

# TECHNICAL INFORMATION



## OPTIMA REDTOP™



	REDTOP 4,2L S	REDTOP 4,2L U	REDTOP 3,7L S	REDTOP 3,7L U	REDTOP 2,1L S – 6V
A: mm	244	244	229	229	254
B: mm	173	173	169	169	176
C: mm	195	195	191	191	195
D: mm	172	172	170	170	84
E: mm	174	174	162	162	90
F: mm	254	254	237	237	254
G: mm	140	140	197	197	195
H: mm	–	82	–	200	–
Nominal Voltage: V	12	12	12	12	6
Cold Cranking Amps: (EN) CCA	815	815	730	730	815
Capacity: (EN) Ah	50	50	44	44	50
Reserve Capacity: (EN) min	104	104	90	90	104
Weight: kg	17,2	17,6	14,4	15,1	8,4

## OPTIMA YELLOWTOP™



	YELLOWTOP 4,2L S	YELLOWTOP 4,2L U	YELLOWTOP 2,1L S – 6V
A: mm	244	244	254
B: mm	173	173	176
C: mm	195	195	191
D: mm	172	172	84
E: mm	174	174	90
F: mm	254	254	254
G: mm	140	140	195
H: mm	–	82	–
Nominal Voltage: V	12	12	6
Cold Cranking Amps: (EN) CCA	690	690	690
Capacity: (EN) Ah	55	55	55
Reserve Capacity: (EN) min	120	120	120
Weight: kg	19,5	19,9	10,6

## CHARGING INFORMATION

### Alternator

13,8 to 15,0 volts.

### Battery Charger (Constant Voltage)

13,8 to 15,0 volts, 10 amps maximum, 8-10 hours approximate.

### Float Charge

13,2 to 13,8 volts, 1 amp maximum current.

### Rapid Recharge (Constant voltage charger)

Maximum voltage 15,6 volts. No current limit as long as temperature remains below 51 degrees C. Charge until current drops below 1 amp.

Recharge time will vary according to temperature and charger characteristics. When using Constant Voltage chargers, amperage will taper down to as the battery becomes recharged. When amperage drops below 1 amp, the battery will be close to a full state of charge.

### Cyclic application or series string applications (CV/CC) only:

Constant Voltage with Constant Current finish: 14,7 volts, temperature < 51 degrees C, no current limits. When current falls below 1 amp, finish with 2 amp constant current 1 hour.

For additional charging information contact your Authorized OPTIMA dealer.

# A BATTERY FOR THE SPACE-AGE



**SPIRALCELL TECHNOLOGY®**

*Optimal starting power regardless  
of temperature*

*Extreme vibration resistance*

*1,5 – 2 times longer life than  
traditional batteries*

*Long storage time*

*Non spillable in any position*

*Maintenance free*



The assignment was to create an energy source that could power the first moon buggy. The requirements were for a battery design that could function under extreme stress and still deliver considerably more power than conventional batteries. A compact battery that guaranteed function and performance. The result is the unique SpiralCell Technology® that OPTIMA batteries are based on. A new formula that delivers higher starting power, faster charging, no acid leakage, high vibration resistance and is maintenance free. The technology has been around for over 30 years and has continued to grow as OPTIMA sets new standards for function and performance in the battery market.



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OPTIMA  
SPIRALCELL  
TECHNOLOGY

THE ORIGINAL SPIRALCELL TECHNOLOGY®

**PEAK PERFORMANCE  
ALL THE WAY**



**OPTIMA**®  
**BATTERIES**

THE ULTIMATE POWER SOURCE™





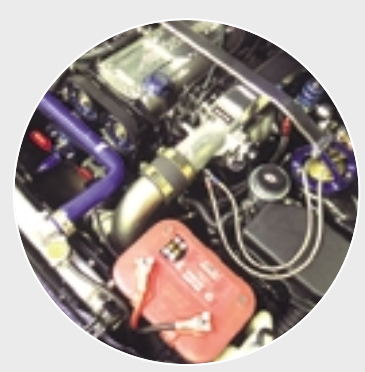
# OPTIMA REDTOP™

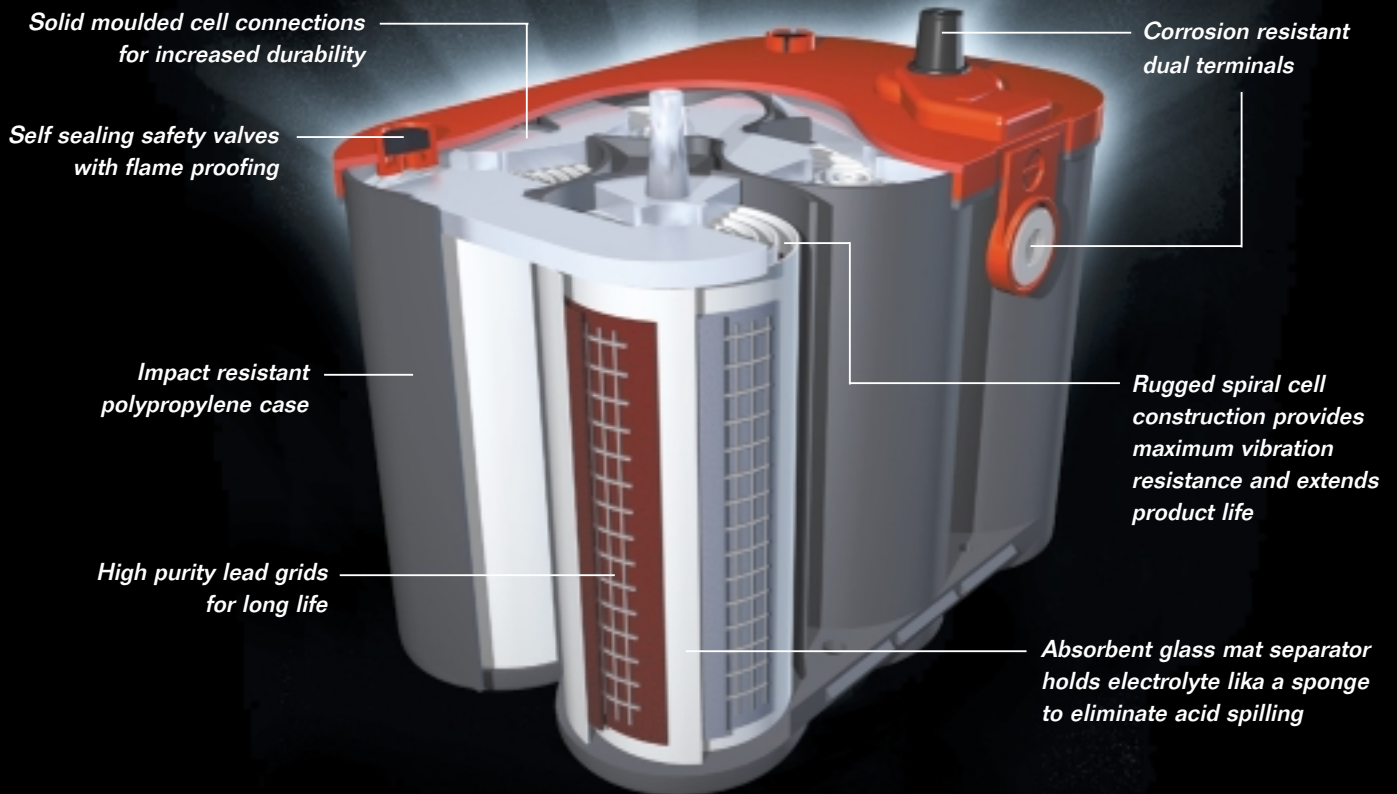
## Starter Batteries for Professional use

The instant you turn the key the OPTIMA RedTop battery proves the power of its design. Their unparalleled starting capacity means that demanding vehicles like muscle cars or racing cars get the starting power they need when it really counts. RedTop batteries also give sure starting power to vehicles that work hard and are extensively used by professionals. The key to this power is OPTIMA's SpiralCell Technology®, which allows starting of heavy-duty diesel engines and large machinery with the same compact battery that is available for your vehicle. This technology provides maximum starting power regardless of extreme outdoor temperature changes from +40° to -40°C. The robust, leak free construction can withstand extreme vibration and delivers maintenance free power, wherever your adventure takes you.

### POWER TO GET STARTED

The starting power OPTIMA RedTop delivers can be compared with traditional lead acid batteries that are several times larger. This makes OPTIMA RedTop the obvious choice for professional users demanding maximum starting power in all imaginable situations and environments.





# THE ANATOMY OF POWER

## OPTIMA SPIRALCELL TECHNOLOGY®



## A UNIQUE FORMULA

OPTIMA's unique anatomy is built on SpiralCell Technology®. Instead of flat plates used in ordinary batteries, OPTIMA uses two thin lead plates wound into a spiral cell with a glass-mat between to contain the acid. The technique of winding the cells, which are linked with solid connections, gives maximum performance with a minimum of size and weight. This makes the battery compact, robust and easy to mount.

### Maximum durability

The electrolyte solution is contained in a sealed system, surrounded by a durable and weather resistant plastic, and completely welded together. Neither bumps, collisions, nor sudden temperature changes can interrupt power supply or allow the battery to leak.

### Considerably longer life span

The thin lead plates give more lead surface area than traditional lead/acid batteries. The design minimizes resistance and gives even pressure over the entire lead surface, providing fast energy and an extra long life span. The larger lead surface also allows faster recharging than regular

batteries. In a traditional flooded battery heat causes increased acid density due to gassing which shortens battery life. This will never happen to an OPTIMA battery.

Thanks to the AGM (Absorbed Glass Mat) construction and recombination process you will never have to add water.

### Maintenance free

A major difference from ordinary batteries is that OPTIMA batteries are maintenance free because of the sealed system and no flowing electrolyte. No corrosion can form around the posts.

### Easy mounting

The sealed system allows the battery

to be permanently mounted in any angle, making it ideal for installation in narrow spaces.

### Maximum starting power

The technology gives maximum and sure starting power regardless of temperature or the number of deep discharges. Compact OPTIMA batteries have been tested starting large diesel motors in outdoor temperatures from +40° to -40° Celsius.

### Very low self discharge

OPTIMA batteries are ideal for seasonal use. The low rate of self discharge guarantees plenty of starting power even after long periods of storage.





# OPTIMA YELLOWTOP™

## Deep Cycle Batteries for Professional use

Providing power for special vehicles with winches, engine heaters, large audio systems, and other energy demanding applications requires a battery with extra high capacity. The OPTIMA YellowTop handles all of the above throughout the entire discharge cycle. It has the capacity to maintain high voltage during discharge, allowing you to utilize all of the stored current to a much greater degree than in traditional batteries. This, in combination with its low internal resistance, can also improve the sound of your car stereo. OPTIMA's SpiralCell Technology® combines the advantages of starter batteries with deep cycle batteries. The YellowTop handles multiple discharges and charges without losing capacity, and is also ideal for seasonal use because of its low self-discharge rate.

### POWER TO PERFORM

The OPTIMA YellowTop is the deep cycle battery that shows its true colours when it really counts. Ambulances and other emergency vehicles trust the YellowTop for sure starting and accessory power in situations where nothing can go wrong.

