ULTRALIFE®

Corporation

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VP Technology, Energy Storage Systems

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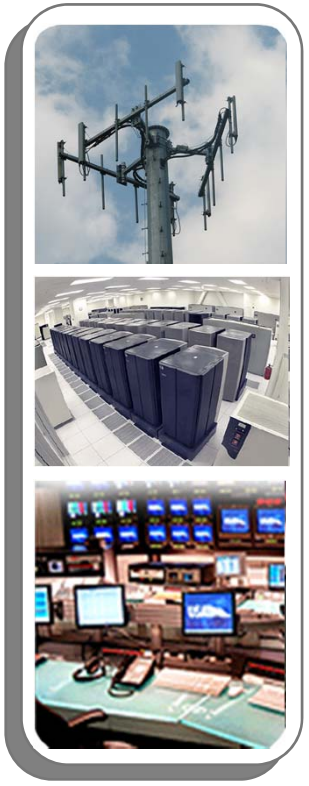
Wide Array of Solutions

Battery & Energy Products

Communications Systems

Energy Services & Energy Storage



Small Storage Projects

2.5kWhr 500W continuous discharge

The UKT0011 is a portable power system that will deliver primary 24 to 33VDC power through shore power while charging the battery box or while keeping the battery box at full charge.

The UKT0011 consists of a battery box and charger box. The system runs on a Universal AC or 25-33VDC input. The system, loaded with 6 to 12 UBBL10 or UBBL13 batteries, will provide output power in the event of a primary power failure

2.6kWhr NeighborhoodCable Power Back Up System

72 Amp-hr at 36 volts, Uses (10S 10P) x3 Bricks, 300 (18650) cells

Li-Ion to replace Lead Acid, in Stationary, Size Fixed, Non-Air Conditioned space

Cost Driver is Service Calls over Coverage Area, longer service life

Key Partners

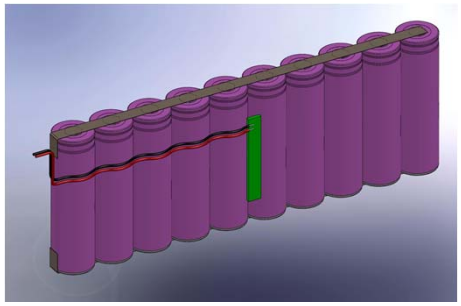
- New York State Research & Development Authority (**NYSERDA**)
- New York Battery and Energy Storage Technology (**NY-BEST**)
- New York Power Authority (**NYPA**)
- New York State Foundation for Science Technology and Innovation (**NYSTAR**)
- **State University of NY** at Canton – Energy Storage Project
- **Rochester Institute of Technology**
- **Rensselaer Polytechnic Institute** Center for Automation and Technologies (**RPICATS**)
- **WindTamer Corp** – Local NY State Wind Turbine Manufacturer
- **Electrical Power WorX** – Local NY State Ultra-capacitor Integrators
- **Dayton T. Brown** – NY State Testing Services
- **Future Energy Development, LLC** – NY State Business

Ultralife Advantages

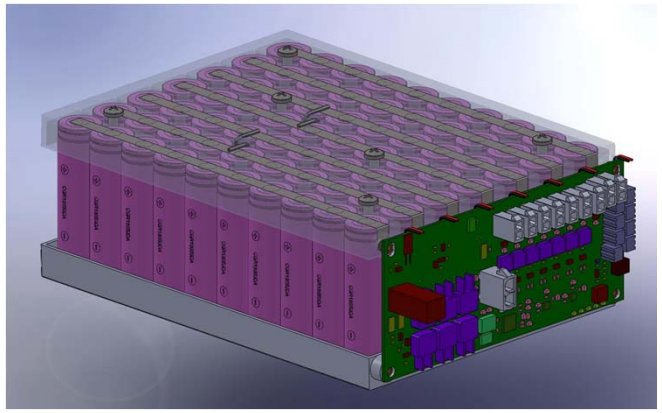
- Provide window to the forefront of the Technology
- One stop Sourcing, Service and Maintenance
- Complete Integration Service
- Campus Learning Opportunities
    - In collegiate curriculum and also vocationally
- Community Awareness and Acceptance

Li-Ion – Building Blocks

Design Basic Cell String (10P)

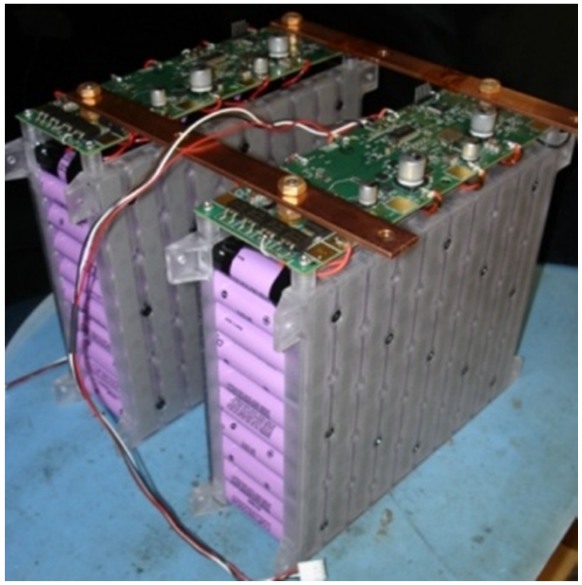


Based on readily available
mass produced Li-ion
Cobalt Technology



BRICK=
(70 Cells)

Basic Brick 7S 10P

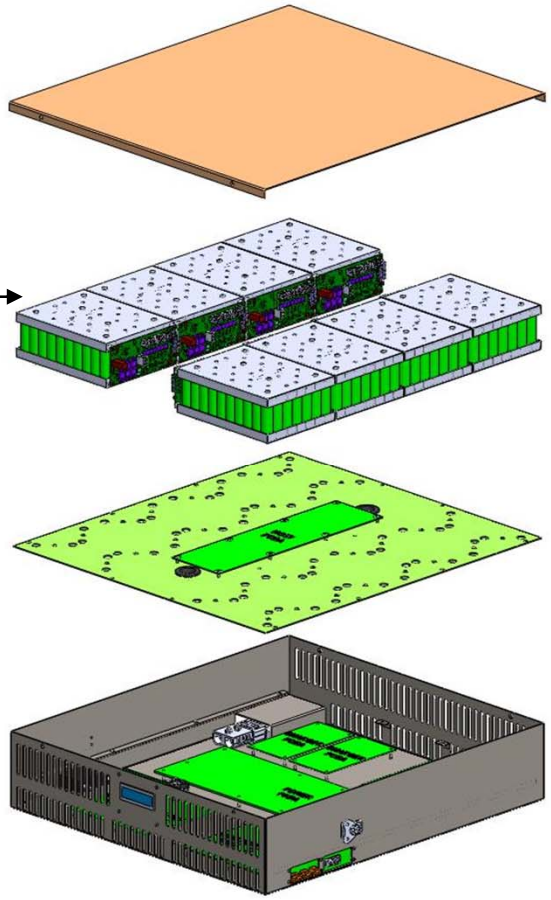


Shown With Integrated Monitoring and Control Circuitry Designed and Assembled by Ultralife

Prototype Battery Modules

Li-Ion Battery - Module

Each **Module** contains: Eight (8) Bricks

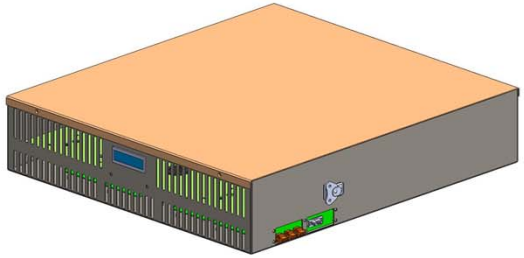


4 Bricks in Series for voltage –

4 Bricks in Parallel for capacity –

96Volts 48Amphours Total

MODULE= (8 Bricks)



Individually Monitored and Replaceable

Li-Ion Battery

Each RackSet contains:
<u>Twenty (20) Modules-</u>

10 Modules in Parallel for capacity –

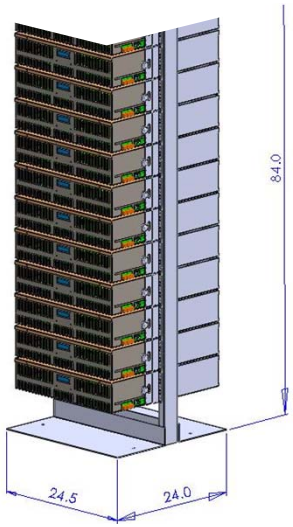
10 Modules in series for voltage –

Providing

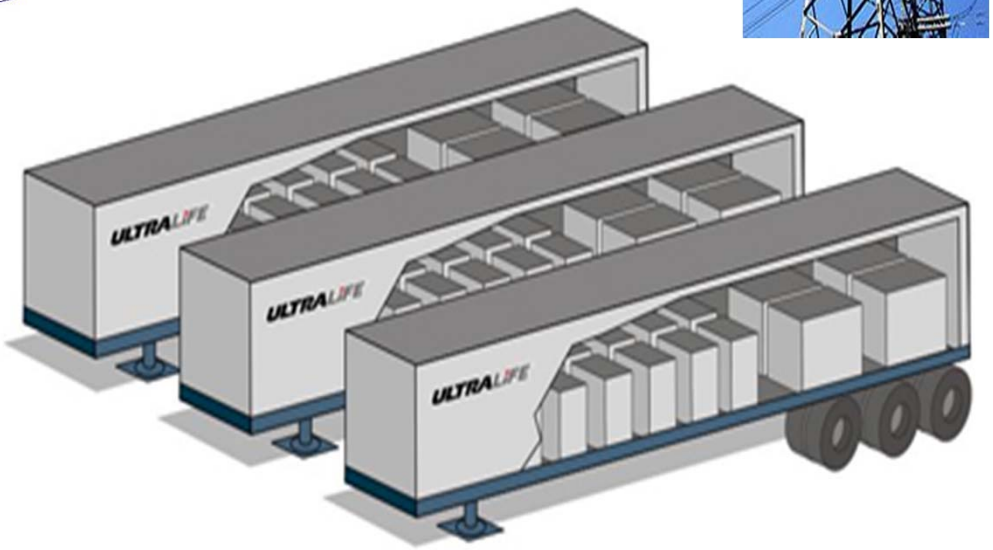
960Volts 96Amphours

Or Approximately

92kWhrs / RackSet



Touch Screen Interface



Energy Storage Grant – 1 MWhr

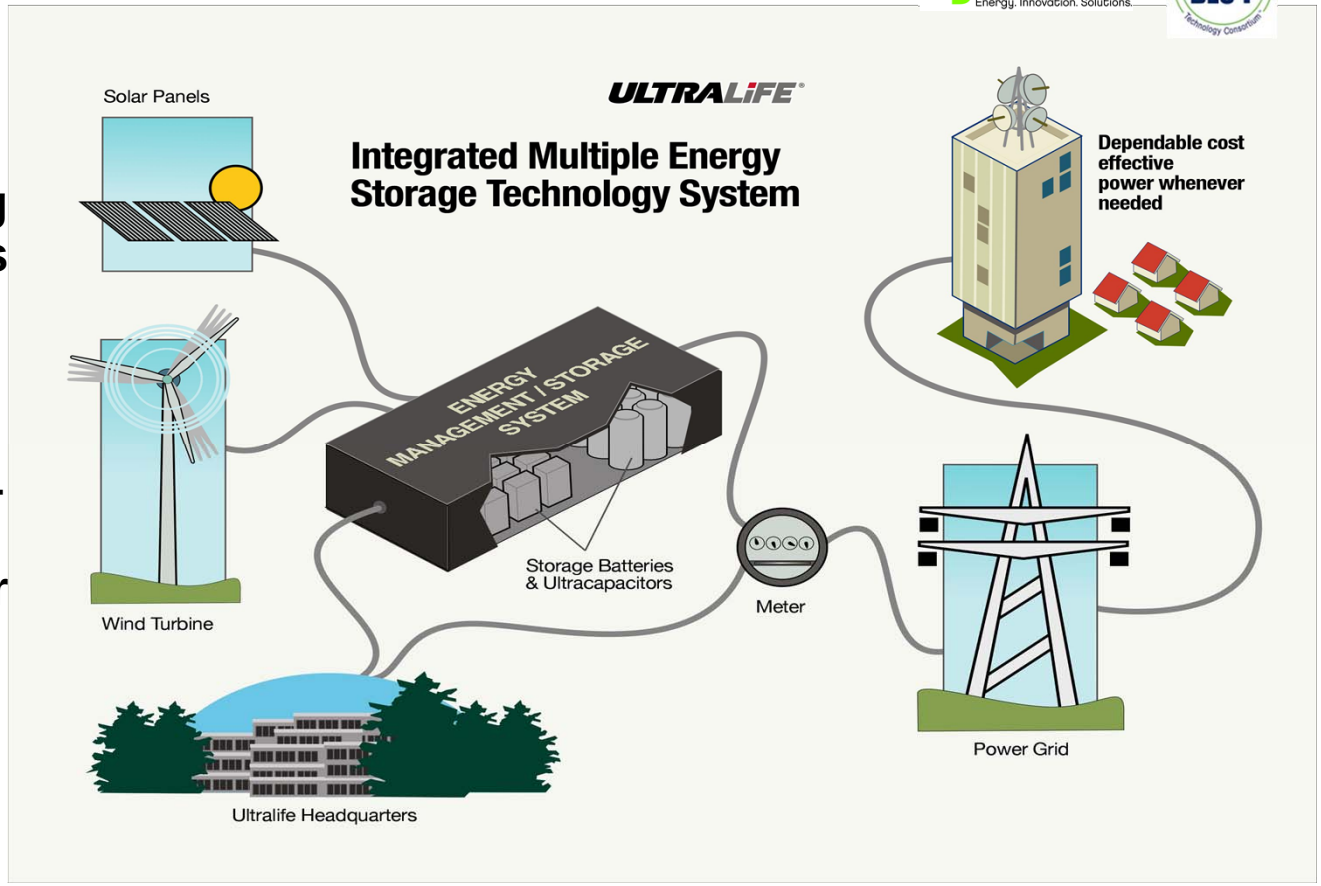
NYSERDA PON 1704

1MWhr Integrated Multiple Energy Storage Technology System at our Newark, New York site.

The project will demonstrate large utility scale energy storage incorporating renewable generators and grid connect ability.

Total project value is $4.8 million, with $2.4 million NYSERDA funding over a 3 year period.

(50% externally funded)



Energy Storage Grant - 2 MWhr

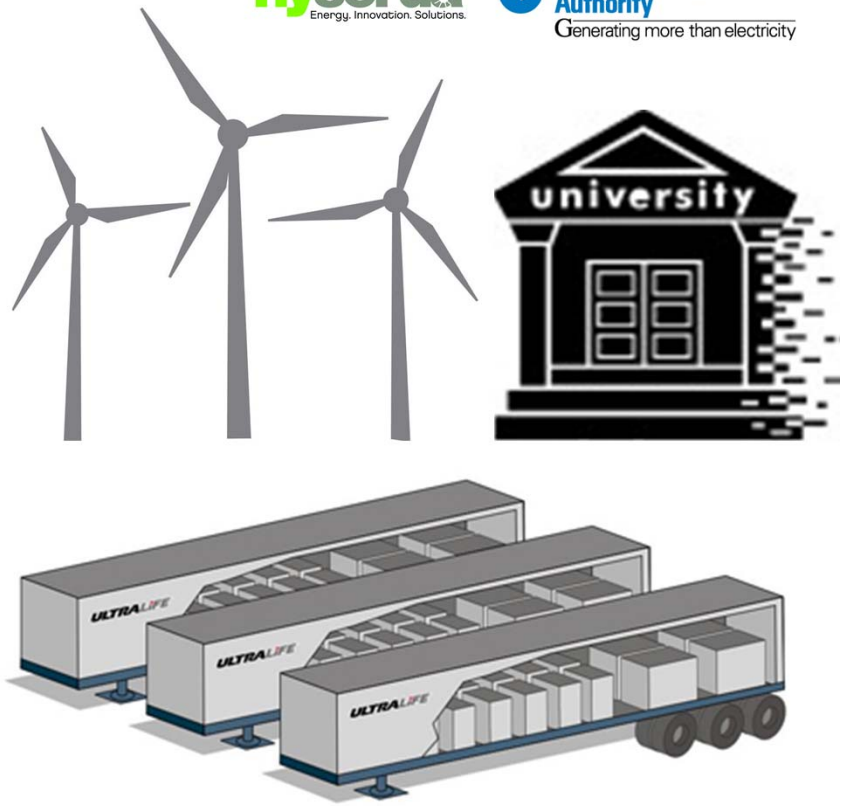
NYSERDA PON 1670

2MWhr wind integrated storage system as a key component of a 600kW wind demonstration project on SUNY Canton Campus.

The project is a battery solution intended to solve the energy storage needs of a 600kW Wind Turbine to be installed at the SUNY Canton campus.

Project total value is $3 million, funded by a $1.5 million NYSERDA grant, and a $1.5 million New York Power Authority (NYPA) grant over a 3 year period.

(Fully externally funded)



Chemistry Comparison

Storage Technology	Main Advantages	Disadvantages	Power	Energy
Flow Batteries	High Capacity	Low Energy density	Acceptable	Good
	Independent Power and Energy Ratings			
NaS	High Power and Energy Density, High Effic	Medium cost, Safety Concerns	Good	Good
Li-Ion	High Power and Energy Density, High Effic	High Cost, Special Charging Crt	Good	Feasable
NiCd	High Power and Energy Density, High Effic		Good	Acceptable
Lead Acid	Low Capital Cost	Limited Cycle Life, when Disch > 50%	Good	Feasable

ULTRALIFE®

Thank You

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