A
Conversion (Bypass and Invert)	10mS
PV Input	
Algorithm	MPPT
Max PV input power	5500W + 5500W
MPPT Voltage Range	125-425V
Max PV Charging Current	20A + 20A
Battery	
Blade Packs	(4) Battery Modules
Battery Chemistry	LiFePO4 (LFP Lithium Ion)
Nominal capacity	51.2Vdc - 100Ah (One Battery)
Peak Discharge (15S)	102A (One Battery) / 408 (Bank)
Max Discharge Current (Continuous)	50A (One Battery) / 200A (Bank)
Maximum Charge Current	50A (One Battery) / 200A (Bank)
Battery Weight (each)	112.5 lbs
Cycle Life	6000 (90% DoD)





