TrinaStorage

Elementa + Electra

Cell-to-Grid Storage Solution



Streamlined **Integration**

Comprehensive **Safety**

High **Performance**

Optimized **LCOS**

Cell-to-Grid **Storage Solution**

Elementa + Electra is an integrated, utility-scale cell-to-grid energy storage solution that combines the battery, technology-agnostic power conversion system (PCS) from a Tier 1 manufacturer, and grid capabilities into a unified architecture designed to optimize performance, enable rapid scalability, and maximize long-term project value.

Elementa: The DC Battery System

Provides a high-performance structural foundation optimized for energy density, cell safety, and lifecycle performance.

Battery System | Energy Density | Safety System



Electra: The AC Platform

Provides AC-side system integration – PCS, MV step-up transformation, grid interface, and standardized system design for reliable grid coordination.

Power PCS | MV Step-Up | Grid Compliance



Cell-to-Grid
The Capability Logic Behind Elementa + Electra

Cell-to-Grid Capability

Leveraging vertically integrated capabilities from battery cells to grid connection for enhanced performance, reliability, and system optimization.

Bankable System Performance

Pre-integrated and factory-tested cell-to-grid solution that simplifies deployment, reduces commissioning risk, and accelerates grid connection.

Validation, Delivery & Lifecycle Service

System-level testing, global delivery, and full-lifecycle service reduce commissioning risk and support long-term asset value.

Diverse Scenario Applications

Grid Integration & Co-location
Curtailment reduction, grid capacity, output smoothing, dispatch flexibility

Standalone Storage & Energy Market Trading
Arbitrage, ancillary services, capacity value, revenue stacking

Utility & Grid Support
Frequency/peak regulation, voltage support, congestion relief

Interconnection Delays, Microgrid, Energy Resilience
Islanding, black start, weak-grid support, critical-load protection

AI Data Centers & Large-Load Supply
Reliable, dispatchable, sustainable power for AI data centers

Complex Operating Environments
High temperature, humidity, dust, salt-fog, low-noise requirements



About Trina Storage

Trina Storage, a business unit of Trinasolar, is a global energy storage system provider dedicated to transforming the way we provide energy. Our mission is to lead the renewable energy transition through cost-effective storage and to provide Solar For Everyone by expanding solar generation at scale. Building on 29 years of solar experience, we deliver cost-effective and flexible solutions to utilities and developers around the world.

Interested in learning more?

Please contact us at www.trinasolar.com/us/contact-us

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