

PRODUCT DATA SHEET

Agile Flow Battery



The Agile Flow Battery from EnSync Energy Systems provides commercial and industrial facilities unrivaled flexibility in powering operations. Suitable for long duration and deep discharge, the Zinc-Bromide chemistry allows for a variety of applications beyond simple peak demand reduction, and opens up new opportunities for facility managers to integrate renewables, optimize energy usage, and lower costs.

EnSync's fourth generation flow battery, the Agile system features proven durability and performance. EnSync Agile Flow batteries are modular and scalable in size to meet power requirements for a wide variety of applications.

The Agile Flow Battery is managed by EnSync's auto-async control system available in the Matrix Energy Management platform that seamlessly integrates EnSync's bi-directional inverter and distributed generation.



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PRODUCT FEATURES

Full Depth of Discharge (DOD)	Zinc Bromide technology is well-suited to full, 100% DOD cycles with minimal degradation. Long duration discharge times provide operators with increased flexibility
Advanced Battery Management	Features an EnSync designed and integrated Battery Management System (BMS) for seamless monitoring and control
Ambient Temperature Operation	With no de-rating of performance in temperatures up to 104°F, the Agile does not require a temperature conditioned space for installation
Fire Safety	Industry leading fire safety with flame retardant electrolyte
Scalable and Configurable	Multiple units can be configured for larger system sizes

SPECIFICATIONS

ELECTRICAL	
Rated Energy Capacity	55 kWh
Response Time	<1ms
Discharge Power (Permitted Range)	0 kW – 25 kW
Rated Discharge Power	12.5 kW
Rated Charge Power	18 kW
Charge Power (Permitted Range)	5 kW – 18.8 kW
Battery Efficiency	75%
Auxiliary Power is self-derived from a common internal DC point of connection. Can self-power / idle without external power source.	

MECHANICAL	
Dimensions	7.2'W x 4'D x 6.6"H (6.9' installed) 2.2m x 1.2m x 2m (2.1m installed)
Weight (with electrolyte)	4,740 lbs. / 2,150 kg
Weight (without electrolyte)	2,094 lbs. / 950 kg
Electrolyte by Volume	211 gallons (800 liters)
Containment (built in; >150% of largest tank)	159 gallons (600 liters)
Unit Handling	Fork-lift/Pallet Jack/Crane
Front and back fully accessible through lightweight, lift-off service panels	

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SPECIFICATIONS CONT.

ENVIRONMENTAL	
Enclosure	IP 21 / NEMA 1 / IP 54 for battery compartment / NEMA 13
Operating Temperature Range	-10°C to 40°C (-30°C available as option) 14°F to 104°F (-22°F available as option)
Storage Temperature Range (with no external source of energy and discharged module)	0°C to 50°C 32°F to 122°F
Storage Temperature Range (with external source of energy and discharged module)	-30°C to 50°C -22°F to 122°F
Humidity	100% non-condensing

BATTERY MANAGEMENT SYSTEM (BMS) – REPRESENTATIVE FUNCTIONALITY	
Measurement	Voltage – Over / Under Temperature – Over / Under Multipoint Electrolyte Level Sensing
Calculation	State of Health (SOH) State of Charge (SOC) Power
Control	Charge Discharge Fault Response
Communication Protocol	Modbus Standard Multiple Options Available

CERTIFICATIONS AND COMPLIANCE	
Designed to meet	UL 9540, UL1973 NFPA, NEC
Third Party Performance Validation	NIOSH GB7 2.1-2007
Quality Standards	ISO 9001

WARRANTY AND SERVICE	
Standard Warranty (months from shipment / commissioning)	24/18 (extended warranty available)

OPTIONAL PACKAGES	
Cold Weather Package	-30°C

Note: Product specifications are subject to change without notice.