

# **ODYSSEY**<sup>®</sup>

**THE EXTREME BATTERY**



# **Extreme Racing**<sup>™</sup>

*Engineered to take you to the red line – and the finish line*

# ***Built to withstand the extremes of high performance pursuits!***

Constant pounding. Extreme heat. High-revving, high-vibration, power-sapping engines. The demands of racing demand a battery that's up to the job. But one that's lightweight and compact so you don't give any advantage to the competition. The ODYSSEY® Extreme Racing™ battery can handle it.

Featuring rugged construction and packed tightly with pure lead plates, the non-spillable AGM design of the ODYSSEY Extreme Racing battery protects against the shock and vibration that can quickly destroy other batteries. And the pure lead plates mean more power—twice the overall power and three times the life of conventional batteries.

The ODYSSEY Extreme Racing battery is ideal for a complete range of racing applications:

- ***Automobile***
- ***Motorcycles***
- ***ATVs***
- ***Snowmobiles***
- ***Racing Boats***

## ***Construction***

- Pure virgin lead plates for maximum surface area, optimized recycling
- AGM (absorbed glass mat) design eliminates acid spills
- High conductivity, corrosion-resistant tin-plated brass terminals
- High integrity terminal seal
- Sealed design—gases recycled internally during operation or charging
- Safety relief valve per cell
- Robust intercell connections prevent vibration damage



### Better warranty

Limited 3-year full replacement warranty — not pro rata.

### Longer service life

With 3-10 years of service life, ODYSSEY® Extreme Racing™ batteries save consumers time, money and aggravation.

### Longer cycle life

70% longer cycle life compared to conventional deep cycle batteries — high stable voltage for longer periods of time.

### Longer shelf life

Can be stored on open circuit (nothing connected to the terminals) without the need for recharging up to 2 years or 12.00V, whichever occurs first.

### Faster recharge

The highest recharge efficiency of any sealed lead battery on the market — capable of 100% recharge in 4-6 hours.

### Mounting flexibility

Non-spillable design — can be mounted on any side in any position except inverted.

### Vibration resistance

Design protects against high impact shock and mechanical vibration — a common cause of premature battery failure.

### Extreme temperature tolerant

Operating temperatures from -40°C (-40°F) to 45°C (113°F), for models without a metal jacket and from -40°C (-40°F) to 80°C (176°F) for models with a metal jacket.

### Totally maintenance free

No need to add water, ever! Drycell design with resealable venting system.

### Improved safety

US Department of Transportation classified as a 'non-spillable' battery. No acid spills, no escaping gases.

# Extreme Racing™

MODEL	Voltage	PHCA** (5 sec)	CCA*	Nominal Capacity		Reserve Capacity Minutes	Length inches (mm)	Width inches (mm)	Height inches (mm)	Weight lbs (kg)	Terminal	Torque Specs in-lbs (Nm max)	Internal Resistance (mΩ)	Short Circuit Current
				(20 Hr Rate-Ah)	(10 Hr Rate-Ah)									
Extreme 8	12	310	100	8	7	9	5.43 (138.0)	3.39 (86.0)	3.98 (101.0)	5.9 (2.7)	M4 Receptacle	8.9 (1.0)	27.1	455A
Extreme 15	12	370	156	15	14	25	7.9 (200.0)	3.0 (77.0)	5.5 (140.0)	12.5 (5.7)	M6 Stud	35 (3.9)	13.5	891A
Extreme 18	12	535	200	14	13	21	6.70 (170.2)	3.90 (99.1)	6.18 (157.0)	12.0 (5.4)	M6 Stud	40 (4.5)	8	1000A
Extreme 20	12	545	185	13	12	18	7.00 (177.8)	3.38 (85.9)	5.17 (131.3)	11.4 (5.2)	M6 Receptacle† or SAE 3/8" Receptacle	50 (5.6)	10	1200A
Extreme 22	12	625	265	18	17	27	6.70 (170.2)	3.90 (99.1)	6.89 (175.0)	13.2 (6.0)	M6 Stud	40 (4.5)	7	1800A
Extreme 25	12	680	220	16	16	24	7.15 (181.5)	3.0 (76.3)	6.65 (167.8)	15.4 (7.0)	M6 Receptacle† or SAE 3/8" Receptacle	50 (5.6)	7	1800A
Extreme 30	12	950	450	34	32	60	9.8 (250.0)	3.8 (97.0)	6.1 (156.0)	20.0 (9.0)	M6 Stud	35 (3.9)	7.1	1700A
Extreme 35	12	925	380	28	27	52	6.64 (168.6)	7.05 (179.0)	5.04 (128.0)	26.0 (11.8)	M6 Receptacle† or SAE 3/8" Receptacle	60 (6.8)	5	2400A
Extreme 40	12	1100	500	45	43	87	9.8 (250.0)	3.8 (97.0)	8.1 (206.0)	27.5 (12.5)	M6 Stud	35 (3.9)	5.1	2450A

\*Cold Start Performance S.A.E J537 JUNE 82 \*\*Pulse Current

† Can be fitted with brass automotive terminal.

Operating temperature range:

-40°C (-40°F) to 45°C (113°F) without metal jacket

-40°C (-40°F) to -80°C (176°F) with metal jacket

#### Constant voltage portable charger parameters:


Standby, per 12V battery 13.5-13.8V no current limit required

Cyclic, per 12V battery (16-hour recharge) 14.4-14.8V no current limit required

Typical service life at 25°C/77°F

Medium to heavy duty usage – 3+ years  
Light duty usage – 6+ years





***Extreme power,  
reliability and versatility  
for the serious racing enthusiast***

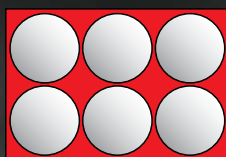
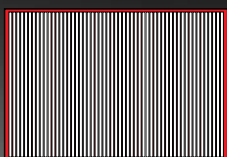



## Head-to-head technology comparison

	ODYSSEY® EXTREME RACING™ BATTERIES	CONVENTIONAL BATTERIES
<b>DESIGN LIFE</b>	8-12 years (Float) @ 25° C (77° F)	5 years
<b>SERVICE LIFE</b>	3 to 10 years	1 to 5 years
<b>ELECTROLYTE</b>	Drycell ("starved electrolyte") no external leakage or corrosion	Most are acid flooded (causing acid burns and spills); some wet sealed or "gelled"
<b>STORAGE LIFE</b>	2 years before needing charge @ 25°C (77°F)	6-12 weeks before needing charge
<b>SHIPPING</b>	Air transportable; US Department of Transportation classified non-spillable (less expensive)	Ground transport; classified as hazardous material (more expensive)
<b>END OF LIFE</b>	Battery slowly loses power at end of life; no catastrophic failure	Immediate and catastrophic loss of power (can leave you stranded)

### ODYSSEY® Extreme Racing™ batteries beat spiral-wound

Compared to spiral-wound batteries of equal size, ODYSSEY® Extreme Racing™ batteries pack 15% more plate surface area into the case. Avoiding the "dead space" between cylinders in "six-pack" designs means ODYSSEY Extreme Racing batteries deliver more power and 40% more reserve capacity.



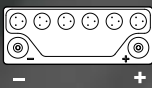
 **Unused battery space**

### Terminal layouts

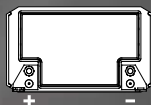
Extreme 8



Extreme 15



Extreme 18



Extreme 20<sup>††</sup>



Extreme 22



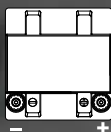
Extreme 25<sup>††</sup>



Extreme 30



Extreme 35<sup>††</sup>



Extreme 40



Drawing sizes are for terminal position reference only; diagrams are not proportionate to each other.

†† Supplied with metal jacket

## About EnerSys®

EnerSys® is a global leader in stored energy solutions for automotive, military, and industrial applications. With manufacturing facilities in 17 countries, sales and service locations throughout the world, and over 100 years of battery experience, EnerSys is a powerful partner for automotive service and parts providers.



### EnerSys

P.O. Box 14145  
Reading, PA 19612-4145, USA  
Tel: +1-610-208-1991  
+1-800-538-3627  
Fax: +1-610-372-8613

### Regional Sales

**EnerSys Energy Products Inc.**  
617 North Ridgeview Drive  
Warrensburg, MO 64093-9301, USA  
Tel: +1-660-429-2165  
Fax: +1-660-429-1758

**EnerSys Australia Pty Ltd.**  
54-58 Derby Street  
Silverwater, NSW 2128  
Australia  
Tel: + 61 (0) 2 9739 9999  
Fax: + 61 (0) 2 9739 9900

[www.odysseybattery.com](http://www.odysseybattery.com)

### WARRANTY:

EnerSys Energy Products Inc. ("Manufacturer") warrants its ODYSSEY® batteries (hereafter referred to as "Battery") to be free of defects in material and workmanship for the earlier of (a) the Applicable Warranty Period or (b) within 400 cycles to 80% depth of discharge, whichever occurs first. The Applicable Warranty Period is two (2) years for power sports applications; three (3) years in automotive, marine, commercial, and industrial applications; and four (4) years in the case of the PC1220, 75-PC1230, 75/86-PC1230, PC1350, 25-PC1400, 35-PC1400, 34-PC1500, 34M-PC1500, 34R-PC1500, 34/78-PC1500, 78-PC1500, 65-PC1750, 31-PC2150, 31M-PC2150 and PC2250 batteries. The Applicable Warranty Period begins from the date of purchase with original receipt, or, if no receipt is available, from Manufacturer's shipping date. Within the Applicable Warranty Period, the Battery will be replaced free of charge if, at the discretion of Manufacturer, adjustment is necessary due to defect in material or workmanship (not merely discharged). Batteries for warranty replacement consideration are to be returned to the original supplying distributor/dealer. If not truly feasible, other ODYSSEY distributors/dealers can be approached but a warranty processing fee may be applied. This warranty may vary from country to country; contact your authorized ODYSSEY battery wholesaler or dealer for the applicable warranty.

### GENERAL PROVISIONS

A. Manufacturer has no obligation under the limited warranty set forth above in the event the Battery is damaged or destroyed as a result of one or more of the following:

- Willful abuse or neglect or if the top decorative cover has been removed.
- Natural forces such as wind, lightning, hail; damage due to fire, collision, explosion, vandalism, theft, penetration or opening of the Battery case in any manner.
- Overcharging, undercharging, charging or installing in reverse polarity, improper maintenance, allowing the Battery to be deeply discharged via a parasitic load or mishandling of the Battery such as but not limited to using the terminals for lifting or carrying the Battery. Trickle chargers that do not have a regulated trickle charge voltage between 13.5V and 13.8V (no lower than 13.5V and no higher than 13.8V) will cause early failure of the Battery. Use of such chargers with the Battery will also void the Battery's warranty. For applications where an alternator is present, the alternator must deliver between 14.0V and 14.7V when measured at the battery's terminals. Alternators that do not have a regulated charge between 14.0V and 14.7V (no lower than 14.0V and no higher than 14.7V) will cause early failure of the Battery. Use of such alternators with the Battery will also void the Battery's warranty.
- Failure to properly install the Battery or lack of metal jacket for high temperature or vibration applications.
- Normal deterioration in the electrical qualities or the acceleration of such deterioration due to conditions that accelerate such deterioration.
- If the Battery is used for an application that requires higher cranking power or a greater reserve rating than the Battery is designed to deliver, or the Battery capacity is less than the Battery capacity specified by the vehicle manufacturer, or the Battery is otherwise used in applications for which it was not designed.
- Prolonged storage of vehicles with fuel injection computers, alarms, GPS and other electrical devices that require continuous battery power to support active memories; this power drain must be offset with a maintenance-float charger, periodic charging or disconnecting the battery to prevent the establishment of irreversible crystallized sulphation in the battery plate oxide. Failure to address this destroys battery capacity and voids the warranty, as this is not a warranted defect in materials or workmanship. A battery with an open circuit voltage (OCV) of equal to or less than 10.0V will be deemed as overdischarged and void from warranty due to misuse and/or neglect.
- WARNING - Do NOT use any type of oil, organic solvent, alcohol, detergent, strong acids, strong alkalis, petroleum-based solvent or ammonia solution to clean the jars or covers. These materials may cause permanent damage to the battery jar and cover and will void the warranty.

B. To obtain warranty service:

1. Return the Battery to any authorized ODYSSEY battery wholesaler or dealer.
2. If the battery is determined by Manufacturer, in its sole discretion, to be defective for material or workmanship under terms of this limited warranty, it will be replaced.
3. Manufacturer's acceptance of any items shipped to Manufacturer shall not be deemed an admission that the items so shipped are defective. Any items shipped back to Manufacturer, shall in Manufacturer's sole discretion, become Manufacturer's sole property.

THIS LIMITED WARRANTY IS IN LIEU OF, AND MANUFACTURER DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, STATUTORY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. MANUFACTURER'S EXCLUSIVE LIABILITY FOR BREACH OF WARRANTY SHALL BE TO REPLACE THE BATTERY WITHIN THE EFFECTIVE WARRANTY PERIOD. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR ANY LOSS OR DAMAGES OF ANY OTHER KIND, WHETHER DIRECT, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, SPECIAL OR OTHERWISE. NOR SHALL MANUFACTURER BE LIABLE FOR ANY REMOVAL OR INSTALLATION EXPENSE, OR THE LOSS OF TIME OR PROFITS.

Some countries and/or states do not allow limitation on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, which may vary from country to country and/or state to state.