



Global Energy Solutions





POWER/FULL SOLUTIONS FOR A GLOBAL MARKETPLACE

EXPERIENCE - With over one hundred years experience in battery manufacture, it's little wonder EnerSys is the global leader in energy storage. Our reputation for superior quality products and innovative technology is the reason EnerSys is the undisputed first choice worldwide.

SOLUTIONS - EnerSys doesn't just supply batteries. We offer industry, whether it's small, medium or multi-national, an integrated energy package. By working in close partnership with our customers, EnerSys provides a complete solution to a diverse range of industrial applications requiring stored DC energy solutions.

GLOBAL REACH - Headquartered in Pennsylvania, United States, with regional headquarters in Europe and Asia, EnerSys employs over seven thousand people and operates twenty-two manufacturing and assembly facilities worldwide, with a presence in twenty nine countries. This vast infrastructure positions EnerSys at the forefront of both manufacturing capabilities and new product development.

POWER/FULL PRODUCTS FOR A CHANGING WORLD

Constantly evolving technologies require rapid response to changes in technical requirements - EnerSys is the first to react.

Our extensive product range serves a variety of reserve power applications and consistently delivers the most effective, powerful and reliable batteries available. EnerSys manufactures a greater range of flooded and valve-regulated lead-acid (VRLA) batteries than any other single manufacturer. Our PowerSafe, DataSafe and Genesis brands offer an ideal energy solution to markets as diverse as telecommunications, IT, uninterruptible power supplies, utilities and switchgear, security, emergency lighting and general electronics.

POWER/FULL BRANDS PROVIDE WORLDWIDE SOLUTIONS

PowerSafe - Premium range of high reliability flooded and VRLA products to serve the demanding requirements of telecommunications and electric utility/switchgear markets. PowerSafe products offer the broadest range of flooded and valve-regulated lead acid (VRLA) products to provide total support for telecom applications including central office, outside plant, wireless, and everything in between, as well as electric utility applications including power generation transmission and distribution.

DataSafe - A reliable range of both flooded and VRLA batteries specifically designed for the high power requirements of the most demanding uninterruptible power supply systems from workstations to central data processing centers.

Genesis - Premium pure lead AGM, standard AGM and GEL technology batteries are all to be found in this wide range of products targeted at such diverse applications as security systems, emergency lighting, UPS, mobility, cable TV and medical.



PowerSafe

data safe

genesis



PowerSafe SBS

A superior range of valve regulated batteries, with an impressive extended service life, high energy density and shelf life. Manufactured in a range of compact configurations using pure lead technology, the SBS range offers design flexibility where space is at a premium.

A dedicated battery room is not required, as SBS can operate in cabinets at the point of use. Advanced plate technology allows SBS batteries to function in the harshest of environments.

Features and Benefits

- Capacity: 7.0Ah - 360Ah
- Design Life: 15 years @ 20°C (68°F)
- High energy density
- Two year shelf life
- Compact Design
- UL94-V0 Flame retardant case and cover

Applications:

- Telecommunications - Outside Plant
- Telecommunications - Wireless
- Cable TV
- Electric Utility/Switchgear



PowerSafe VX

Designed specifically for the demands of the evolving telecommunications network, the revolutionary VX series has taken sealed lead acid batteries into a new era. Longevity and the ability to operate in extreme environments are the outstanding features of this range.

Features and Benefits

- Capacity: 100Ah
- Design Life: 20 years @ 25°C (77°F)
10 Years @ 40°C (104°F)
- Very robust for extreme conditions and high temperature environments
- Front terminal connection for ease of installation
- UL94-V0 Flame retardant case and cover

Applications:

- Telecommunications - Outside Plant
- Telecommunications - Wireless
- Electric Utility/Switchgear
- Emergency Lighting
- Railroad Signal



PowerSafe V

PowerSafe V is the acknowledged world leader in sealed lead acid technology for critical applications. Offering long life with high reliability, PowerSafe V is suitable for a wide variety of applications. Delivering superior performance, while occupying less space than conventional standby batteries, the V series is recognized worldwide as the premium battery for telecom.

Features and Benefits

- Capacity: 22Ah - 1769Ah
- Design Life: 12+ years @ 20°C (68°F)
- World proven
- Superior reliability
- Long service life
- UL94-V0 Flame retardant case and cover

Applications:

- Telecommunications - Outside Plant
- Telecommunications - Wireless
- Telecommunications - Central Office
- Electric Utility/Switchgear
- Railroad Signal



PowerSafe V Front Terminal

PowerSafe V Front Terminal is the acknowledged world leader in valve regulated lead acid technology for critical applications. Offering long life with high reliability and delivering superior performance while occupying less space than conventional standby batteries, the PowerSafe V Front Terminal series is recognized worldwide as the premium battery for the telecommunications industry.

The PowerSafe V Front Terminal monobloc's compact design and standard footprint, suitable for 19", 23" and ETSI racking, gives users the option of increased energy density. Total front access facilitates easy maintenance and installation.

Features and Benefits

- Capacity: 50Ah - 155Ah
- Design Life: 15 years @ 20°C (68°F)
- World proven
- Superior reliability
- Front terminal connection for ease of installation
- Long service life
- UL94-V0 Flame retardant case and cover

Applications:

- Telecommunications - Outside Plant
- Telecommunications - Wireless
- Telecommunications - Central Office
- Electric Utility/Switchgear
- Railroad Signal



PowerSafe VE

The PowerSafe VE series is designed to offer competitive solutions for the telecommunications and IT markets. Incorporating selected design features for the cost-conscious user, the VE range still offers superior performance by weight and volume.

Features and Benefits

- Capacity: 35Ah - 500Ah
- Design Life: 10-12 years @ 20°C (68°F)
- Competitive
- High performance
- Long service life

Applications:

- Telecommunications - Outside Plant
- Telecommunications - Wireless
- Emergency Lighting



PowerSafe DDM

The PowerSafe DDM range offers an ideal solution for large capacity valve regulated lead-acid battery requirements. PowerSafe DDM's steel can design concept, with its integral racking system provides a cost effective battery system with a compact, quick and simple installation process. With thicker positive plates for extended life, high-integrity unique post seal design, large copper post design for superior high-rate performance, and steel-encased cells providing uniform compression, the DDM is a superior product in performance and service life.

Features and Benefits

- Capacity: 200Ah - 2000Ah
- Design Life: 20 years @ 25°C (77°F)
- Protective steel can design providing uniform cell compression
- Superior quality frame design allows maximum heat dissipation
- High integrity welded/epoxy dual post seal design
- Easy to install, low maintenance VRLA module system

Applications:

- Telecommunications - Central Office
- Telecommunications - Outside Plant
- Telecommunications - Wireless
- Electric Utility/Switchgear



PowerSafe OPzV

Combining tubular and gel electrolyte technology in a VRLA battery, the PowerSafe OPzV series are suitable for long and repeated discharges over prolonged periods, where the need for topping-up is eliminated. The cells can be mounted horizontally or vertically, depending on requirements.

Features and Benefits

- Capacity: 215Ah - 3170Ah
- Design Life: 15 years @ 20°C (68°F)
- No water addition required
- Long service life
- 1200 cycles to 80% DOD

Applications:

- Telecommunications - Central Office
- Electric Utility/Switchgear
- Emergency Lighting



PowerSafe C

A prime choice for combined short duration and long duration applications, particularly the requirements of the utilities market. Because of a unique combination of extra thick positive grids, a square plate format and multi-cell construction, superior performance is guaranteed. Maintenance and inspection is particularly easy due to the individual voltage posts and transparent container.

Features and Benefits

- Capacity: 50Ah - 200Ah
- Design Life: 20 years @ 25°C (77°F)
- Flat plate construction in calcium or antimony alloy grids
- Space efficient

Applications:

- Electric Utility/Switchgear
- Emergency Lighting
- Railroad Signal



PowerSafe E

The PowerSafe E incorporates a sophisticated combination of plate surface area, plate thickness and volume of electrolyte which optimizes performance for discharges from one minute to eight hours. This enables it to cope well with more demanding load requirements, providing exceptionally high initial and ending current, separated by a long period of more moderate constant current demand.

Features and Benefits

- Capacity: 200Ah - 890Ah
- Design Life: 20 years @ 25°C (77°F)
- Flat plate construction in calcium or antimony alloy grids

Applications:

- Electric Utility/Switchgear
- Emergency Lighting
- Railroad Signal



PowerSafe F

Providing superior performance for long duration discharges, the PowerSafe F range is the ideal choice for telecommunication central office and switchgear back-up power. The FTC-21P (1680 Ah) cell conforms to the Bell System list 508 specifications.

Features and Benefits

- Capacity: 840Ah - 1810Ah
- Design Life: 20 years @ 25°C (77°F)
- Bell System 508 Standard

Applications:

- Telecommunications - Central Office
- Electric Utility/Switchgear



PowerSafe G

Relying on tried and tested flooded cell technology, the PowerSafe G has evolved as the standard battery for the telecommunications industry. The clear flame retardant PVC jar casing allows ease of maintenance and inspection. The high capacity reduces footprints for large central office applications.

Features and Benefits

- Capacity: 930Ah - 3900Ah
- Design Life: 20 years @ 25°C (77°F)
- Small footprint for large central offices
- Flame retardant clear container
- Flat plate construction in calcium or antimony alloy grids

Applications:

- Telecommunications - Central Office
- Electric Utility/Switchgear



PowerSafe OPzS

OPzS vented tubular cells are suitable for all standby applications which require a safe and reliable long-life battery. EnerSys' OPzS range far exceed the internationally recognized German DIN standards and are distinguished by their high tolerance to cycling and long float charge life.

Features and Benefits

- Capacity: 216Ah - 3360Ah
- Design Life: 15 years @ 20°C (68°F)
- International standard
- Long service life

Applications:

- Telecommunications - Central Office
- Electric Utility/Switchgear
- Emergency Lighting



Varta VB

The unique rod design ensures that the Varta VB cell is corrosion resistant and has cycling capabilities approaching those of the tubular plate cell. This feature, together with the use of special low antimony-selenium grid alloy, results in a very powerful, reliable product, with a float life of fifteen to twenty years, suitable for a wide range of applications.

Features and Benefits

- Capacity: 33Ah - 2037Ah
- Design Life: 15-20 years @ 20°C (68°F)
- Unique rod plate design
- Cycling capability
- Long service life

Applications:

- Telecommunications - Central Office
- Telecommunications - Outside Plant
- Telecommunications - Wireless
- Electric Utility/Switchgear



PowerSafe GLS PLUS

A range of powerful batteries, distinguished by its high tolerance to cycling and long float charge life. The GLS Plus is a vented tubular monobloc type, with exceptional safety, reliability and longevity characteristics.

Features and Benefits

- Capacity: 62Ah - 324Ah
- Design Life: 10-12 years @ 20°C (68°F)
- High reliability
- High tolerance to cycling
- Long service life
- Low maintenance

Applications:

- Electric Utility/Switchgear
- Telecommunications - Central Office
- Emergency Lighting



FP

The FP range combines low maintenance and high energy density in a vented pasted plate cell, providing reliable and cost-effective standby power for use in a variety of industries. The increased thickness of the positive plate ensures a service life of up to twenty years, with low maintenance and easy installation (in cabinets or on racks).

Features and Benefits

- Capacity: 20 - 4410 Ah
- Flame retardant clear container in styrene acrylonitrile, for ease of visual inspection
- Positive plate in low lead-antimony alloy grids
- Up to 20 year life expectancy

Applications:

- UPS
- Telecommunications - Central Office
- Electric Utility/Switchgear



PowerSafe OP/OPC

The PowerSafe OP/OPC range provides a flexible source of power, particularly for standby applications. As with all EnerSys products, these batteries are distinguished by high performance, low maintenance and exceptional long life.

Features and Benefits

- Capacity: 69Ah - 690Ah
- Design Life: 15 years @ 20°C (68°F)
- High reliability
- Long service life
- Low maintenance

Applications:

- Telecommunications - Central Office
- Electric Utility/Switchgear



Planté

EnerSys' Planté ranges of vented lead acid batteries provide long life, reliability and operate to 100% of nominal capacity throughout the lifetime of the battery - a claim unmatched by any other battery technology. The ultra high performance AU series, specially designed for UPS, can deliver 426-1775 watts per cell for fifteen minutes - exceptional figures for any flooded battery, let alone such a long life design such as Planté.

Features and Benefits

- Capacity: 215Ah - 3170Ah
- Design Life: 20 years @ 20°C (68°F)
- Long service life
- Proven technology
- High reliability
- Available in both BS and DIN variants

Applications:

- Electric Utility/Switchgear
- Telecommunications - Central Office
- Emergency Lighting



DataSafe NPX

Offering superior value, especially in UPS, the DataSafe NPX series is designed for high rate discharge applications. These batteries are used primarily where high power is required for a short duration.

Features and Benefits

- Capacity: 23 - 150 watts/cell
- Design Life: 3-5 years @ 25°C (77°F)
- UL recognized
- Approved for shipping as non-hazardous, non spillable
- Operates in any position

Applications:

- UPS
- General Electronics



DataSafe HR

DataSafe HR is the ideal source of power to protect vital systems. The HR range from EnerSys offers an unsurpassed reputation for excellence and improvements on industry standards for performance. Thick ribbed ABS plastic containers provide high mechanical strength and superior safety features.

Features and Benefits

- Capacity: 200 - 500 watts/cell in 12 volt configuration
780 watts/cell in 6 volt configuration
- Design Life: 10 years @ 25°C (77°F)
- UL recognized
- Approved for shipping as non-hazardous, non spillable
- V0 flame retardant ABS material

Applications:

- UPS



DataSafe C

An economical multi-cell flat plate unit, optimized for high performance and providing excellent short duration discharge rates. The DataSafe C product line is ideal for smaller UPS systems that demand the high reliability and long life of a flooded cell.

Features and Benefits

- Capacity: 228 - 797 watts/cell
- Design life: 20 years @ 25°C (77°F)
- Calcium alloy grids for lowest water loss, resulting in low maintenance costs
- Exceptional high rate performance

Applications:

- UPS



DataSafe D

The DataSafe D calcium flat plate battery offers an economical solution when high rate performance and long cycle life is required. The multi-cell construction requires fewer units resulting in lower installation costs. Constructed with EnerSys' unique long life slide lock post seal design, high conductivity terminal posts and optional wrapped positive plates, the DataSafe D provides superior cycling performance and durability.

Features and Benefits

- Capacity: 594 - 5248 watts/cell
- Design life: 20 years @ 25°C (77°F)
- Rated at 100% capacity at initial discharge
- Long life Slide Lock post seal design
- Flame retardant cover and container available

Applications:

- UPS



DataSafe E

The DataSafe E incorporates a sophisticated combination of plate surface area, plate thickness and volume of electrolyte which optimizes performance for high rate discharges. The DataSafe E offers single cell design with high power delivery capability.

Features and Benefits

- Capacity: 422 - 3322 watts/cell
- Design life: 20 years @ 25°C (77°F)
- Single cell UPS design

Applications:

- UPS



Varta UPS-H

The unique rod design ensures that the Varta UPS-H cell is corrosion resistant and has cycling capabilities approaching those of the tubular plate cell. This feature, together with the use of special low antimony-selenium grid alloy, results in a very powerful, reliable product, with a float life of fifteen to twenty years, suitable for a wide range of applications.

Features and Benefits

- Capacity: 110 - 793 watts/cell
- Design Life: 15-20 years @ 20°C (68°F)
- Cycling capability
- Long service life

Applications:

- UPS



DataSafe MX

For short duration high-rate discharges up to one hour there's nothing to touch DataSafe MX. It delivers a stunning 50% more power than conventional batteries occupying the same space. Alternatively, for the same power the DataSafe MX cuts battery accommodation by more than a third to give you the option of smaller cabinets or more room to expand the system.

Features and Benefits

- Capacity: 83 - 272 watts/cell
- Design Life: 10 years @ 20°C (68°F)
- Very high power
- Fast recharge
- One year shelf life

Applications:

- UPS



Genesis Pure Lead

Premium thin plate pure lead AGM technology gives a very high rate discharge capability, and is also suitable for long duration standby. With the lowest self discharge rate, highest venting pressure and greater than 99.7% recombination efficiency, Genesis pure lead batteries are designed for a long, reliable service, even in extreme environments.

Features and Benefits

- Capacity: 13Ah - 70Ah
- Design life: 10 years @ 20°C (68°F)
- World leading product
- Excellent cycling capability
- Very high energy density
- UL recognized
- Approved for shipping as non-hazardous, non-spillable
- Operates in any position

Applications:

- Telecommunications
- Aviation
- Electric vehicles
- Solar Power Systems
- Defense
- Electronics
- UPS
- Medical
- Engine Start



Genesis NP

General purpose Genesis NP batteries are designed using proven gas recombination technology which removes the need for regular water addition by controlling the evolution of hydrogen and oxygen during charging. Gas recombination provides the user with the freedom to use lead acid batteries in a wide range of applications.

Features and Benefits

- Capacity: 0.8Ah - 91Ah
- Design life: 3-5 years @ 25°C (77°F)
- UL recognized
- Approved for shipping as non-hazardous, non-spillable
- Operates in any position

Applications:

- Security
- Electronics
- UPS
- Defense
- Engine Start
- Mobility
- Telecommunications
- Aviation
- Electric vehicles
- Solar Power Systems
- Emergency lighting
- Medical



Genesis NP-Gel

The Genesis NP Gel series of valve regulated gel batteries has been designed to offer competitive solutions in traditional BCI footprint designs. The NP Gel products have excellent cycling capability for mobility applications and superior float life performance in cable TV and telecommunication applications.

Features and Benefits

- Capacity: 30Ah - 90Ah
- Design life: 3-5 years @ 25°C (77°F)
- Proven gel electrolyte technology delivers maximum cycle life and prolongs life in elevated ambient temperatures
- UL recognized
- Complies for shipping as non-hazardous, non-spillable
- Operates in any position

Applications:

- Mobility
- Medical
- Electronics
- UPS
- Electric vehicles
- Engine Start
- CATV
- Telecommunications
- Aviation
- Defense
- Solar Power Systems



Cyclon

EnerSys thin plate rechargeable cells can solve many of the problems associated with "conventional" lead-alloy batteries. The sealed construction uses a patented, starved- electrolyte system, providing numerous advantages including long service life, rugged construction, extreme temperature performance, fast recharge, high discharge rates and low internal resistance. In addition to the standard cylindrical configurations, Cyclon cells offer a high degree of flexibility to meet unusual requirements and can be custom configured in an infinite number of designs to meet your precise voltage and amp-hour requirements.

Features and Benefits:

- Capacity: 2.5Ah - 25Ah
- Design Life: 15 years @ 20°C (68°F)
- UL recognized
- Approved for shipping as non-hazardous, non-spillable
- Operates in any position

Applications:

- Telecommunications
- Emergency lighting
- Medical equipment
- Global positioning systems
- Electronics
- UPS
- Aerospace
- Defense
- Solar



Renewable Energy

EnerSys batteries for solar panels, wind or water turbines have been specially designed to ensure total safety and an uninterrupted supply of energy. Utilizing state of the art manufacturing and quality procedures, together with a rigorous research and development program results in improved technology to satisfy environmental, economic and technical demands. Whether you are generating electricity from solar, wind or water, EnerSys offers a wide choice of technologies for the most effective renewable energy power solution.

RenewableEnergy

Applications:

- Buoy
- Peak load handling
- Remote telephony
- Utility
- Telecommunications
- Lighting/instrumentation
- Rural power
- Traffic signals
- Repeater stations
- Switchgear



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Wherever in the world you do business, EnerSys is with you all the way. With large manufacturing plants strategically located throughout Asia, Europe and North and South America, combined with a strong global sales and support team, and backed with a reputation for world-leading technology, our customers benefit through supply reliability, high quality products designed to meeting ever increasing technical requirements, and our commitment to providing the best solution to meeting their Reserve Power needs.

For more information, visit our website at www.enersysinc.com, or contact an EnerSys Reserve Power sales office.

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