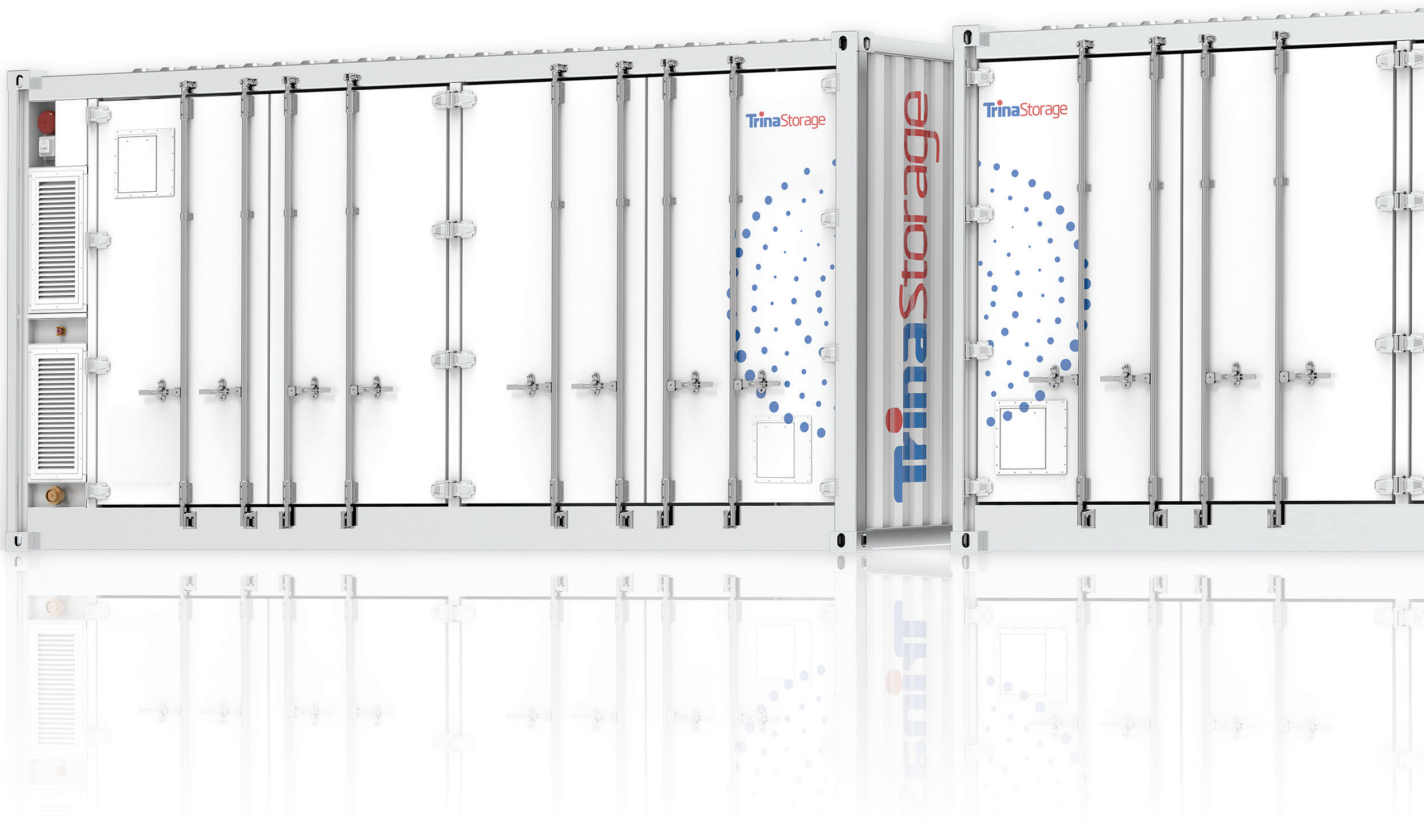
TrinaStorage

Elementa 2 Pro Platform



The Industry's New Standard in Grid Scale Energy Storage:

The Elementa 2 Pro Platform – A Fully Wrapped Cell-to-AC Solution

The Elementa 2 Pro Platform is Trina Storage's most advanced cell-to-AC solution, purpose-built for the demands of the North American grid. Drawing on decades of renewable energy leadership and a proven track record in utility-scale storage deployments, Trina Storage delivers a platform that integrates every critical system component – from cells to site – under a single, bankable umbrella. Designed and tested for real-world performance, the Elementa 2 Pro Platform combines technical innovation, transparent supply chains, and domestic integration to reduce project risk and accelerate time to revenue.

Energy Storage Rating by BNEF (2024 & 2025)

Tier 1

TrinaStorage

Bloomberg NEF

2024 Bankable System Integrators

TOP 6

TrinaStorage

Bloomberg NEF

2024 Energy Storage System Shipments

TOP 10

TrinaStorage

Earns Dual Recognition for Safety and Bankability

DNV & UL Solutions

TrinaStorage

Elementa 2 Platform

Elementa:

The DC Building Block That Powers Our Platform

At the core of the Elementa 2 Pro Platform is Elementa – our proven, in-house engineered DC block built on Trina's own LFP cell technology.

With decades of battery innovation behind it, Elementa delivers superior lifecycle performance, safety, and full traceability from raw materials to deployment.

Our difference? We're not just delivering battery containers – we're delivering a tested, transparent, and trusted DC foundation.

The Trina Storage Advantage:

Complete Traceability, Trusted Partnerships & U.S. Infrastructure

- **Trina Storage Trace:** Industry-leading traceability system, delivering component-level transparency from cell-to-AC
- **Trina Storage Alliance:** Vetted, U.S.-based partner network ensuring reliable, compliant system components
- **U.S.-Based Contracting & Service:** Local support for procurement, contracting, commissioning, and lifecycle service

With the Elementa 2 Pro Platform, you're not just buying a product – you're gaining a partner with proven capability, deep market understanding, and a commitment to your success.

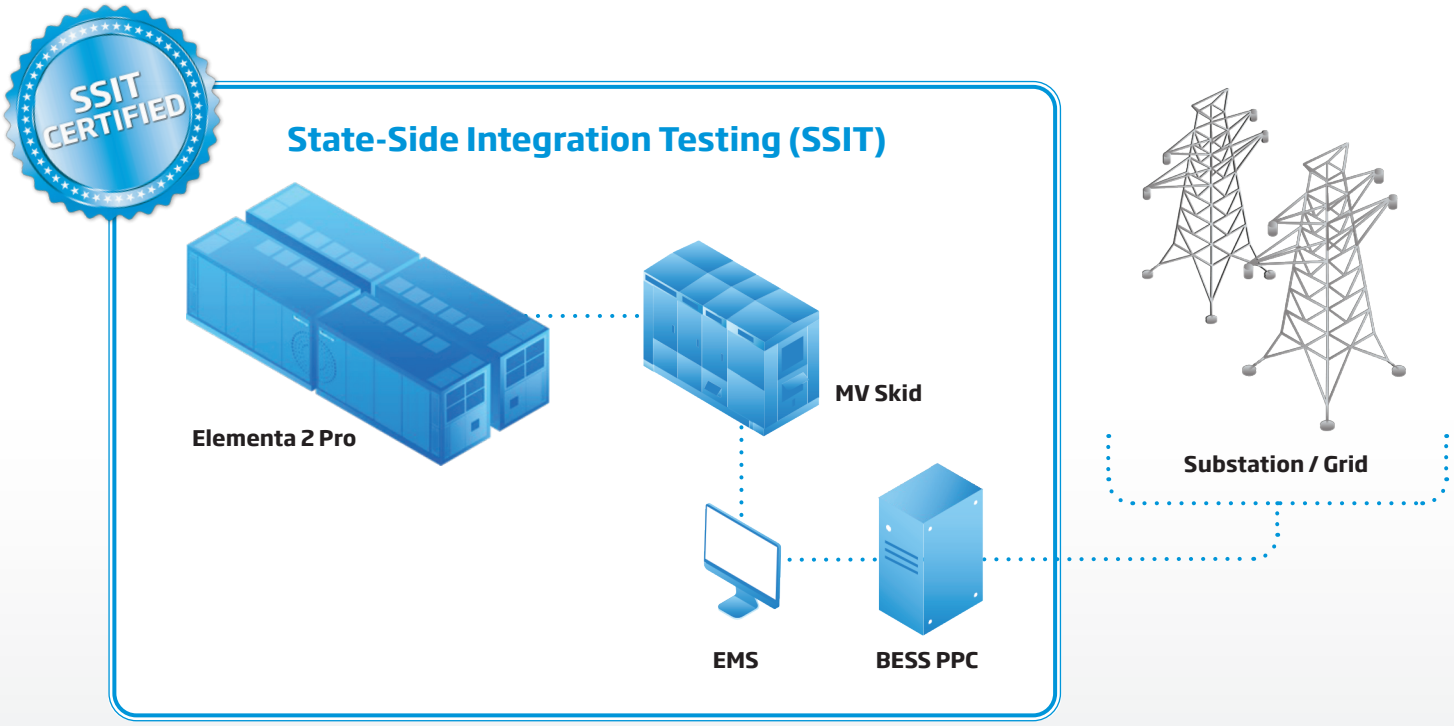
Beyond the Container: A Complete, Integrated Platform

The Elementa 2 Pro Platform isn't a collection of components. It's a fully integrated system that includes:

- Trina Storage Elementa 2 Pro DC Block
- Transformers
- Power Conversion System (PCS)
- Energy Management System (EMS)

Every element is tested together and delivered under a single contract – reducing handoffs, eliminating guesswork, and simplifying project execution.

Validated by our State-Side Integration Testing (SSIT), every platform leaves our hands field-ready. Testing occurs in North Carolina with plans to expand to multiple U.S. test locations. Specific configurations receive an official SSIT Certificate, including a list of integrated components and test results, ensuring each AC system arrives field-ready.

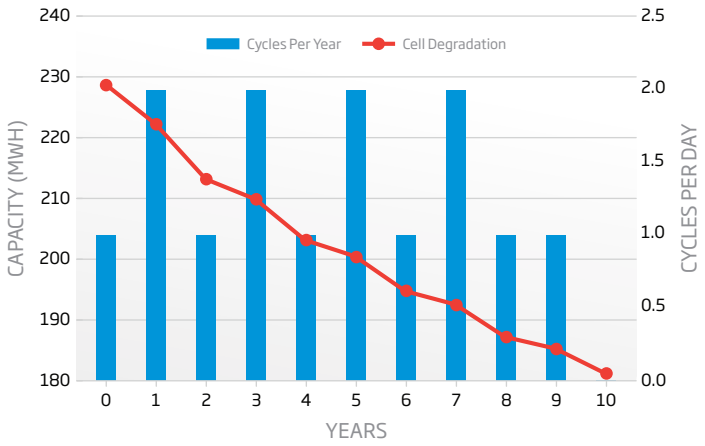


Dynamic Degradation Curve:

Real-World Modeling of the Whole System

With the Dynamic Degradation Curve,™ we model system performance based on real-world cycling – not unrealistic static assumptions. This allows us to offer realistic, operationally aligned performance guarantees – giving you better visibility into project economics.

Backed by third-party bankability reports and a track record of global deployments, Elementa 2 Pro Platform isn't just engineered to perform – it's proven to deliver.



Product Specifications:

System Parameters	TSMG5015S2-2H	TSMG5015S2-4H
Cell Type	LFP – 3.2V / 314Ah	
Electrical Configuration	416S12P*2	416S12P*4
Nominal Capacity	5015kWh	
Max Operating Voltage Range (DC)	1123.2V~1497.6V	
Dimensions (LxWxH)	6058mm x 2438mm x 2896mm	
Weight	40.5T (81,000 lbs)	
IP Rating	IP55-Container, IP67-Module	
Operating Ambient Temperature	-30~50°C (>45°C Derating), -22°C~122°F (>113°F Derating)	
Altitude	≤4000m	
Cooling Mode	Intelligent Liquid Cooling	
Fire Safety	NFPA 69 Compliant ventilation system + audible and visual alarm (default), NFPA 68 Compliant deflagration panel, Aerosol, dry pipe sprinklers (Optional)	
Anti-Corrosion Degree	C4 (C5 Optional)	
Operation Humidity Range	0-100% (Non-condensing)	
Communication Protocols	CAN/Modbus TCP	
Noise	70dB (25°C), 65dB (Optional)	

AC Parameters

AC Power	4200kW-5000kW
Operating Grid Voltage	13.8kV-34.5kV (±10%)
Operating Grid Frequency	60 Hz
Compliance	UL 9540/UL9540A/UL1973, EN 61000-6-2/4 (EMC), CE, UN 38.3/UN 3536

Images courtesy of Lightshift Energy.




TrinaStorage

www.trinasolar.com/us/Storage/Solution

Shipments Globally

10GWh