# Connecting Clean Energy with Electricity Demand Management



Generate and manage your own power and reduce costly demand charges with NantEnergy's SmartStorage™ C&I system, a truly intelligent battery storage solution that delivers utility bill savings and benefits without intervention.

### Intelligent System Operation

As your building's power demand starts to rise, the NantEnergy system's load controllers trigger a rapid power discharge to offset the increase. The result is your demand is capped; when high-price utility time-of-day energy rates kick-in, the NantEnergy system discharges available energy to reduce your consumption of the most expensive utility energy, recharging when rates are lower; as a utility power outage commences, the NantEnergy system enters back-up power mode, supplying reserve energy to power your building during the outage.



## NantEnergy SmartStorage™ for C&I Snapshot:

- Reduce demand charges and shift expensive energy usage to cheaper times of day
- Exceptional Economics: typically a 3-5 year ROI
- Ten year operating life, twenty years available with battery refresh
- Comprehensive site analysis with predictive, intelligent algorithms that maximize savings
- Maximize uptime and participate in revenue generating utility programs
- Simple and safe installation process
- Available financing provides immediate positive cashflow

# Cost-Effective and Applicable to a Wide-Range of Buildings

- Office buildings
- Retail
- Light manufacturing
- Multi-family housing
- Warehouses
- Schools
- Nursing homes
- Hotels
- Electric vehicle charging stations
- And many, many more

NantEnergy's optional 10- or 20-year Asset Management Service, which includes a Demand Reduction Performance Guarantee, provides assured performance over the system's lifetime.

#### **TECHNICAL SPECIFICATIONS**



The NantEnergy C&I system integrates advanced lithium-ion batteries with our proprietary, predictive learning Software controller. The batteries charge during low use periods, or when solar production is highest, and dispatches power at peak times during the day.

Smart metering gathers real-time data on your building power needs. Online monitoring allows you to watch performance while NantEnergy's 24/7 cloud-based Network Operations Center monitors system performance and provides timely maintenance.

#### **Product Features**

# Scalable Power and Capacity

- · Available in 30kW to 2MW configurations
- · 2-6 hour discharge duration
- Highly scalability to meet site-specific power and capacity needs for optimum ROI

Multiple applications
supported to meet
site needs

- · Demand Charge Management
- · Energy Arbitrage
- · Solar Self-consumption and solar firming
- · Savings optimization for utility critical peak pricing
- Multi-site fleet dispatch for participation in utility programs.

# Intuitive User Interface and Reporting

- Intuitive User Interface · Web server-based user interface
  - · Secure account access
  - · Real-time and historical performance graphing
  - Automatic generation of periodic performance summaries

#### Safety

- Battery rack, cells and Battery Management System (BMS) tested and approved to UL standards
- Power converter tested and approved to UL standards
- Integrated BMS provides redundant automated safety features
- System alerts delivered to our network operations center, 24/7

#### Reliable Performance

- 10-year warranty and performance guarantee available under Asset Management Service Agreement (20-year Service option available with Battery refresh).
- Integrated industrial-grade site controller with multiple redundancy features
- · 24/7 Remote performance monitoring
- Integrated cloud-based management with multisite redundant data backup

#### Packaging and Installation

- System pre-integrated in NEMA3R, environmentally conditioned, UL certified outdoor rated enclosure.
- · Suitable for indoor and outdoor installation
- · Easy onsite integration and installation

### Future Proof

- · Automated in-field software updates
- · Post-deployment performance tuning
- Post-deployment feature addition for additional savings

### Communications

Interface

- Ethernet
- Wireless (optional)

#### **Electrical Inverter Specifications**

AC Power Rating	Scalable in 30kW increments (125kW option)
Storage Capacity	Scalable in 68kWh increments
Battery Chemistry	Reliable, safe lithium manganese oxide
AC Interconnection Voltage	480V, 3-phase (208V option)
Control Electronics Supply	110V AC

#### Physical Specifications

Approx. battery enclosure dimensions	81"Hx40"Dx48"W per 68kWh or 137kWh unit
Approx. inverter dimensions	39"Hx9"Dx24"W per 30kW unit
Approx. weight of battery	1600 lbs per 68kWh unit
Approx. weight of inverter	120 lbs per 30kW unit
Battery enclosure type	Indoor/Outdoor NEMA3R rated with environmental conditioning and optional sunshield
Inverter enclosure type	Indoor/Outdoor, NEMA 4X
Battery enclosure mounting/stability	Bolts to the floor, Zone 4 Seismic rating
Inverter mounting	Wall-mount

#### Certifications and Compliance

System	UL 1642, UL 1973,
Certifications	UL 508, UL 1741
Interconnection Compliant	CA Rule 21 and more



NOTE: Specifications are for guidance only and are subject to periodic changes without notice.