



Your Expert
in Parts

Power Management



Power Management for professionals!

A failed power supply or a failed converter is a failed system. The sensitivities of modern electronic equipment to variable input voltages, has made voltage stabilization even more important. Start/ Stop technology on motor vehicles has added to this problem.

You know that regardless of the technology you're installing, be it radio communications on a fire engine, data tracking on a bus, visual displays on a lorry or navigation equipment on a luxury yacht - even the best product or the newest technology is only as good as the power supply to it.

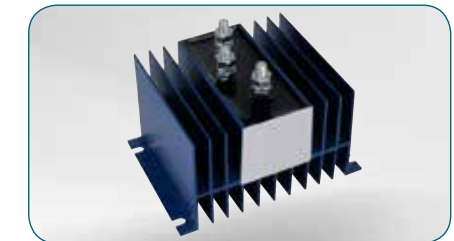
The new HC-CARGO Power Management series offers a wide range of 12V-12V, 24V-24V and 24V-12V products that ensure that stable and reliable voltage can be delivered to important equipment, even when the electrical system is under duress, such as during engine cranking.

Our supplier only uses modern, rigorously tested designs, automated assembly techniques and an award winning quality manufacturing system, backed up by expert engineering support.

Therefore we guarantee you reliable and high quality products.



HC-CARGO 161059 Split Charge Relay



HC-CARGO 160342 Battery Isolator

HC-CARGO Battery Isolators

Why isolate your batteries?

Many vehicles have multiple batteries: one to start the engine and others to power accessories. Without a battery isolator, a battery with a lower charge will rob power from a battery with a higher charge, until the batteries equalize. This problem is known as multiple battery drain and could leave you with dead batteries.

HC-CARGO Battery isolators help you to solve this challenge. They act as a check valve between the batteries, preventing the current from flowing from one battery to another. Each battery is isolated and acts as an independent power source. So no matter how drained your accessory batteries become, they will never drain from the battery you're depending on to start the engine.

When the alternator is charging, power can only flow from one direction, from the alternator to the batteries. Each battery then determines the amount of current which flows into it by its own state of charge, based on the voltage regulator setting.

With this system, the alternator and batteries are protected. The balanced circuit electronic isolator is the absolute best way that proper isolation and control can be accomplished, solving every multi-battery drain problem.

Features

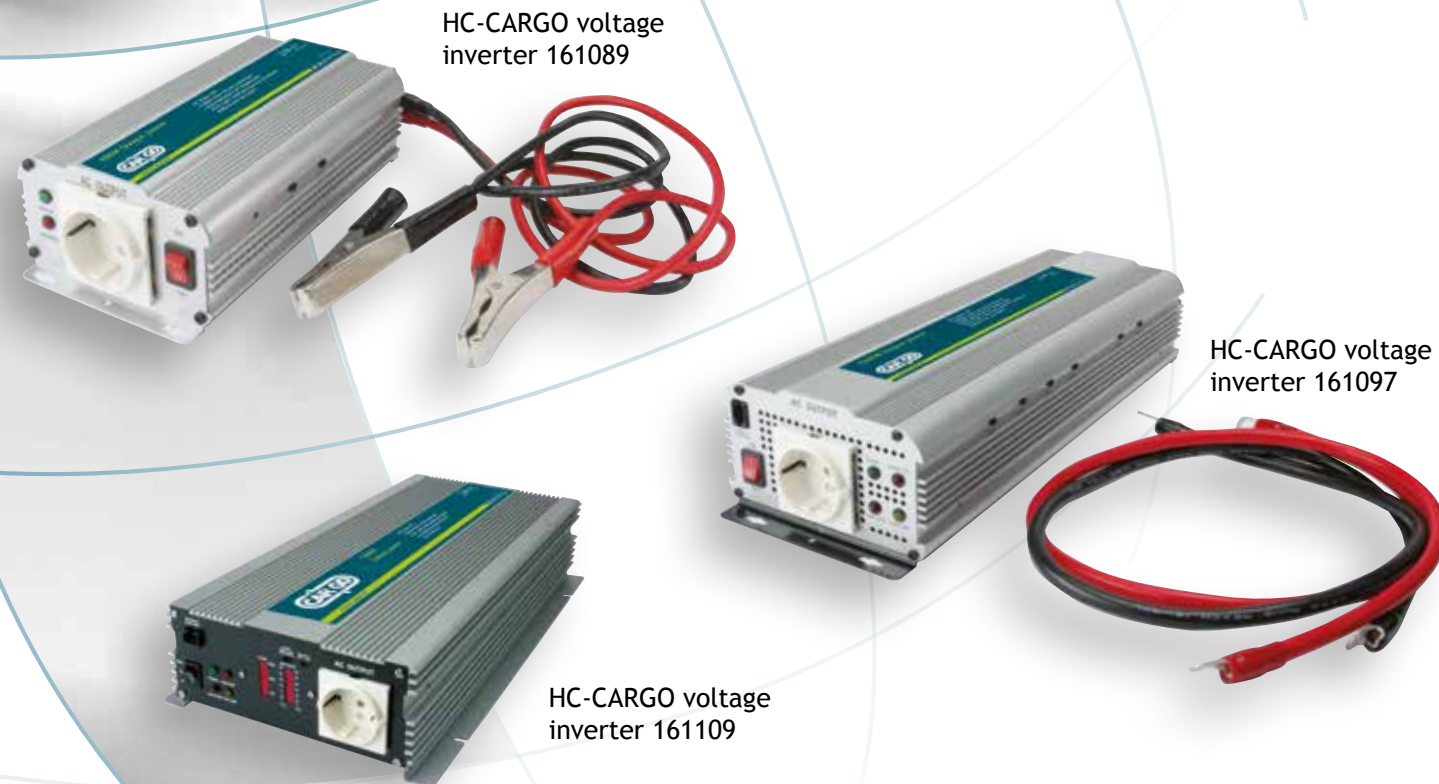
- Eliminates multi-battery drain when two or more battery banks are in the charging system
- Isolates each battery circuit and allows each battery to discharge according to its own needs
- Solid-state electronics. More efficient and reliable than mechanical and solenoid systems
- Full current in either post
- Anodised aluminium heat sink
- Sealed to protect against oil, gas, salt water and harsh environment
- Designed to exceed OEM specifications. The most comprehensive line of Battery Isolators on the market
- CE certified

Overview

HC-CARGO Battery isolators

Itemid		Current/ max. A	Voltage
160877		50	24
160876		70	12
160342		70	6-36
160343	W/diode	70	6-36
160742		100	24
160398		120	6-36
160399	W/diode	120	6-36
161060		140	24
161059		140	12
160740		180	12





HC-CARGO voltage inverter 161089

HC-CARGO voltage inverter 161097

HC-CARGO voltage inverter 161109

What is a voltage inverter and what does it do?

A power inverter is a DC (battery) powered device that converts DC (Direct Current) power into AC (Alternating Current) power. The output is 220-240 VAC, 50 Hz, International power.

With a large enough battery bank, or a large enough alternator output from your vehicle, along with a powerful enough inverter, almost anything within reason, can be operated from a power inverter, for example: Everyday appliances such as microwaves, power tools, TVs and DVD players, lights, audio/visual equipment, battery chargers, and computers. A heavy inrush inverter can be used to power air compressors, water pumps, heaters, ventilation fans, and air conditioners. Pure sine inverters are ideal for running sensitive test equipment: oscilloscopes, scales, stereos & video equipment, etc.

How do I get it right?

The size of your inverter is dependent on the load you will be powering. You will need to calculate the total (Watts or Amps) of all appliances you plan to power.

It is not recommended to run two heavy pieces of equipment simultaneously, such as a refrigerator and a microwave or a vacuum cleaner and a microwave, unless a very large capacity inverter is being used.

A 100-Watt light bulb consumes just under 1 Amp of electricity per hour. (120 Watts = 1 Amp of AC power) 8 Amps draw of electricity (9 x 100-Watt light bulbs) are approximately the equivalent of 960 Watts or just under 1 kW (1000 Watts of power).

Common features overview HC-CARGO Voltage Inverters

Voltage/out	Protection against Over heating	Protection against Overloading	Short circuit	Temp.	Approvals
220-240	Yes	Yes	Yes	60°C±5°C	CE

Itemid	UK Itemno*)	Dim. mm	Voltage/in	W/cont. 1	W/max
Modified Sine - 12V					
161078	161083	120x73x73	12	150	450
161085	161087	155x73x73	12	300	900
161089	161091	190x113x62	12	600	1500
161093	161095	340x135x79	12	1000	2400
161097	161099	400x135x79	12	1500	3000
161113	161115	340x135x148	12	2500	5000
Modified Sine - 24V					
161082	161084	120x73x73	24	150	450
161086	161088	155x73x73	24	300	900
161090	161092	190x113x62	24	600	1500
161094	161096	340x135x79	24	1000	2400
161098	161100	400x135x79	24	1500	3000
161114	161116	340x135x148	24	2500	5000

Itemid	UK Itemno*)	Dim. mm	Voltage/in	W/cont. 1	W/max
Pure Sinus - 12V					
161101	161103	340x135x79	12	700	1400
161105	161107	360x195x80	12	1000	2000
161109	161111	430x245x85	12	1500	3000
Pure Sinus - 24V					
161102	161104	340x135x79	24	700	1400
161106	161108	360x195x80	24	1000	2000
161110	161112	430x245x85	24	1500	3000

*) Different plug-types: UK:



ROW:



HC-CARGO Converters

VOLTAGE CONVERTERS - FOR A WIDE RANGE OF APPLICATIONS

A COMPREHENSIVE PRODUCT RANGE

Products are split into these groups

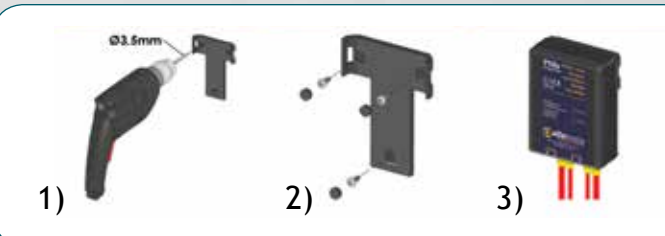
- 12V-12V range
- 12V-24V range
- 24V-24V range
- 24V-12V range

All products use modern switch mode designs and are built using the same concepts and technologies as the successful PowerVerter range, which will of course meet your 24V-12V requirements.



HC-CARGO 160640
24V-12V Converter

All the units consume an off load current of less than 15mA, which is usually less than the self discharge current of the vehicle's battery.



FAST INSTALLATION

All the products fit onto a "Click 'n' fit" mounting clip, which is fixed in three points allowing it to be mounted onto uneven surfaces. It is easy to fit the clip into awkward places, then simply click the unit into position. This gives reassurance to the installation engineer and speeds fault finding.

Common features overview HC-CARGO Converters

Approvals	Protection against overvoltage	Over current	Protection against over heating	Protection against reverse connection	Protection against transients
CE	Yes	Yes	Yes	Yes	Yes

Switch mode/isolated			
Itemid	Voltage/ in	Voltage/ out	A/cont.
160960	12	12	6
160644	12	24	7
161074	24	24	3
161075	24	24	4.5
161077	24	24	10
160392	24	12	12
161079	24	12	18
161081	24	12	24
160390	24	12	3
160391	24	12	6

Itemid	A/cont.	Voltage/in	Voltage/ out
Switch mode/uninsulated			
160642	3	12	24
160646	10	12	24
161072	16	12	24
161073	25	12	24
160306	12	24	12
161080	18	24	12
160389	24	24	12
160387	3	24	12
160640	50	24	12
160388	6	24	12

HC-CARGO Power Guards - a solid state battery

Battery Guards monitor the source voltage and disconnect the equipment from the battery if the voltage falls below a pre-determined level. This can work to ensure that there is always sufficient voltage remaining in the battery to start a vehicle engine or ensure power is available for other critical applications. The total discharge of a lead acid battery can also cause damage to the cells significantly shortening the life of the battery.

The HC-CARGO Power Guard unit can also be set to disconnect equipment at a lower voltage that will still protect the battery from total discharge, while allowing for maximum battery usage.

A wide range of features

- Simple inline system - do not require chassis mounting. Simply connect and tie wrap neatly within the wiring system
- Three point mounting system. Avoids rocking/stress to the electronics when mounted on uneven surfaces
- Heat is dissipated into die cast casing
- Manual shutdown facility
- Alarm and disconnect delay feature
- Fully programmable - All units in the range are supplied pre-programmed for a variety of scenarios

Common features overview HC-CARGO Power Guards

Alarm/voltage	Protection against over heating	Protection against over loading	Regulation	Short circuit	Shut down / 12V	Shut down / 24V	Shut down / voltage
Yes	Yes	Yes	Yes	Yes	11,5	23	Yes

Itemid	Voltage/in	A max/cont.
161014	9-32	10
161015	9-32	20
161016	9-32	40
161017	9-32	60
161018	9-32	100
161019	9-32	200



HC-CARGO Power Guards (from Alfatronix)

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HC-CARGO supplies more than
25.000 items - Quality products
for every purpose



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