# Fluence Edgestack™

Connection-ready commercial and industrial energy storage product designed to support 500+ kW applications with rapid deployment and minimum footprint.

**FLUENCE®**
A Siemens and AES Company

## About Edgestack

Edgestack is a complete, connection-ready system used by C&I customers to reduce monthly electricity costs.

Edgestack discharges when needed to flatten a facility's energy load profile and significantly reduce demand charges from the utility. The fully-integrated system is available in 500 kW building blocks that can be configured to meet the needs of individual facilities and aggregated across fleets or customer locations without time-consuming redesigns. Edgestack is built using our 6th generation technology stack, which incorporates more than 3 years of design and deployment experience.

## Features

**Connection Ready:** Edgestack comes fully integrated with all the batteries, inverters, safety features, cooling, and software controls needed. Edgestack is quiet, emissions-free, occupies a small footprint, and can be sited at nearly any C&I location.

**Fleet Optimized:** Configure Edgestack to meet your requirements then deploy across a fleet of facilities or customers. Edgestack's modular system architecture drives efficiencies in project design and permitting for fast delivery and rapid installation, while consistency across project locations simplifies training, operations, and maintenance.

**Total System Safety:** Edgestack 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

# Edgestack™ Specifications

## Edgestack System

| | |
|---|---|
| **Rated AC Power (50°C)** | 500 kW – 4 MW |
| **Discharge Duration** | 1 – 4 hours |
| **Grid Frequency** | 50Hz and 60Hz |
| **Reactive Power** | Four-quadrant control, 0.9 leading to 0.9 lagging at rated power (reactive capability available over full real power range)* |

| | |
|---|---|
| **Availability** | >97.0% |
| **Altitude** | De-rated over 1,000 meters |
| **Seismic Rating** | Seismic options available |
| **System Response Time** | Max capacity change in 1,000 ms |
| **Standard Temperature Range** | -30°C to 45°C ** |

## Fluence Cube

**Cube Dimensions (H x W x D)**
Long Duration: 2,549 x 2,578 x 2,160 mm
Short Duration: 2,549 x 2,578 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), gas detection (carbon monoxide), deflagration panels, lockable disconnect switch, open door sensor, gas spring damper, sliding door lock

**Installation**
Forkliftable from all 4 sides. Crane compatible and includes vertical stabilization.

## Fluence OS

Fully-integrated operating system for comprehensive control, asset management, and system visibility.

**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**
AGC, real and reactive power dispatch, SOC management

## Fluence IQ

The Fluence IQ Bidding Application automates wholesale market participation to maximize asset value in the NEM and CAISO markets.
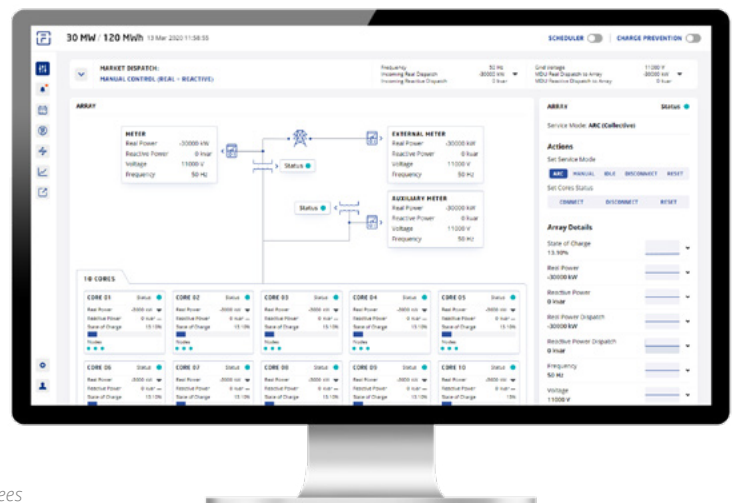
**Forecasting**
Analyze thousands of variables to predict future market prices

**Optimization**
Automatically generate optimal bids for wind, solar, and storage assets

**Bidding**
Incorporate organizational risk tolerance levels into bidding strategy



*\* Additional reactive capability upon request*
*\*\*Can vary depending on cooling system, low temperature kits required below -10 degrees*