

ENGINEERED WITH THIN PLATE PURE LEAD (TPPL) TECHNOLOGY

EXTREME POWER AND ENDURANCE



ODYSSEY[®] Extreme SERIES™



DRIVE IT TO EXTREMES

Up to twice the overall power of conventional batteries!

Doing double duty

Some batteries offer enormous cranking power. Others, deep cycle reserve power. Unbeatable ODYSSEY® Extreme Series™ batteries do both.

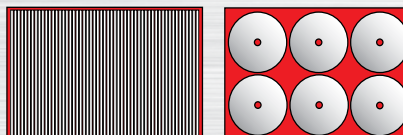
Even at very low temperatures, ODYSSEY Extreme Series batteries have the power to provide engine-cranking pulses in excess of 2250 amps for 5 seconds – double to triple that of equally sized conventional batteries. And they can handle 400 charge-discharge cycles to 80% depth of discharge.†

How so much power is possible

ODYSSEY Extreme Series batteries are made with flat plates made of 99.99% pure lead – not lead alloy. Pure lead plates can be made thinner, so we can fit more of them in the battery. More ODYSSEY battery plates mean more plate surface area. And that means more power – twice as much as conventional batteries.

Packed with more power

Like many popular spiral-wound batteries, ODYSSEY Extreme Series batteries employ dry cell Absorbed Glass Mat (AGM) technology to contain acid, allowing the battery to be installed even on its side. But the densely packed flat plates in an ODYSSEY Extreme Series battery avoid the “dead space” between cylinders in a “six pack” design. The result is 15% more plate surface area - and that translates to more power!



Unused battery space

ODYSSEY® Extreme Series™ batteries vs. spiral-wound designs: 15% more plate surface area!

ODYSSEY® batteries have a new name and new look!

While we have evolved the name to ODYSSEY® Extreme Series™ batteries, and we've updated the look, rest assured that the Extreme Series batteries are packed with the same power and technology you've been depending on for years.

ODYSSEY®
Extreme
SERIES™



Shipped fully charged. Get it and go!

ODYSSEY Extreme Series batteries are ready for use right out of the box. If the ODYSSEY Extreme Series battery's voltage is 12.65V or greater, simply install the battery in your vehicle and you are ready to go! If below 12.65V, boost charge following the instructions in the ODYSSEY Extreme Series battery Owner's Manual and/or Technical Manual. Putting a boost on the battery will not damage it, even if its voltage reads higher than 12.65V.

www.odysseybattery.com www.enersys.com

†PC370, PC950 and PC1100 are engine start only. Limited cycling.

RUN STRONGER LONGER

Designed and built to last up to 3 times as long as conventional batteries!

Boasting rugged construction and TPPL design, ODYSSEY® Extreme Series™ batteries have an 8-12 year design life and a 3-10 year service life.

Tin Alloy Coated Brass Terminals*

To ensure secure, corrosion-free cable connections, our brass terminals are coated with a high-quality tin alloy†

Robust Intercell Connections

To resist vibration and eliminate internal sparking, cell connectors are casted to the plates and bonded.

Compressed TPPL Plate Separators

For extreme vibration resistance, the TPPL plate separators are compressed before being inserted into the case.

Pure Lead Plates

To provide more power, the plates in our batteries are constructed from 99.99% pure lead. The plates are extremely thin, so more of them can fit into the battery. More lead plates means more power.

- Select ODYSSEY Extreme Series batteries are available with metal casing for high heat applications.
- TPPL design holds acid in place to prevent spills, even when installed on its side.
- ODYSSEY Extreme Series batteries can be stored for up to 2 years and still be returned to full power.**



TPPL
THIN PLATE PURE LEAD TECHNOLOGY

Optional height adapter may be used on 34-PC1500 models for installations where a group 24 or group 27 is required. Snap the adapter securely into place on the bottom of the 34-PC1500 battery. In some installations, the 34-PC1500 model with this adapter may be used to replace a group 24F or 27F depending on required cable length. ▶

*Excludes PC1220 and PC1350

**At 25°C. Storage times will be even longer at lower temperatures.

†Some models excluded. See table for details.

SUPERIOR STARTING POWER AND VIBRATION RESISTANCE

The ODYSSEY® Extreme Series™ battery's incredible combination of power and endurance makes these batteries ideal for just about anything, just about anywhere.



Emergency Response

ODYSSEY® Extreme Series™ batteries are always on call with maintenance-free starting power plus massive deep cycle reserve power for on-board accessories.

- Police cars
- Fire engines
- Ambulances



4X4 & Off-Road

Rugged construction and non-spillable, dry cell design ensure extreme shock and vibration resistance for the toughest off-road applications.

- SUVs
- Light trucks
- Off-road vehicles



Heavy Duty/Commercial

Superior cranking power and deep cycle ability mean ODYSSEY Extreme Series batteries get the job done.

- Farm, lawn and garden equipment
- Tractor trailers
- Earth-moving/construction equipment





Classic & Vintage Cars

The deep cycle reserve power of ODYSSEY® Extreme Series™ batteries ensures that classic and vintage cars will start reliably, even after two years of sitting idle.

- Vintage vehicles
- Classic trucks
- Muscle cars



Motorcycles & Powersports

The ODYSSEY Extreme Series battery delivers the power and durability that powersports vehicles demand. Rugged construction and non-spillable, dry cell design provides extreme shock and vibration resistance.

- Motorcycles and ATVs
- Personal watercraft
- Snowmobiles
- Ultralight and Gyrocopter™ aircraft



High Performance & Modified Vehicles

From starting high-compression engines to powering high-intensity discharge lights, ODYSSEY Extreme Series batteries can handle any upgrade, and can be mounted in almost any position.

- Tuner cars
- Race cars
- Dragsters

Sound and Video Packages

ODYSSEY Extreme Series batteries provide the power and mounting flexibility that today's high-wattage, in-car sound and video systems demand.

- Audio systems
- Video systems
- Auxiliary amplifiers



ODYSSEY® EXTREME SERIES™ BATTERY

| Model | Voltage | PHCA** (5 sec) | CCA* | HCA | MCA | Nominal Capacity | | Reserve Capacity Minutes | Length mm | Width mm | Height† mm | Weight kg | Terminal | Torque Specs Nm max | Internal Resistance (mΩ) | Short Circuit Current |
|--------------|---------|-------------------|------|------|------|------------------|------------------|--------------------------------|--------------|-------------|---------------|--------------|---|-------------------------------|--------------------------------|-----------------------------|
| | | | | | | 20 Hr Rate-Ah | 10 Hr Rate-Ah | | | | | | | | | |
| PC310 | 12 | 310 | 100 | 200 | 155 | 8 | 7 | 9 | 137.5 | 86.0 | 99.0 | 2.7 | M4 Receptacle | 1.0 | 27.1 | 455A |
| PC370 | 12 | 425 | 200 | 315 | 270 | 15 | 14 | 25 | 200.0 | 77.0 | 140.0 | 5.7 | M6 Stud | 3.9 | 13.5 | 891A |
| PC535 | 12 | 535 | 200 | 300 | 265 | 14 | 13 | 21 | 170.2 | 99.1 | 158.5 | 5.4 | M6 Receptacle | 4.5 | 8 | 1000A |
| PC545 | 12 | 460 | 150 | 280 | 220 | 13 | 12 | 18 | 177.8 | 85.9 | 131.3 | 5.2 | M6 Receptacle | 5.6 | 10 | 1200A |
| PC625 | 12 | 530 | 200 | 420 | 340 | 18 | 17 | 27 | 170.2 | 99.1 | 176.5 | 6.0 | M6 Receptacle | 4.5 | 7 | 1800A |
| PC680 | 12 | 520 | 170 | 350 | 280 | 16 | 16 | 24 | 184.7 | 79.0 | 191.8 | 7.0 | M6 Receptacle† or SAE 3/8" Receptacle | 5.6 | 7 | 1800A |
| PC925 | 12 | 900 | 330 | 610 | 480 | 28 | 27 | 48 | 168.7 | 179.1 | 148.1 | 11.8 | M6 Receptacle† or SAE 3/8" Receptacle | 6.8 | 5 | 2400A |
| PC950 | 12 | 950 | 400 | 600 | 500 | 34 | 32 | 60 | 250.0 | 97.0 | 156.0 | 9.0 | M6 Stud | 3.9 | 7.1 | 1700A |
| PC1100 | 12 | 1100 | 500 | 800 | 650 | 45 | 43 | 87 | 250.0 | 97.0 | 206.0 | 12.5 | M6 Stud | 3.9 | 5.1 | 2450A |
| PC1200 | 12 | 1200 | 540 | 860 | 725 | 42 | 40 | 78 | 199.9 | 169.2 | 193.0 | 17.4 | M6 Receptacle† or SAE 3/8" Receptacle | 6.8 | 4.5 | 2600A |
| PC1220 | 12 | 1220 | 680 | 960 | 860 | 70 | 64.8 | 135 | 278.0 | 175.0 | 190.0 | 20.7 | DIN Lead Post | N/A | 5.7 | 2200A |
| 75/86-PC1230 | 12 | 1230 | 760 | 1050 | 815 | 55 | 50 | 110 | 240.3 | 179.8 | 201.2 | 20.6 | TOP SAE SIDE 3/8" Receptacle | 6.8 | 2.5 | 3100A |
| PC1350 | 12 | 1350 | 770 | 1080 | 960 | 95 | 88.5 | 195 | 353.0 | 175.0 | 190.0 | 27.4 | DIN Lead Post | N/A | 4.2 | 2900A |
| 25-PC1400 | 12 | 1400 | 850 | 1150 | 950 | 65 | 55 | 130 | 240.3 | 173.7 | 220.7 | 22.7 | SAE | 6.8 | 2.5 | 3100A |
| 35-PC1400 | 12 | 1400 | 850 | 1150 | 950 | 65 | 55 | 130 | 240.3 | 173.7 | 220.7 | 22.7 | SAE | 6.8 | 2.5 | 3100A |
| 34-PC1500 | 12 | 1500 | 850 | 1250 | 1050 | 68 | 62 | 135 | 275.6 | 171.7 | 200.2 | 22.4 | SAE | 6.8 | 2.5 | 3100A |
| 34R-PC1500 | 12 | 1500 | 850 | 1250 | 1050 | 68 | 62 | 135 | 275.6 | 171.7 | 200.2 | 22.4 | SAE | 6.8 | 2.5 | 3100A |
| 34M-PC1500 | 12 | 1500 | 850 | 1250 | 1050 | 68 | 62 | 135 | 275.6 | 171.7 | 201.9 | 22.4 | SAE and 3/8" Stud (Pos.), 5/16" Stud (Neg.) | 6.8 | 2.5 | 3100A |
| 34/78-PC1500 | 12 | 1500 | 850 | 1250 | 1050 | 68 | 62 | 135 | 275.6 | 179.8 | 200.2 | 22.4 | TOP SAE SIDE 3/8" Receptacle | 6.8 | 2.5 | 3100A |
| PC1700 | 12 | 1550 | 810 | 1325 | 1175 | 68 | 65 | 142 | 331.0 | 168.4 | 197.6 | 27.6 | M6 Receptacle† or SAE 3/8" Receptacle | 6.8 | 3.5 | 3500A |
| 65-PC1750 | 12 | 1750 | 950 | 1350 | 1070 | 74 | 65 | 145 | 300.5 | 182.9 | 190.5 | 26.3 | SAE | 6.8 | 2.0 | 5000A |
| PC1800-FT | 12 | 1800 | 1300 | 1600 | 1450 | 214 | 190 | 475 | 581.0 | 125.0 | 316.5 | 60.0 | M10 Stud | 9.0 | 3.3 | 3800A |
| 31-PC2150 | 12 | 2150 | 1150 | 1545 | 1370 | 100 | 92 | 205 | 331.7 | 175.0 | 243.6 | 35.3 | 3/8" Stud or SAE† | 16.9-22.6 | 2.2 | 5000A |
| 31M-PC2150 | 12 | 2150 | 1150 | 1545 | 1370 | 100 | 92 | 205 | 330.2 | 172.7 | 238.5 | 35.3 | SAE and 3/8" Stud (Pos.), 5/16" Stud (Neg.) | 16.9-22.6 | 2.2 | 5000A |
| PC2250 | 12 | 2250 | 1225 | 1730 | 1550 | 126 | 114 | 240 | 286.0 | 269.0 | 233.0 | 39.0 | DIN Terminal and 3/8" Stud | 11.0 For 3/8" Stud Only | 2.1 | 5000A |

*Cold Start Performance: S.A.E J537 JUNE 82 **Pulse Current † Can be fitted with brass automotive terminal

Optional metal jackets: available on PC545, PC680, PC925, PC1200, PC1700 and 31-PC2150

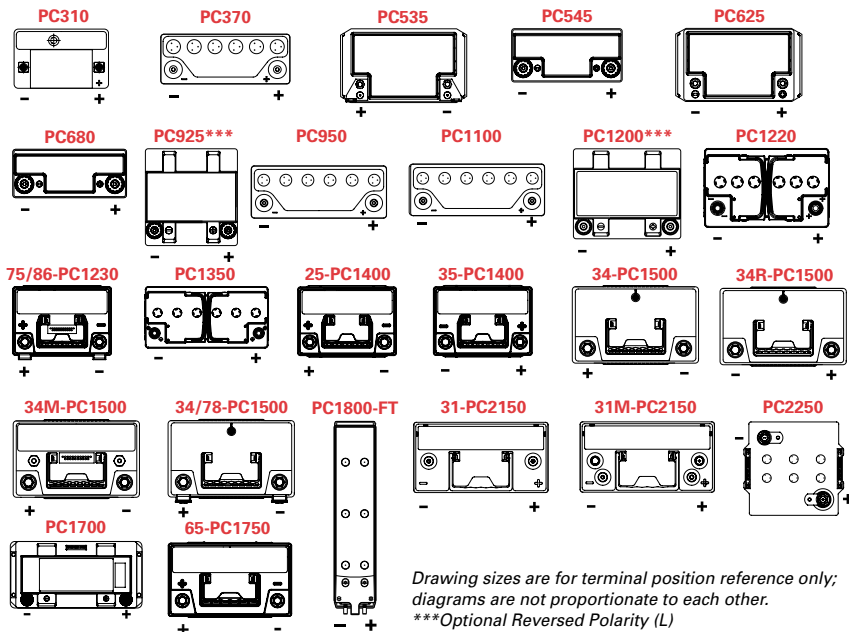
Operating Temperature Range: PC310, PC370, PC950, PC1100 and PC1800-FT: -40°C to 50°C,
PC535 and PC625: -40°C to 45°C,
PC545, PC680, PC925, PC1200 and PC1700 without metal jacket: -40°C to 45°C,
PC545, PC680, PC925, PC1200 and PC1700 with metal jacket: -40°C to 80°C,
PC1220, PC1350 and PC2250: -40°C to 40°C,
All other models: -40°C to 80°C

†† Height may include SAE/DIN terminal, metal jacket and maximum tolerance



POWER FOR EVERY APPLICATION.

TERMINAL LAYOUTS



Drawing sizes are for terminal position reference only; diagrams are not proportionate to each other.
***Optional Reversed Polarity (L)

ODYSSEY® EXTREME SERIES™ BATTERY TECHNOLOGY COMPARISON

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

WARRANTY:

EnerSys Energy Products Inc. ("Manufacturer") warrants its ODYSSEY® Extreme Series™ batteries (hereafter referred to as "Battery") to be free of defects in material and workmanship for the following Applicable Warranty Periods:

- 2 years for Auxiliary Power (APU) and other non engine start cycling applications.
- 2 years for power sports applications.
- 3 years for commercial, industrial, marine and automotive applications in non BCI sizes.
- 4 years for an engine starting application for PC1220, PC1350, PC2250 and all BCI sizes.

The warranty does not cover a Battery reaching its normal end of life which may occur prior to the warranty periods stated above. Depending on the application a Battery can reach its normal end of life before the end of the warranty period.

A Battery can deliver only a fixed number of usable amp-hours over its lifetime and is considered to have reached its normal end of life if the application uses up all of these amp-hours, regardless of the time the Battery has been in service. Therefore Manufacturer reserves the right to deny a warranty claim if it determines the Battery to be at its normal end of life, even if the claim is lodged within the applicable warranty period.

The Applicable Warranty Period begins from the date of purchase with original receipt, or, if no receipt is available, from Manufacturer's shipping date as stated on the battery. Batteries determined to meet the conditions of this warranty will be replaced free of charge if, at the sole discretion of Manufacturer, adjustment is necessary due to defect in material or workmanship. Batteries for warranty replacement consideration are to be returned to the original supplying distributor/dealer. If not feasible, other ODYSSEY® Extreme Series™ 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.

Batteries replaced under the warranty provisions will be shipped with a yellow replacement warranty sticker and carry only the remainder of the original Applicable Warranty Period.

- To register your ODYSSEY battery, please visit our website at www.odysseybattery.com

GENERAL PROVISIONS:

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

- Willful abuse, misuse, physical damage, 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.

- Repair or attempted repair of the Battery by anyone other than an authorized Manufacturer's representative shall void this warranty.

- Normal or accelerated deterioration in the electrical qualities due to operating or application conditions.
- 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 irreversible damage. A Battery with an open circuit voltage (OCV) of equal to or less than 8.0V will be deemed as over discharged and void 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 BATTERY COVERS AND BATTERY TOPS. THESE MATERIALS MAY CAUSE PERMANENT DAMAGE TO THE BATTERY COVERS BATTERY TOPS AND WILL VOID THE WARRANTY.

B. To obtain warranty service:

1. Return the Battery to the original supplying 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 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. This warranty shall be governed by and interpreted in accordance with the laws of the Commonwealth of Pennsylvania without regard to Pennsylvania conflicts of laws rules. The United Nations Convention on Contracts for the International Sale of Goods signed in Vienna in 1980 shall not apply to this warranty. This warranty is understood to be the exclusive agreement between the parties relating to the subject matter hereof. No employee or representative of Manufacturer is authorized to make any warranty in addition to those made in this agreement.

About EnerSys®

EnerSys® is a global leader in stored energy solutions for automotive, military, and industrial applications. With manufacturing facilities in 18 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.

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