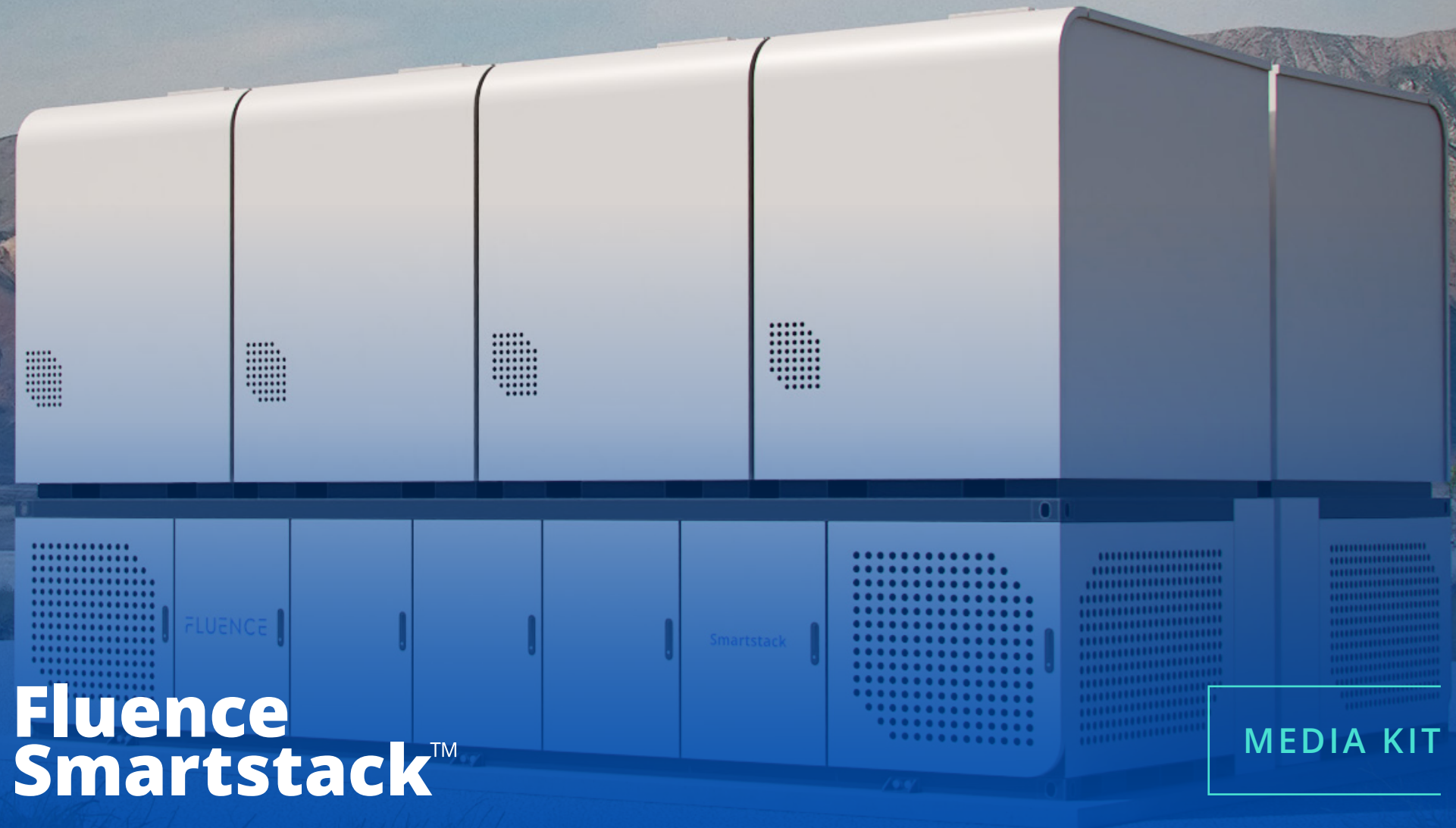


FLUENCE®

A Siemens and AES Company



Fluence
Smartstack™

MEDIA KIT

Fluence has developed a new energy storage platform

to address the growing and evolving energy market. Fluence Smartstack™ is a high-density, AG-based energy storage platform offering smart performance, predictive servicing, leading cybersecurity, and top-class safety all in a future-ready modular design. Smartstack is designed to address the industry's land use, performance, and transportation logistics challenges brought on by unprecedented growth and demand.





Smartstack reimagines energy storage design

through a patent-pending modular architecture that can be tailored for different storage durations and varying market needs. The product's form factor includes two key components:



SMART SKID

A base platform that houses the brains of the Smartstack system. The Smart Skid integrates advanced cooling equipment, power control system hardware, all cabling, and comprehensive monitoring capabilities with convenient maintenance access.



BATTERY PODS

Smartstack battery pods sit atop the Smart Skid and contain the system's battery cells. Pods are designed to be swapped with replacement units during maintenance or technology upgrades maximizing system availability.

The future-ready architecture brings the following benefits:

- Delivers approximately **30% higher energy density** compared to traditional AC systems
- Drives **greater overall Internal Rate of Return (IRR)** for project developers
- Embedded with **AI-enabled system intelligence** that lengthens life, and increases uptime and market participation
- **Simplified logistics and installation**

The following sections of this media kit cover the most pressing challenges facing the storage industry and how Smartstack is designed to help solve them.

Energy Density in Grid-Scale Storage

WHAT IS ENERGY DENSITY?

Energy density refers to the amount of energy a battery can store relative to its physical size (volumetric energy density) or weight (gravimetric energy density). For grid-scale battery storage systems, volumetric energy density is often the more critical metric, as it determines how much energy can be packed into a given footprint, which is particularly important for installations in urban or space-constrained environments.

WHY IS ENERGY DENSITY IMPORTANT?

High energy density is crucial for maximizing the efficiency and practicality of grid-scale energy storage. Higher energy density allows utility-scale systems to store more energy per unit of land or infrastructure, reducing installation costs, simplifying logistics, and minimizing land use conflicts. Additionally, higher energy density systems can lower transportation and construction costs during deployment.

Store more energy per unit of land or infrastructure, reduce installation costs, simplify logistics, and minimize land use conflicts.

HOW DOES SMARTSTACK SOLVE THE DENSITY CHALLENGE?

Smartstack's patent-pending design addresses the industry's density and transportation logistics challenges. Smartstack's form factor strategically splits weight and dimensions into transportable units, reducing shipping constraints and installation complexity. Onsite, the system maximizes project site density with proven battery cell technology, delivering approximately 30% higher energy density than traditional AC-based systems. The platform enables more MWh generation within existing project footprints and can make previously constrained sites viable for storage project development.



System Intelligence in Grid-Scale Storage

WHAT IS SYSTEM INTELLIGENCE?

System intelligence in grid-scale battery energy storage refers to the software and algorithms that control, optimize, and monitor the operation of the storage system. This includes energy management systems (EMS), battery management systems (BMS), and advanced analytics that allow the system to operate efficiently, respond dynamically to grid conditions, and extend the system's lifetime.

WHY IS SYSTEM INTELLIGENCE IMPORTANT?

1. Optimization of Performance
2. Grid Stability and Responsiveness
3. Predictive Maintenance
4. Cybersecurity

HOW DOES SMARTSTACK DELIVER ENHANCED SYSTEM INTELLIGENCE?

The platform elevates system intelligence with locally deployed AI, autonomously optimizing embedded controls while providing full visibility across storage portfolios.

Through a combination of real-time monitoring and local AI-enabled controls, Smartstack's system intelligence constantly adapts to real-time conditions, helping ensure storage operators can maximize market participation and reduce their efficiency losses, all while keeping system operations within safe parameters. Smartstack's real-time monitoring and AI-enabled controls support behavior-based anomaly detection using diagnostic data to identify unusual performance patterns that may indicate security threats or operational issues.

Real-time monitoring and AI-enabled controls support behavior-based anomaly detection.



Optimizing the Economics of Grid-scale Storage

WHAT IS INTERNAL RATE OF RETURN (IRR)?

IRR is a financial metric used to evaluate the profitability of an investment, including grid-scale energy storage systems. IRR indicates the expected rate of return a project will generate over its lifetime. It is widely used by developers, investors, and utilities to assess whether a grid-scale energy storage project is financially viable and worth pursuing.

WHY IS IRR IMPORTANT?

1. Evaluating Profitability
2. Risk Assessment
3. Comparison of Projects
4. Project Financing

Higher revenue potential,
with real-time insights

HOW DOES SMARTSTACK HELP IMPROVE A PROJECT'S IRR?

- Smartstack's optimized design delivers significant CAPEX savings while its modular architecture reduces maintenance costs and accelerates project timelines.
- With enhanced power density and comprehensive controls, Smartstack enables higher revenue potential, with real-time insights driving maximum asset utilization across the storage fleet.
- Smartstack is designed to deliver industry-leading 99% system availability which drives to higher revenue generation.
- Smartstack's system intelligence enables storage owners to benefit from longer system lifespans, improved balance levels, more precise state of charge measurements, and available in-use life extensions, backed by Fluence's investment in system testing and safety.

Smartstack Messaging

SMARTSTACK MESSAGING GUIDELINES

Fluence Smartstack™ should be written as follows:

- Fluence Smartstack™ on first reference
- Smartstack on following references

PRODUCT DESCRIPTION:

Fluence Smartstack™ is a high-density, AC-based energy storage platform offering smart performance, predictive servicing, leading cybersecurity, and top-class safety all in a future-ready modular design.



SMARTSTACK IMAGERY

An image of Smartstack and accompanying caption approved for media use are available on our website.

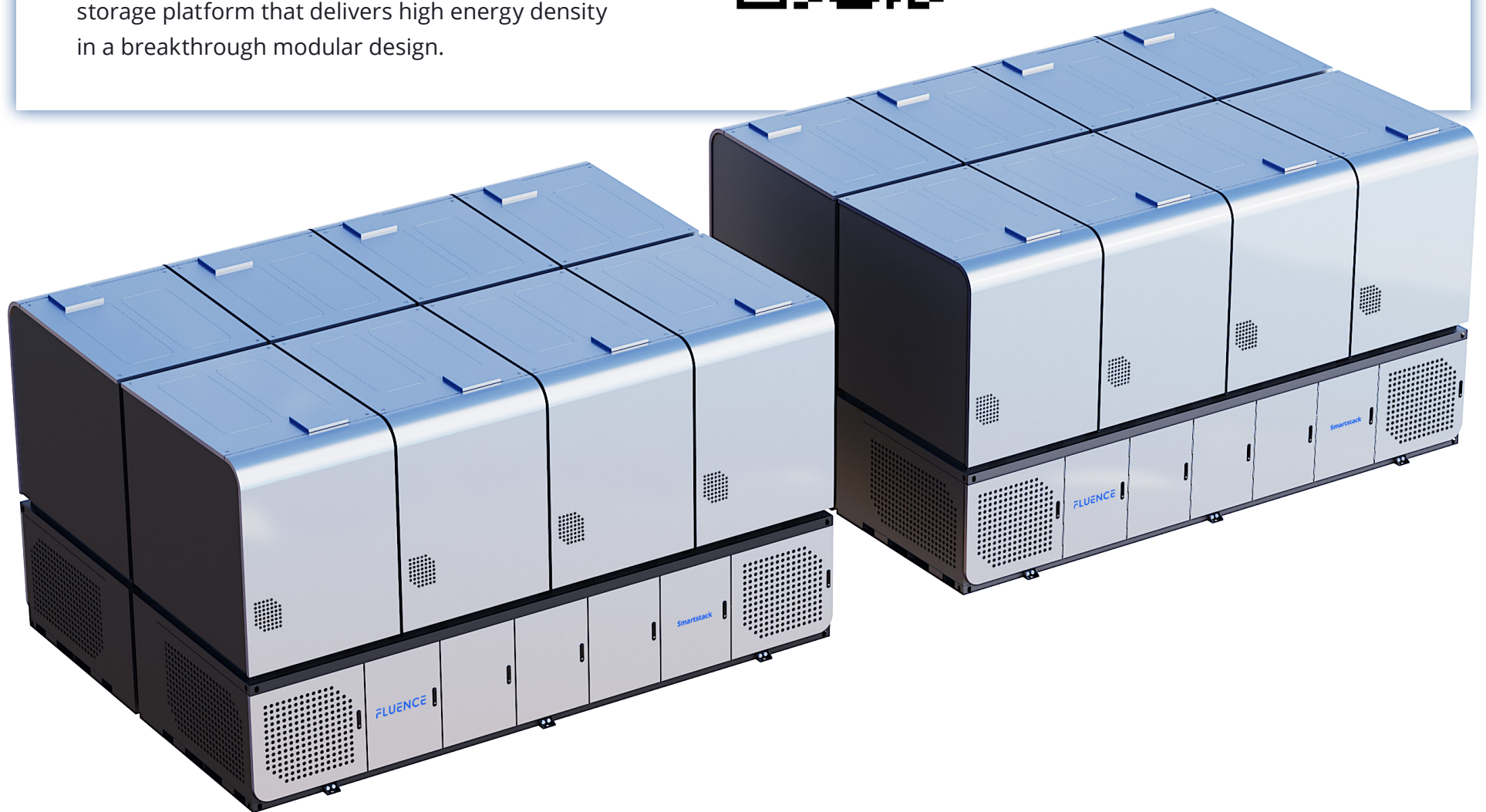
IMAGE CAPTION

Fluence Smartstack™ is an AC-based energy storage platform that delivers high energy density in a breakthrough modular design.



DOWNLOAD ASSETS

Scan the QR code to browse the media kit and download the image file.





MEDIA INTERVIEWS

Want to learn more about Smartstack and how Fluence continues driving the energy storage industry forward through speed and innovation? Contact Shayla Ebsen, Director of Communications at Fluence, shayla.ebsen@fluenceenergy.com.

ABOUT FLUENCE:

Fluence Energy, Inc. (Nasdaq: FLNC) is a global market leader delivering intelligent energy storage and optimization software for renewables and storage. Fluence's solutions and operational services are helping to create a more resilient grid and unlock the full potential of renewable portfolios. With gigawatts of projects successfully contracted, deployed, and under management across nearly 50 markets, Fluence is transforming the way we power our world for a more sustainable future.

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