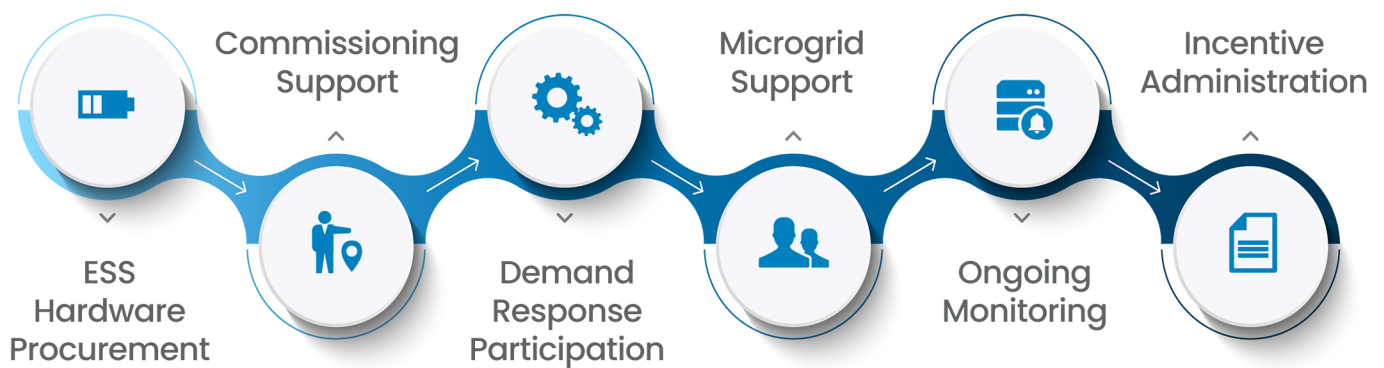# Acumen EMS™

Energy Management System

Acumen EMS controls software combines behind-the-meter value streams to generate the highest revenues for your Energy Storage project. Acumen utilizes artificial intelligence to forecast and optimally operate energy storage systems to ensure maximum value.

MAXIMIZE YOUR STORAGE ASSETS WITH ACUMEN EMS

- **One-Stop Shop.** Energy Toolbase enables modeling, purchasing, procuring, commissioning, and monitoring for your energy storage systems paired with Acumen EMS.

- **Optimized.** Robust operating modes optimized for bill savings, revenue generation of your assets, and critical backup capabilities.

- **Forward-Looking.** Participating in current and future value stream opportunities.

- **Compliance.** OEM warranty and incentive program (e.g., ITC, SGIP) compliant operations.

- **Flexible.** Acumen EMS integrates with a variety of top tier Energy Storage Hardware platforms tailored to your project's specifications.

- **Standards.** Supports all industry standard communication protocols.

- **Proven Track Record.** Acumen EMS has a history of successful deployment and optimization, a dependable brand for your projects.

PROJECT-LEVEL SUPPORT SERVICES

Commissioning Support

Microgrid Support

Incentive Administration

ESS Hardware Procurement

Demand Response Participation

Ongoing Monitoring

ACUMEN EMS ALL-IN-ONE SOLUTION

Our turnkey, fully wired enclosure houses all of the necessary hardware components in a single box, enabling a streamlined installation and commissioning. Pre-configured for the specific project and application.

✓ Turnkey   ✓ Revenue Grade Metering   ✓ Rugged Outdoor Enclosure   ✓ LTE 4G as an Option

ETB MONITOR REAL TIME PERFORMANCE

Our full-featured ETB Monitor solution comes standard when deploying our Acumen EMS controls software. Real-time insights into the operational performance and savings of your solar + storage systems.

energy toolbase

www.energytoolbase.com | contact@energytoolbase.com

TECHNICAL SPECIFICATIONS FOR NORTH AMERICA

OPERATING MODES

Demand Charge Management, Time-of-Use Arbitrage, Solar Self-Consumption, DC Clipping Recapture, Demand Response Programs, Critical Load Resiliency, Signal-Based Dispatching

CERTIFICATION

EMS Certifications
CE & FCC Class A
UL Listed Device
Sunspec IEE 2030.5

Storage Partner Certifications
UL1741 (SA/SB)
UL9540 (A)

METERING

Integrates with Modbus TCP enabled Revenue Grade Meter
High Accuracy CT's (ANSI .06 or Better)
Data Capture from Solar PV, Storage, Utility Metered Load

RESILIENCE

Autonomous operation for limited periods of time with no Internet
Sustained operations during power interruptions

COMMUNICATIONS

RS-485 or Ethernet/ TCP Networks
Modbus RTU
Modbus TCP
Sunspec/Mesa Modbus API

CONNECTIVITY

Wired Ethernet
Embedded LTE

COMPATIBILITY

ETB Monitor - a single monitoring platform for all ESS hardware deployed at site with Acumen EMS
Integrated with tier one hardware vendors

ENVIRONMENT

Operating Temperature: -25°C to 70°C
Relative Humidity: 10% to 95% (non-condensing)

energy toolbase