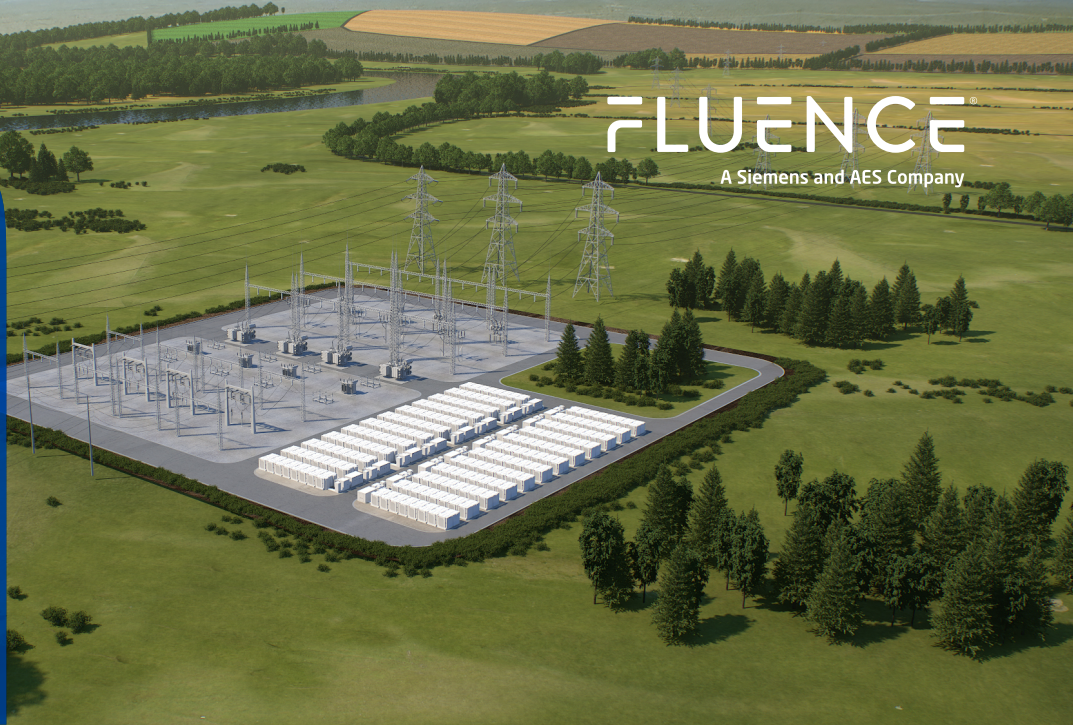# Fluence Gridstack™

Grid-scale, industrial-strength energy storage product designed for the most demanding market applications with industry-leading reliability, scalability, and safety.

FLUENCE®
A Siemens and AES Company

About Gridstack

Gridstack's industrial-strength design is built for the most demanding applications including Flexible Peaking Capacity, Frequency Regulation, Renewable Integration, T&D Enhancement, and more. The system is highly configurable to meet your specific operational requirements and can be cost-effectively augmented over time to maximize asset value..

Features

Easily Configurable: Gridstack's flexible architecture lets you configure key components from pre-qualified Tier 1 suppliers to best meet your deployment requirements. Enhance your system for specific market applications with a range of optimized dispatch algorithms.

Highly Scalable: Gridstack brings repeatability to large energy storage deployments. The scale-out design drives efficiencies in project permitting and delivery to reduce your implementation risk, while consistency across project locations simplifies training, operations, and maintenance.

Total System Safety: Gridstack comes equipped with comprehensive safety features throughout the integrated technology stack. The factory-built design brings consistent quality control to your storage system for the highest level of safety.

Fluence Cube is your building block for better energy storage.

The Fluence Cube is a factory built, modular storage building block for safe, cost-effective systems configurable with the latest component technologies, delivering:

- Cost-effective systems with maximum quality control
- Fast procurement and contracting process
- Simple system design, engineering, and permitting
- Rapid delivery, construction, and commissioning
- Latest safety features and storage components

Gridstack™ Specifications

Gridstack System

Rated AC Power (50°C)	2 MW – 500+ MW		**Availability**	>97.0%
Discharge Duration	1 – 6+ hours		**Altitude**	De-rated over 1,000 meters
Grid Frequency	50Hz and 60Hz		**Seismic Rating**	Seismic options available
Reactive Power	Four-quadrant control, 0.9 leading to 0.9 lagging at rated power (reactive capability available over full real power range)*		**System Response Time**	Down to 150 ms
			Standard Temperature Range	-30°C to 45°C

Fluence Cube

Cube Dimensions (H x W x D)
Long Duration: 2,549 x 2,566 x 2,160 mm
Short Duration: 2,549 x 2,566 x 2,257 mm

Cube Weight (total) lb/kg
Long Duration: 18,078 / 8,200
Short Duration: 18,850 / 8,550

Enclosure Rating
NEMA Type 3R

IP Rating
IP55

Cooling
Air or Liquid Cooled

Battery Chemistry
Advanced lithium ion sealed cells

Safety Features
Fast stop, fire detection and suppression system (solid aerosol, optional), gas detection (carbon monoxide), deflagration panels, lockable disconnect switch, open door sensor, gas spring damper, sliding door lock

Installation
Forkliftable from all four sides.
Crane compatible and includes vertical stabilization.

Additional reactive capability upon request

Fluence OS

Fully-integrated operating system for system control, safety monitoring, asset protection, and external integration.

Operation Modes
Automatic Resource Control, Manual Dispatch, Idle, Disconnect, Reset

System KPIs
Real and reactive power dispatch, state of charge, cell voltage and temperature, auxiliary system details, core and node status, fire system and F-Stop status, and more

External Control Interface
SCADA and EMS integration available via common protocols including DNP3 and Native Modbus TCP/IP

Market Dispatch Applications
Primary and secondary frequency control, peak shaving, power factor regulation, AGC, SOC management, and more
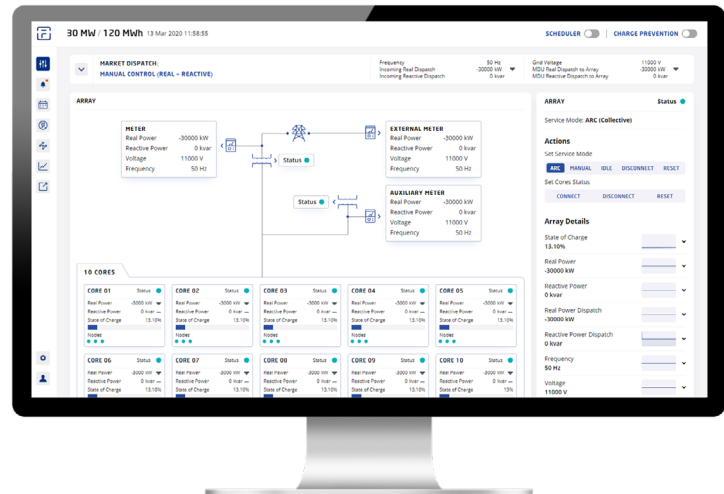

Fluence IQ

The Fluence IQ™ Platform maximizes the value of solar, wind, and energy storage with advanced software products.

Mosaic
Intelligent, AI-powered bidding for renewables and energy storage

Nispera
Next generation asset performance management software for renewables and energy storage

About Fluence™

Fluence (Nasdaq: FLNC) is a global market leader in energy storage products and services, and digital applications for renewables and storage. Fluence provides an ecosystem of offerings to drive the clean energy transition, including modular, scalable energy storage products, comprehensive service offerings, and the Fluence IQ Platform, which delivers AI-enabled digital applications for managing and optimizing renewables and storage from any provider. The company is transforming the way we power our world by helping customers create more resilient and sustainable electric grids.