# 5 REASONS TO CHOOSE CTEK DC/DC CHARGERS

# **CTEK SWEDEN**

and New Generation Battery Care

# CTEK BATTERY CHARGERS



#### **D250S GIVES YOUR BATTERY LONGER LIFE**

MAXIMIZED SERVICE BATTERY LIFE BECAUSE THE TIME WHEN THE BATTERY IS UNDERCHARGED IS MINIMIZED AND DEEP DISCHARGES ARE AVOIDED

#### **D250S GIVES YOUR BATTERY MORE POWER**

MAXIMIZED SERVICE BATTERY CAPACITY BECAUSE CHARGING SOURCES (ALTERNATOR, SOLAR, WIND) ARE SYNCHRONIZED AND WITH MAXIMIZED UTILIZATION OF ALTERNATOR.

#### **D250S CHARGES YOUR BATTERY FASTER**

MINIMIZED TIME AND COST FOR CHARGING WHICH REDUCES COST FOR ENGINE IDLING AND SHORE POWER UTILIZATION.

#### **D250S IS GOOD FOR THE ENVIRONMENT**

MINIMIZED ENVIRONMENTAL IMPACT DUE TO MINIMIZED ENGINE IDLE TIME AND MAXIMIZED BATTERY LIFE.

#### D250S GIVES SAFETY FOR YOU AND YOUR BATTERY

MAXIMIZED SAFETY WHERE CHARGING OF THE BATTERY IS TEMPERATURE CONTROLLED TO AVOID HARMFUL GASES





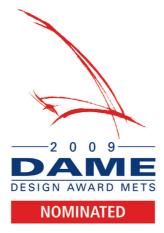
CTEK SWEDEN AB designs and develops a unique series of battery chargers for all types of lead-acid batteries for both private and professional use.

It's unique and innovative range of accessories and add-on products makes charging even easier and more functional.

CTEK is constantly providing its leading edge by patented innovations of features and functions, its approach to improved battery care and focus on safety.

Through CTEK's guaranteed quality and reliability, many leading high performance car manufacturers have chosen CTEK as their preferred supplier of chargers. For the same reason, CTEK has been voted best in independent tests since 2004.

WITH CTEK YOU ARE GUARANTEED BETTER BATTERY CARE IN AN EASY, SAFE AND RELIABLE WAY!



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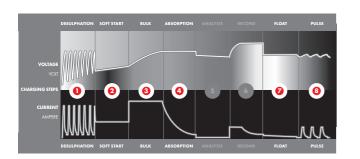






THE SMARTEST BATTERY CHARGERS IN THE WORLD

## CTEK'S STEPS TO A PERFECT BATTERY



CTEK is pioneers on how batteries should be charged, maintained, analyzed and reconditioned. CTEK offers a solution to improve charging for the regular alternator. With CTEK D250S the alternator can work as a enhancer and will fully charge the battery on a fraction of the normal time it takes. Six of the eight step from the standard CTEK 8-step charge curve is now built into a charger that takes its energy from the alternator. CTEK D250S is also an Active Battery Isolator, which means that a system with more than one battery can be charged with multiple step charging. The D250S always provides a perfect charge as it adjusts charge to alternative power sources and the surrounding temperature.

#### **TECHNICAL DATA** Input voltage: 7-22V Max current: 20A Back current drain: 2mA\* Charging voltage: 14,4V at 25 degrees battery temp. Efficiency: Battery isolator: Automatic Voltage Sensitive Relay, built-in Solar cell function: MPPT (Maximum Power Point Tracking) for optimal functionality, built-in -20°C to +60°C, Output effect reduced Ambient temp: automatically at higher temperatures 12V Lead acid (Open, MF, Gel, AGM) Type of batteries: Battery size: 40-500Ah 192 x 110 x 6.5 mm Dimensions: Encapsulation IP65 (splash- and dust proof) Protection Reverse polarity protected by internal fuse

### A FULLY CHARGED BATTERY ARRIVING AT YOUR DESTINATION!

#### **HOW LONG DOES IT TAKE?**

The curve shows how current and charge amount varies with time for a 100Ah battery that has been discharged by 30% in a typical motor home. It is difficult to get more than 25 Amps current from the alternator because the battery won't accept more and the voltage drop is significant. The battery won't be fully charged even after 12 hours if you just rely on the alternator. With the D250S the battery will be charged after less than 2 hours.

Large improvement could be expected from other dual battery systems for caravans, boats, emergency and service vehicles and other auxiliary batteries

# APPLICATION FXAMPLES

#### CARAVAN/CAMPER

**Situation:** One battery for all consumers.

**Problem:** The caravan battery is located a long way from the generator, resulting in considerable voltage drop at the trailer connection. The caravan battery is never fully charged by the generator.

**Solution:** The D250S gives a perfect charging curve for the caravan battery without discharging the starter battery.

# TRAILER CONNECTION STARTER BATTERY D2505 SERVICE BATTERY

CARAVAN

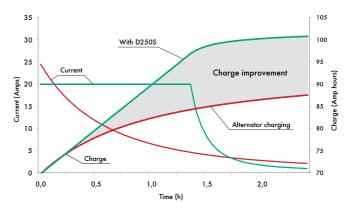
#### **SOLAR PANELS**

Situation: Solar panel.

**Problem:** A solar panel operates optimally at about 17V. Many regulators reduce the voltage by "burning off" energy.

**Solution:** The D250S searches for the optimum operating point (Maximum Power Point) and charges the battery perfectly at high degree of efficiency.



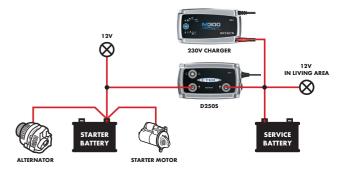


#### **BOAT/MOTORHOME**

**Situation:** Two battery banks.

**Problem:** The house battery bank will take a very long time to be recharged due to low voltage from the alternator and with other electrical products competing for the current.

**Solution:** The D250S charges the house battery fast and very efficient. The battery will be fully charged, produce more and last significantly longer.



<sup>\*)</sup> Back current drain is the current that D250S takes from the battery when the alternator is turned off. D250S extremely low back drain current ads up to about 1Ah/month.