



LOADSHREDDER

Load Shredder Inflight4U

Specifications Document

Introduction

The Load Shredder LiCap Solid State battery is a next generation battery, combining the discharge capabilities of supercapacitors with the storage capacity of lithium. This Graphene-based Lithium-Ion capacitor technology is the answer to a number of pressing issues:

- Remote locations with inadequate cooling and harsh conditions, such as mines
- The need for extended cycles beyond the capability of current Lithium Ferrous Phosphate
- Cellular and fibre communication stations that require very short charge cycles
- General low ventilation and high-uptime requirement missions

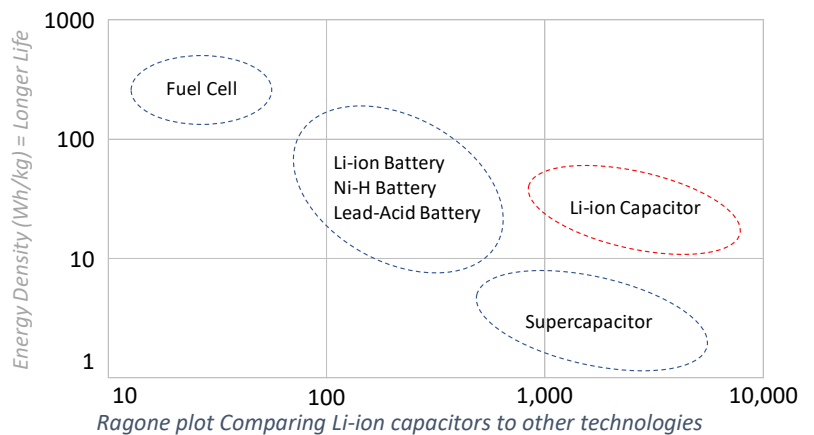
This 12kWh battery storage appliance is rack-mounted and slots right into existing solar, wind, or grid-powered station solutions. With its incredibly forgiving operating parameters and longevity, this presents an excellent return on investment for the enterprise market.



At a glance

The system has many game-changing benefits:

- A drastically reduced charge window of 20 minutes (or even less) means the system can maintain unparalleled mission uptime.
- The unit is incredibly forgiving, able to work within a wide temperature range (-40°C to 70°C) and altitude (up to 4500 meters above sea level).



Comprises no toxic gases, cannot burn, and is therefore the safest battery currently available; suitable for medical use cases.

- With an incredibly long lifespan averaging 18,000 cycles (3 times better than currently available lithium-ion technology) that requires no maintenance for up to 18 years, this system also has no heat management issues and can even be buried in concrete for improved security.
- With large discharge capabilities (up to 30C), and capacity perfectly tailored for clients' needs, the solution is always on-mission and offers a financially tuned return on investment.

	Energy storage 5 kWh	12 kWh
<i>Voltage & Capacity</i>	48V 100Ah	48V 250Ah
<i>Battery</i>	Lithium Solid State Battery	
<i>Display</i>	LCD	LCD
<i>BMS</i>	Built-in BMS & CANBUS	Built-in BMS & CANBUS
<i>Warranty</i>	10 years	10 years
<i>Cycles</i>	≥18,000 CYC	≥18,000 CYC
<i>Rated Voltage</i>	48V	48V
<i>Maximum Charge Voltage</i>	58.8V	58.8V
<i>Minimum Discharge Voltage</i>	44V	44V
<i>Charge Times</i>	1 hour / 30 mins / 20 mins	1 hour / 30 mins / 20 mins
<i>Optional discharge rates</i>	1C/2C/3C	1C/2C/3C
<i>Case</i>	4U Rack Mount case for standard rack	
<i>Rated Current</i>	100	250
<i>Operating Temperature</i>	-20~70°C	-20~70°C
<i>Stackable config</i>	Up to 62 units	Up to 62 units