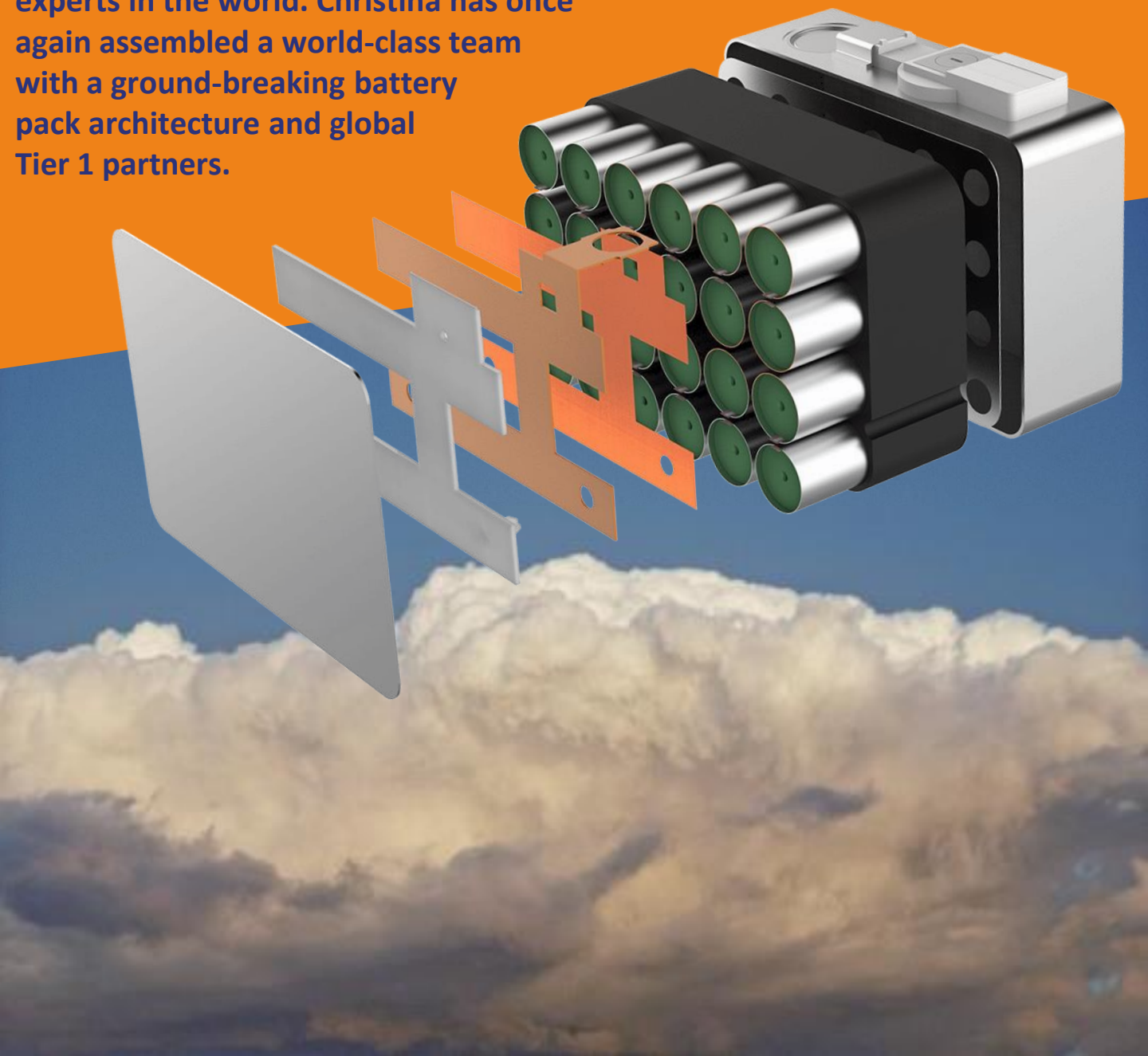

Cadenza
INNOVATION

Cadenza at a glance…

Cadenza Innovation, based in Connecticut, was founded in 2012 by Dr. Christina Lampe-Onnerud, the Founder and former CEO of Boston-Power, and one of the pre-eminent battery experts in the world. Christina has once again assembled a world-class team with a ground-breaking battery pack architecture and global Tier 1 partners.



“What if you could just make a battery that worked better?”

Christina Lampe-Onnerud
Founder and CEO

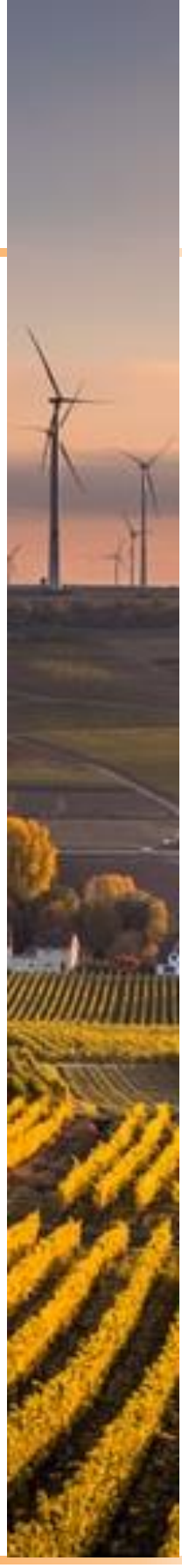
Cadenza INNOVATION

Our Mission

To deploy our intellectual property, field-proven operations and mass production expertise, along with our key technology partners to build Cadenza Innovation into a global technology leader in **safety, energy density,** and **low cost**.

Cadenza Innovation is deploying its battery technology to allow immediate access to a highly simplified design for lithium-ion energy storage systems.

We are Cadenza INNOVATION



Through a recent collaboration with the New York Power Authority (NYPA), we have proudly deployed our safe superCell Li-Ion battery technology at the New York Power Authority Headquarters in White Plains NY.

Alan Ettlinger, NYPA director of research, technology development, and innovation says, “There’s very stringent requirements. The New York City Fire Department has the most stringent rules and regulations concerning what can and cannot be installed.”

Cadenza achieves a lower flammability over 3X below that required by the NFPA’s *Standard for the Installation of Stationary Energy Storage Systems.*

Enterprise 66 kWh
18 Modules

Mid-Size 52 kWh
14 Modules

Compact 20 kWh
6 Modules

Core Principles

Cadenza has gone to great lengths to understand how and why internal shorts in Li-ion batteries can lead to catastrophic failures. Unfortunately, even with modern technology, it is impossible to design against the occurrence of internal shorts in batteries while maintaining competitive energy density.

At Cadenza, we have accepted the inevitable and designed our battery to prevent internal short propagation. This advantage is made possible because all Cadenza Battery Energy Storage Systems (BESS) are designed to inhibit flammable gas from having the opportunity to ignite in the first place. This ignition results in catastrophic failures seen in other Li-Ion architectures in the market today.

Cadenza Innovation's superCell technology leverages novel patented non-propagating Li-ion battery design. SuperCell technology meets safety code regulations at a lower total system cost. Combined with our high safety standards, Cadenza's superCell technology can be deployed anywhere from the most remote sites to dense urban environments.

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Low Voltage Products

Cadenza Innovation's indoor performance module product line offers a 100Ah/5.12 kWh energy storage system as well as a 50Ah/2.56 kWh option. Both 48V products are high energy density modules utilizing Lithium-Iron Phosphate chemistry in the safest, lowest cost, and most reliable fashion. Its high-tech Battery Management System (BMS) along with MODBUS communication informs you of the electrical metrics. We proudly boast zero explosions due to our innovative design. Whether you want to power your home, RV, boat, or office building, we serve countless applications to energize your everyday life.

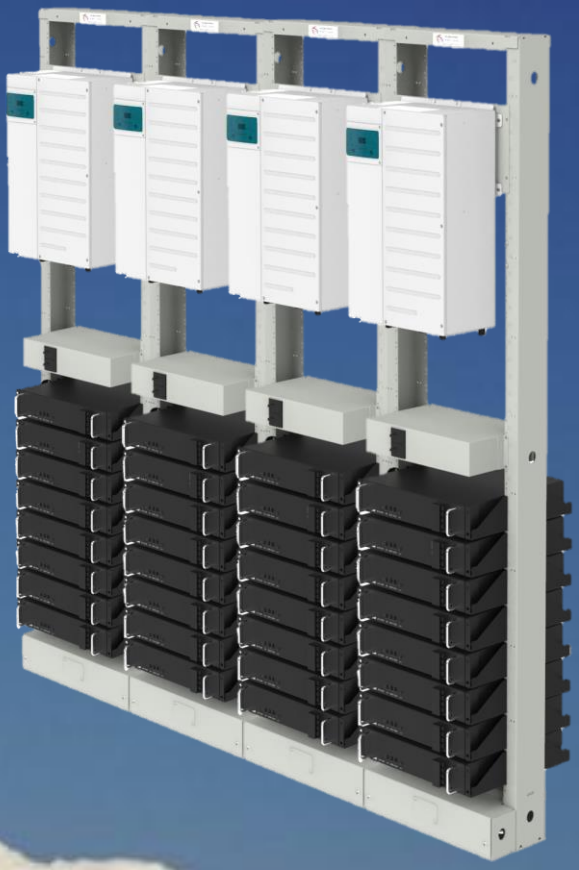
High Voltage Products

Cadenza Innovation offers one of the safest, most energy dense, and most reliable energy storage systems. The Cadenza superCell features 3.6 kWh energy and is specifically designed for urban environments. As you may know, the fire regulations in cities are far higher than in rural areas. Thus, we have tested extensively and created a masterpiece. Our batteries are, as always, designed knowing that internal shorts are inevitable. Our novel design has high safety and reliability without propagation. If an internal short happens, the damage is controlled and contained within the cell. This means that the rest of the system is left unharmed by what would normally result in fire. The batteries can act as a virtual power plant when paired with the Cadenza Cloud. Since our batteries are both compact and easily scalable, these plants could be designed to meet high levels of energy.

Our Battery Products

Cadenza's new high and low-voltage product lines can fit your needs in scenarios such as:

- *Energy storage*
- *Renewable integration*
- *Backup power*
- *Demand response*
- *Peak shaving*
- *48V Telecom*



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Energy Storage:

- ✓ Reduced carbon emissions
- ✓ Eliminates peaking plants & fossil fuel generation
- ✓ Integrates with wind & solar
- ✓ Stores energy when active
- ✓ Provides critical load backup
- ✓ Buffers loads for geothermal
- ✓ Facilitates demand response when integrated with the Cadenza Cloud
- ✓ Reduces energy infrastructure requirements

Distributed Energy Storage:

- ✓ Improves grid resiliency
- ✓ Distributed back-up, managed safely
- ✓ Flexible installations and locations
- ✓ Locate where the power is needed (peak shaving)
- ✓ Scalable architecture (additional storage is easily added)
- ✓ Quick response to local peak loads

More on our safe products…

Features:

- Cold and hot climate capable
- High energy density
- Unprecedented safety: UL, UN, IEEE certified
- Smart BMS, RS485, MODBUS communication
- Sustainable, clean technology
- Widely applicable
- Long lifespan

Usage:

Real time monitoring

Easy system integration

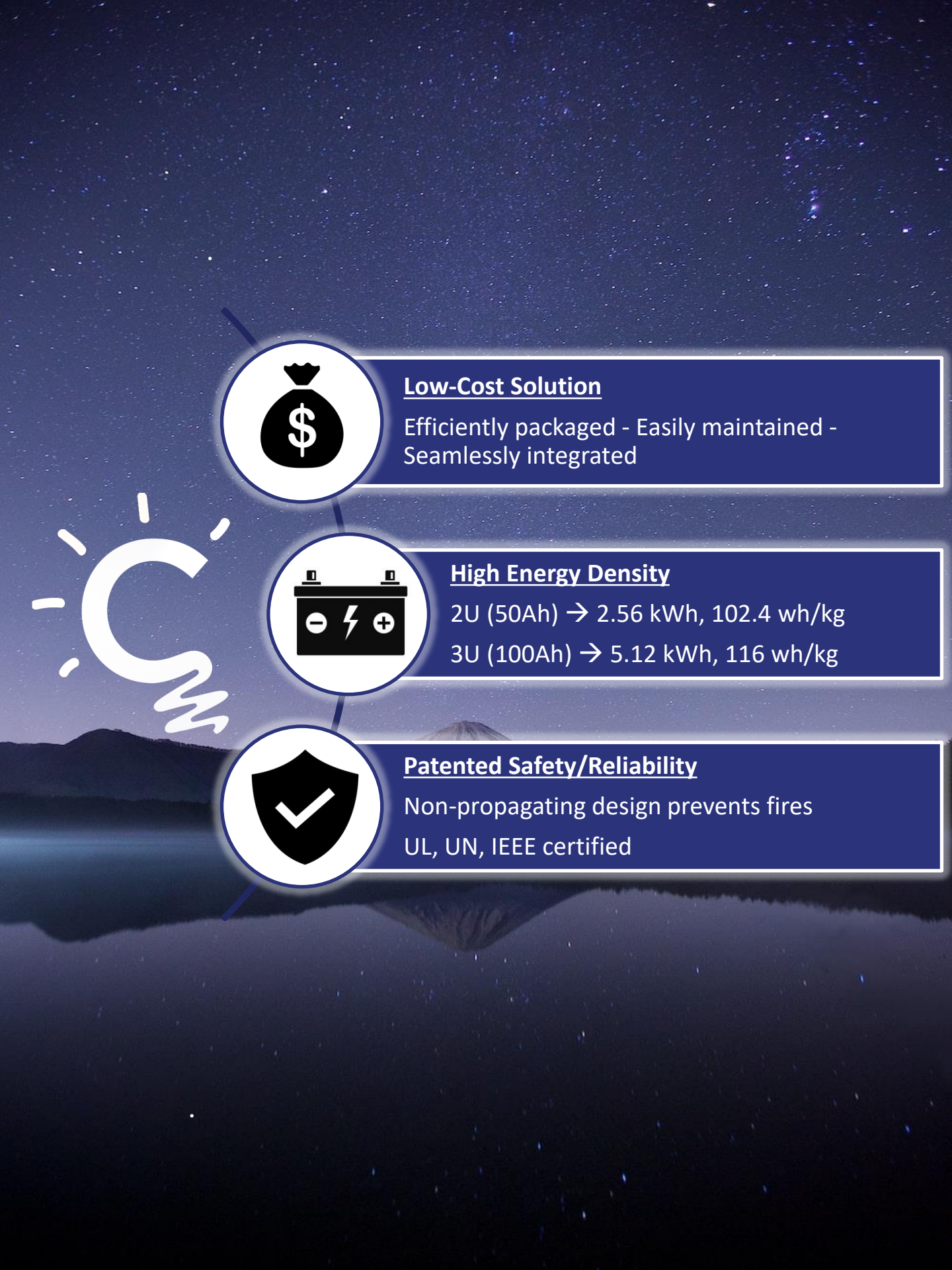
Simple configuration

Flexible installation

19” rack-mountable

With various working modes:

Charge, Discharge, Standby, and Sleep



Low-Cost Solution

Efficiently packaged - Easily maintained - Seamlessly integrated

High Energy Density

2U (50Ah) → 2.56 kWh, 102.4 wh/kg

3U (100Ah) → 5.12 kWh, 116 wh/kg

Patented Safety/Reliability

Non-propagating design prevents fires

UL, UN, IEEE certified

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