CONVERTER
DC/DC

12 / 24 V

ENERGYS DC/DC 50.12/24

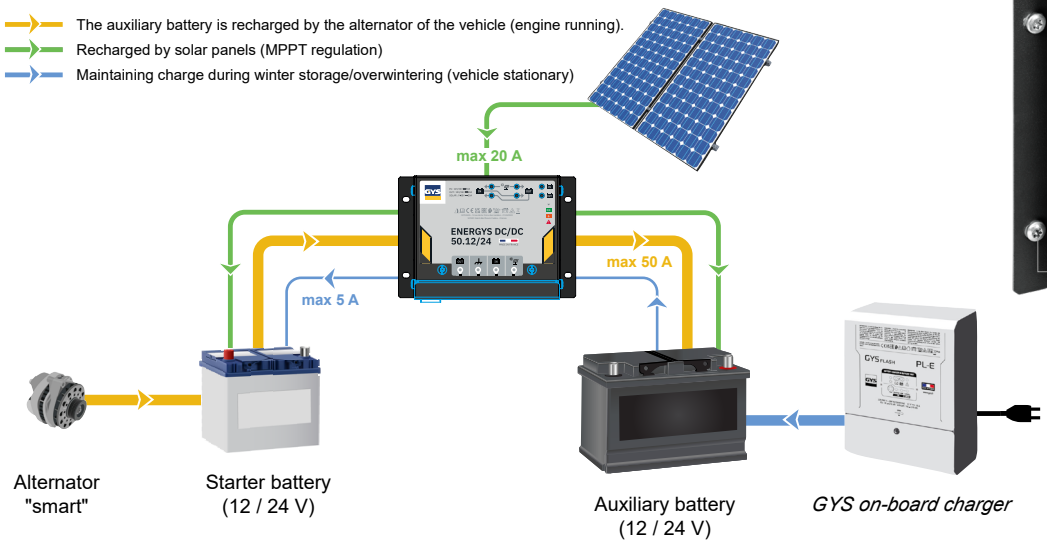
Ref. 072534

INVEST IN THE FUTURE

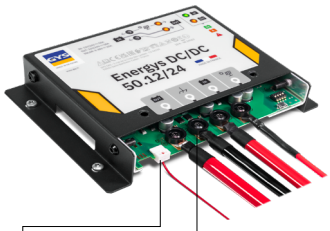
The ENERGYS DC/DC maintains the health of dual-battery electrical system (auxiliary and starter batteries). It delivers an optimum charge to your auxiliary battery while on the move, by using both the alternator and solar panels on your vehicle simultaneously. It also keeps your batteries charged during winter storage. A charger, battery isolator, and solar regulator all in one, it is an essential accessory for peace of mind on long journeys, however far away from an electrical supply you may be.

OPTIMUM ENERGY DISTRIBUTION FOR DUAL-BATTERY SYSTEMS

The ENERGYS DC/DC manages energy distribution based on available power sources and the charge level of each battery. It can draw energy from solar panels, the alternator, or an external charger to allow continuous charging of the two batteries in the system.



E-Mark Certification
Regulation N°10 certified



⚠*cables not included*

AN UNIT WHICH ADAPTS TO ALL CONFIGURATIONS

The ENERGYS DC/DC is suitable for both lead-acid batteries (Liquid, Gel, AGM, etc.) and lithium batteries (LiFePO4), in either 12 V or 24 V, offering a variety of possible configurations for your electrical system.

Automatic 12 V / 24 V detection
The ENERGYS DC/DC automatically determines the voltage of the batteries fitted.

Charge to 100% in any situation
Its advanced multi-stage charging curve ensures 100% charge, even when the distance between the main and auxiliary batteries is great enough to cause a significant voltage drop.

UVP Wake-up function for lithium batteries
When a lithium auxiliary battery is fitted, this function automatically reactivates it in the event of deep discharge.

AN INNOVATIVE ENERGY SOLUTION IN LINE WITH CURRENT MARKET REQUIREMENTS

Compatible with "smart" alternators
The ENERGYS DC/DC ensures that the auxiliary battery is fully recharged, even on vehicles fitted with a new-generation alternator, as required by the latest anti-pollution regulations (EURO 6).

Focus on clean energy

The ENERGYS DC/DC features an integrated MPPT regulator that ensures that the maximum amount of energy is obtained from the solar panels installed on the vehicle as possible, whatever the level of sunlight. It automatically prioritizes the clean energy delivered by the solar panels to recharge the batteries, thereby reducing the load placed on the alternator.
➔ *No external solar controller required.*

"Overwintering" function
This feature maintains the charge of the starter battery by drawing a small amount of the energy available on the auxiliary side while the vehicle is stationary, and an on-board or external charger is maintaining the auxiliary battery.
➔ *No need for a second charger on the start-up side for winter storage.*

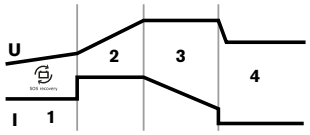
SAFE AND DISCREET INSTALLATION

- **Separates the two batteries to prevent discharge.**
- **Protects the on-board electronics of the vehicle:** protection against polarity reversal, short-circuits, overvoltage...
- Integrated temperature sensor prevents the internal electronics from overheating
- **Ultra-quiet and compact:** fanless and space-saving, it helps to ensure a peaceful environment for occupants of the vehicle.

ADVANCED CHARGING CURVES

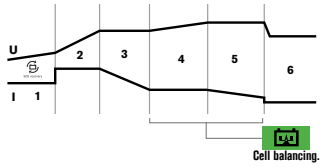
Pb

1. Recovery
2. Charge
3. Absorption
4. Maintenance charge (float)



LiFePO4 (LFP)

1. Recovery
2. Charge
3. Absorption
4. Completion
5. Equalisation / balancing
6. Maintenance charge (float)



PARALLEL COUPLING FOR MORE POWER

Bat. input		Bat. output		Solar input		EFFICIENCY		mm	g
U	I max	U	I max	U_{MPPT}	I max				
12/24 V	50 A	12/24 V	50 A	9-30 V	20 A	98%	<2.5 mA	135 × 35 × 200	570

CE

Made in France

www.gys.fr