

Ultimizer™ Chargers



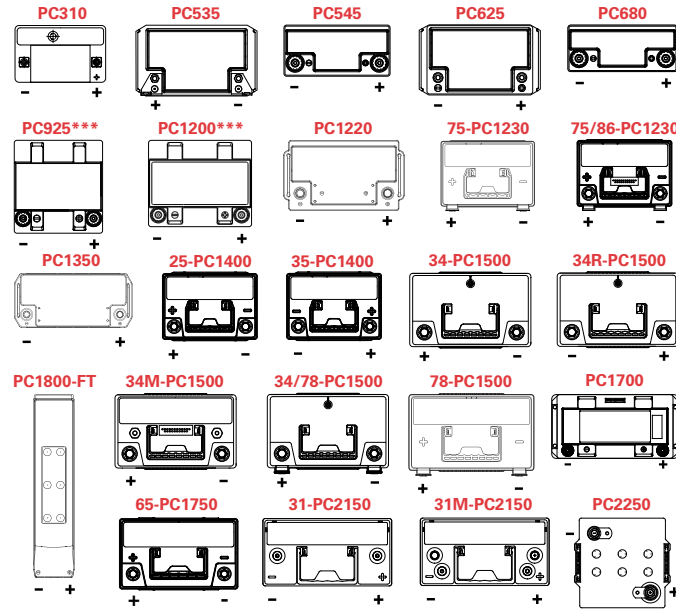
ODYSSEY® Ultimizer™ Chargers

Lightweight and portable, ODYSSEY® Ultimizer™ 12V chargers are specifically designed to support the full line of ODYSSEY® batteries – Automotive/LTV, Heavy Duty/Commercial and Powersports.

Powerful enough to charge batteries quickly, these sophisticated chargers are also safe enough to leave them connected to the batteries indefinitely without damage. All ODYSSEY® Ultimizer™ chargers offer these important benefits:

- Three-step charge profile ensures fast, complete and safe charge
- Continuous trickle charge keeps batteries fully charged during extended periods of non-use
- Sophisticated sequential charging technology keeps triple bank chargers lightweight and compact

TERMINAL LAYOUTS



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

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.

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ODYSSEY®

THE EXTREME BATTERY

THE BATTERY THAT GOES TO EXTREMES



Powered by **EnerSys®**
Power/Full Solutions

www.odysseybattery.com

Powersports

Powersport vehicles need a powerful battery. But they also need one built to take the constant pounding that comes with the territory, whether that territory is on land, sea, or snow. Thanks to rugged construction and a non-spillable AGM design, ODYSSEY® batteries protect against the shock and vibration that can quickly destroy other batteries. Ideal for:

- ATVs • Personal watercraft • Snowmobiles
- Ultralight aircraft • Gyrocopter™ aircraft



The ODYSSEY® battery's non-spillable design allows it to be mounted on its side without danger of leaking.

ODYSSEY® battery technology comparison

	ODYSSEY® BATTERIES	CONVENTIONAL BATTERIES
DESIGN LIFE	8-12 years (Float) @ 25° C (77° F)	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 (77° F)	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)

Alloy coated brass terminals for corrosion-free connection*

Compressed AGM plate separators for extreme vibration resistance



99.99% pure lead plates – more plates equals more power

Bonded intercell connections to resist vibration and eliminate internal sparking

*PC1220 and PC1350 do not have brass terminals. Please see table for details.

1-800-538-3627

www.odysseybattery.com

Automotive/LTV

Remember when all a battery had to do was start the car? Today's vehicles are loaded with more electronics than would have been imaginable just a few years ago. And today's hobbyist vehicles now include more specialties and specialized power demands than ever before. Fortunately, the ODYSSEY® battery has been designed to keep up with the changes.



Thanks to their amazing deep cycling capability, ODYSSEY® batteries are able to power multiple accessories and still deliver massive starting power.



Everyday Vehicles

The electronics in today's vehicles require heavy power. The ODYSSEY® battery delivers it while providing reliable starting for up to 3X as long as conventional batteries.

- Luxury and sport sedans
- SUVs and light trucks
- Vans, minivans and taxis



Classic & Antique Cars

Classic and restored cars are often kept in storage for months. With the ODYSSEY® battery, they'll start reliably for up to two years (when stored at 25°C (77°F) from a fully charged state).

- Antique vehicles
- Classic trucks
- Replica/kit cars



4X4 & Off-Road

Featuring rugged construction and a non-spillable, dry cell design, ODYSSEY® batteries ensure extreme shock and vibration resistance for the toughest off-road applications.

- SUVs
- Light trucks
- Off-road vehicles



High Performance Cars

High-compression, massive horsepower engines demand massive starting power. The superior cranking ODYSSEY® battery provides it for much longer than conventional batteries.

- Muscle cars
- Race cars
- Dragsters



Modified Vehicles

From low-riding hydraulics to high-intensity discharge lights, the non-spillable ODYSSEY® battery can power any modification, and can be mounted in almost any position.

- Tuner cars
- Low riders
- Audio and video systems

Heavy Duty/Commercial

Today's commercial vehicles have to power a range of accessories, both inside the cab and out. And whether on the road, the farm, or the jobsite, they also need a battery with the power to start any job, and the durability to last until it's finished. Not so easy when the job involves constant vibration, extreme loads, long idle periods, and harsh environments. The ODYSSEY® battery can handle it.



The ODYSSEY® battery delivers massive starting power, rapid recovery, and extreme durability that heavy duty and commercial vehicles demand.



Tractor trailers

With today's no-idling laws, big rigs need a battery that can keep everything in the cab running when the engine isn't. The ODYSSEY® battery can power a range of on-board accessories and still deliver reliable starts.



Construction equipment

Along with dusty, dirty jobsites, building equipment has to endure repeated shock and vibration. With its rugged, sealed construction, ODYSSEY® batteries are built to take a pounding and perform in the toughest conditions.



Farming equipment

Farm vehicles have to perform in harsh environments, often after sitting idle for months. With the ODYSSEY® battery they'll start reliably for up to two years (when stored at 25°C (77°F) from a fully charged state).



Buses/RVs

The electronics in today's RVs and charter buses require deep cycle reserve power. The ODYSSEY® battery delivers it while providing massive starting and up to 3X the service life of conventional commercial batteries.



Box trucks/Cargo vans

Big delivery vehicles need big starting power, even after hours of starts and stops with little recovery time. With its massive deep cycle reserve power, the ODYSSEY® battery can handle the most demanding routes.



Emergency Response

With its maintenance-free starting power and massive deep cycle reserve power for on-board accessories, the ODYSSEY® battery protects and serves when it matters most.

- Police cruisers
- Fire trucks
- Ambulances

Trolling Thunder™ / Marine Dual Purpose

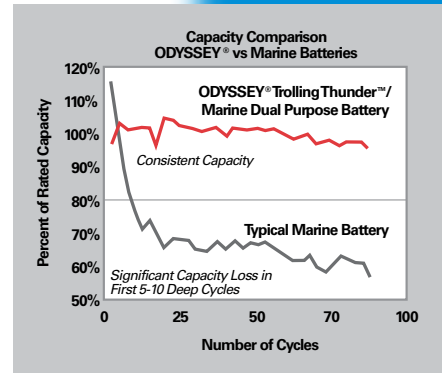
Like an athlete that is both a sprinter and a long distance runner, the ODYSSEY® Trolling Thunder™ / Marine Dual Purpose battery has both massive starting power and amazing deep cycling capability — up to 400 cycles at 80% depth of discharge. With twice the overall power and three times the life of conventional marine batteries, the ODYSSEY battery is ideal for trolling, starting, and for powering the many on-board electronic accessories common in today's boats.



Endorsed by legendary bass fisherman, author, and TV host, Shaw Grigsby, inducted into Legends of the Outdoors™ Hall of Fame, 2004.

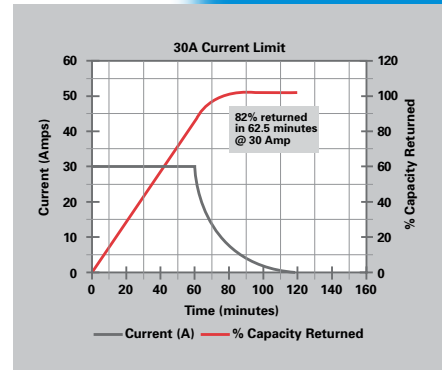


The amazing deep cycling capacity of the legendary ODYSSEY® Trolling Thunder™ Battery along with massive cranking power — all in one revolutionary battery.



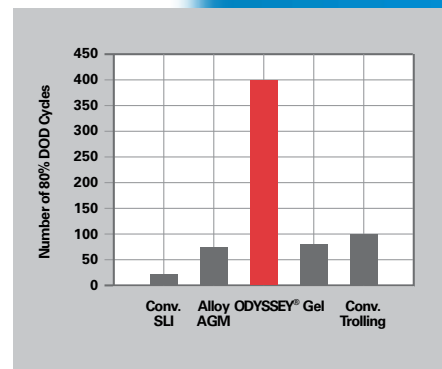
Consistent Power

ODYSSEY® batteries maintain consistently high voltage over a long cycle life.



Fast Recovery

ODYSSEY® batteries recharge faster and more fully than conventional marine batteries.



Long Cycle Life

ODYSSEY® batteries routinely deliver up to 400 deep cycle (80%) discharges.

ODYSSEY®

THE EXTREME BATTERY

Better warranty – Limited 2-, 3- and 4-year full replacement warranty – not pro rata.

Longer service life – 3-10 years of service life.

Longer cycle life – 70% longer cycle life compared to conventional deep cycle batteries – up to 400 cycles at 80% depth of discharge.

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

Faster recharge – The highest recharge efficiency of any sealed lead battery on the market –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 vibration – a common cause of premature battery failure.

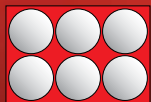
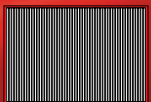
Extreme temperature tolerant – Operating temperatures from -40°C (-40°F) to 80°C (176°F).*

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.

*Not all models are capable of 80°C (176°F)

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



□ Unused battery space

MODEL	Voltage	PHCA** (5 sec)	CCA*	HCA	MCA	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)									
PC310	12	310	100	200	155	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
PC535	12	535	200	300	265	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
PC545	12	545	185	300	240	13	12	18	7.00 (177.8)	3.38 (85.9)	5.17 (131.3)	11.4 (5.2)	M6 Receptacle	50 (5.6)	10	1200A
PC625	12	625	265	440	350	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
PC680	12	680	220	370	300	16	16	24	7.15 (181.5)	3.00 (76.3)	6.65 (167.8)	15.4 (7.0)	M6 Receptacle [†] or SAE 3/8" Receptacle	50 (5.6)	7	1800A
PC925	12	925	380	625	500	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
PC1200	12	1200	550	860	725	42	40	78	7.87 (199.9)	6.66 (169.1)	6.80 (172.7)	38.2 (17.4)	M6 Receptacle [†] or SAE 3/8" Receptacle	60 (6.8)	4.5	2600A
PC1220	12	1220	680	960	860	70	64	135	11.89 (302.0)	6.88 (175.0)	7.48 (190.0)	45.6 (20.7)	DIN Lead Post	N/A	5.7	2200A
75-PC1230	12	1230	730	1050	815	55	50	100	9.46 (240.3)	6.99 (177.5)	7.22 (183.4)	45.5 (20.6)	SIDE 3/8" Receptacle	60 (6.8)	2.5	3100A
75/86-PC1230	12	1230	730	1050	815	55	50	100	9.46 (240.3)	6.99 (177.5)	7.92 (201.2)	45.6 (20.6)	TOP SAE SIDE 3/8" Receptacle	60 (6.8)	2.5	3100A
PC1350	12	1350	770	1080	960	95	88	195	14.84 (377.0)	6.88 (175.0)	7.48 (190.0)	60.4 (27.4)	DIN Lead Post	N/A	4.2	2900A
25-PC1400	12	1400	820	1150	850	65	55	125	9.46 (240.3)	6.84 (173.7)	8.69 (220.7)	50.0 (22.7)	SAE	70 (7.9)	2.5	3100A
35-PC1400	12	1400	820	1150	850	65	55	125	9.46 (240.3)	6.84 (173.7)	8.69 (220.7)	50.0 (22.7)	SAE	70 (7.9)	2.5	3100A
34-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.76 (171.7)	7.82 (198.6)	49.5 (22.4)	SAE	60 (6.8)	2.5	3100A
34R-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.76 (171.7)	7.82 (198.6)	49.5 (22.4)	SAE	60 (6.8)	2.5	3100A
34M-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.76 (171.7)	7.82 (198.6)	49.5 (22.4)	SAE and 3/8" Stud (Pos.), 5/16" Stud (Neg.)	70 (7.9)	2.5	3100A
34/78-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.99 (177.5)	7.82 (198.6)	49.5 (22.4)	TOP SAE SIDE 3/8" Receptacle	60 (6.8)	2.5	3100A
78-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.99 (177.5)	7.12 (180.8)	49.5 (22.4)	SIDE 3/8" Receptacle	60 (6.8)	2.5	3100A
PC1700	12	1700	875	1325	1175	68	65	142	13.02 (330.7)	6.62 (168.2)	6.93 (176.0)	60.9 (27.6)	M6 Receptacle [†] or SAE 3/8" Receptacle	60 (6.8)	3.5	3500A
65-PC1750	12	1750	930	1350	1070	74	65	135	11.83 (300.5)	7.20 (182.9)	7.43 (188.7)	58.0 (26.3)	SAE	70 (7.9)	2.0	5000A
PC1800-FT	12	1800	1300	1600	1450	214	190	475	22.75 (577.9)	4.9 (125.0)	12.44 (316.0)	132.3 (60.0)	3/8" Stud	80 (9.0)	3.3	3800A
31-PC2150	12	2150	1150	1545	1370	100	92	205	13.00 (330.2)	6.80 (172.7)	9.41 (239.0)	77.8 (35.3)	3/8" Stud or SAE [†]	150-220 (16.9-22.6)	2.2	5000A
31M-PC2150	12	2150	1150	1545	1370	100	92	205	13.00 (330.2)	6.80 (172.7)	9.47 (240.5)	77.8 (35.3)	SAE and 3/8" Stud (Pos.), 5/16" Stud (Neg.)	150-220 (16.9-22.6)	2.2	5000A
PC2250	12	2250	1225	1730	1550	126	114	240	11.26 (286.0)	10.59 (269.0)	9.17 (233.0)	86.0 (39.0)	SAE Terminal and 3/8" Stud	100 (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

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 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® 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. Visit www.odysseybattery.com/literature.html to download the "ODYSSEY Warranty" for full details.



OPTIONAL HEIGHT ADAPTOR May be used on all 34-PC1500 models for installations where a group 24 or group 27 is required. Snap the adaptor securely into place on the bottom of the battery. In some installations, the 34-PC1500 model with this adaptor may be used to replace a group 24F or 27F depending on required cable length.

Optional metal jackets available on PC545, PC680, PC925, PC1200, PC1700 and 31-PC2150
Operating Temperature Range = PC310 and PC1800-FT: -40°C (-40°F) to 50°C (122°F), PC535 and PC625: -40°C (-40°F) to 45°C (113°F), PC545, PC680, PC925, PC1200 and PC1700 without metal jacket: -40°C (-40°F) to 45°C (113°F), PC545, PC680, PC925, PC1200 and PC1700 with metal jacket: -40°C (-40°F) to 80°C (176°F), PC1220, PC1350 and PC2250: -40°C (-40°F) to 40°C (104°F)
All other models: -40°C (-40°F) to 80°C (176°F)