





# Advanced energy storage for utilities that power the world

As the global leader in stored energy solutions, EnerSys® has been developing innovative new products, systems and solutions to meet the world's ever-changing energy needs for more than 100 years. We provide customer-centric solutions for power generation industries worldwide.

Evolving technologies require a rapid response to changes in technical requirements, EnerSys is the first to react. We're continually innovating and refining our stored power solutions, which feature the industry's broadest range of flooded and Valve Regulated Lead Acid (VRLA) batteries, as well as nickel cadmium, lithium ion and other emerging technologies.

EnerSys VRLA products feature advanced Thin Plate Pure Lead (TPPL) technology for maximum power, while our flooded lead acid batteries are designed for the most demanding applications. Our full range of proven battery chemistries serves a variety of reserve power applications, delivering the most effective, powerful and reliable batteries available.





### Switchgear

In an electric power network, switchgear equipment provides the ability to control power in order to perform maintenance and protect the network. From utility companies supporting electric grid requirements, to industrial manufacturers/producers supporting their operations, EnerSys® provides a full range of the most reliable standby batteries to support electric utility/switchgear applications.

### **2** Communication

Progressive utilities are taking advantage of growing use of interactive technologies to communicate directly and regularly with customers about a wide range of issues, from billing and service updates to weather and power-related alerts. EnerSys batteries support the development and maintenance of reliable internal centers for customer communications and data integrity.

### **8** Renewables

We continually improve upon our stored energy solutions to be the most environmentally friendly. This commitment to the environment has led us to develop battery technologies that meet environmental, economical and technical demands for renewable energy. Our range of batteries for solar panels, wind turbines and hybrid genset system applications have been specially designed to provide high cycling performance and a safe, uninterrupted supply of energy.

### Fleet Service Trucks

Fleet service truck operators are continually searching for ways to idle less and conserve fuel. The massive deep cycling capability of ODYSSEY® Extreme Series™ batteries enable the use of on-board accessories without idling — and without shortening battery life. Engineered with Thin Plate Pure Lead (TPPL) technology, ODYSSEY batteries provide superior power with three times the life of conventional batteries.



















### **(J)** Uninterruptible Power Supply (UPS)

At EnerSys, we understand the importance of reliable back-up power and the need for batteries that can perform through numerous power outages. That's why we offer the widest size range of the industry's most reliable flooded and sealed batteries designed for the high power requirements of the most demanding Uninterruptible Power Supply (UPS) systems, from workstations to central data processing centers and beyond.

### **6** Emergency Lighting

Loss of power in an emergency puts people and systems at risk. Reliable standby power is an absolute must to ensure that people are safe and systems are secure. With batteries designed and manufactured by EnerSys, you'll have the power needed in critical situations.

### **O** Generator Starting (Genset)

To be effective, generator starting ("genset") batteries must have a high power density, long service life and quick recharge capability. ODYSSEY Extreme Series batteries provide the power to crank large diesel engines in very cold weather, the endurance to be ready when you need them, and the ability to recharge quickly in installations where frequent power outages are common.

## 8 Energy Storage (OptiGrid<sup>™</sup> Stored Energy Solutions)

The OptiGrid Stored Energy Solution allows customers to integrate large battery systems providing In Front of the Meter (IFM) solutions for stabilizing the power grid, improving power quality and efficiency and integrating renewables. Small to medium system solutions are also available for Behind the Meter (BTM) applications such as curtailment, demand response and peak shaving.



### Switchgear

#### **Applicable Batteries to this Market:**

PowerSafe® C
PowerSafe D
PowerSafe OPzS
PowerSafe OPzV

#### **Common Features:**

- Capacity range: 50-3550 Ah
- 20 year life expectancy in float service at 77°F (25°C)
- Thick grids which provide excellent rate performance and long life
- Electrolyte reserve reduces watering requirements
- Slide-Lock<sup>™</sup> post seal design

### **2** Communication

#### **Applicable Batteries to this Market:**

PowerSafe DPowerSafe SBSPowerSafe V

• PowerSafe E

#### **Common Features:**

- Capacity range: 7-2000 Ah
- High reliability and long service life
- · Long shelf life
- High energy density and low internal resistance
- Wide operating temperature range -40°F (-40°C) to 122°F (50°C)

### Renewables

#### **Applicable Batteries to this Market:**

PowerSafe Ni-CdPowersafe OPzVPowerSafe RE

#### **Common Features:**

- Capacity range: 10-2208 Ah
- Long storage life
- Visible electrolyte level
- Ample watering space to reduce maintenance time

### Fleet Service Trucks

### **Applicable Batteries to this Market:**

ODYSSEY® Battery

#### **Common Features:**

- · Proven long service life
- Faster recharge
- Vibration resistant
- Extreme temperature tolerant



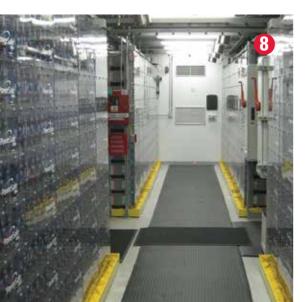














### Uninterruptible Power Supply (UPS)

#### **Applicable Batteries to this Market:**

- CYCLON®
- DataSafe E
- DataSafe® C
- DataSafe HX
- DataSafe D
- Genesis® XE

#### **Common Features:**

- Resealable safety valve
- Rugged construction
- High stable voltage delivery
- High rate charge and discharge cycles

### **6** Emergency Lighting

#### **Applicable Batteries to this Market:**

- CYCLON
- Genesis® NP

#### **Common Features:**

- Recovery capabilities even after deep discharges
- Rugged construction
- High rate charge and discharge cycles

### Generator Starting (Genset)

#### **Applicable Batteries to this Market:**

• ODYSSEY® Battery

#### **Features:**

- · High power density
- Superior cranking capability
- · Long service life
- Quick recharge capability

## **8** Energy Storage (OptiGrid<sup>™</sup> Stored Energy Solutions)

#### **Applicable Batteries to this Market:**

 Any one or combination of EnerSys® battery chemistries that best meets individual needs based on space, cost and temperature

#### **Features:**

- Batteries
- DC Controls
- · Power conditioning system





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