



DC-DC BATTERY CHARGERS

FULLY AUTOMATIC



HULK PROFESSIONAL SERIES DC-DC

IN-VEHICLE BATTERY CHARGERS

HU6525 | HU6540

Your vehicle's alternator is not designed to fully charge auxiliary batteries. An insufficient charge may cause sulphation resulting in shorter battery life and impaired performance.

The answer to this is the HULK Professional Series In Vehicle DC-DC Battery Chargers. They are available in either 25 or 40 Amp and are engineered to operate in the toughest conditions either under bonnet or in vehicle, charging your auxiliary batteries to their optimum level whilst driving or with solar when parked.

Fully Automatic and using a unique 7 Stage charging algorithm the HULK Professional Series DC-DC battery chargers ensure your battery is charged to 100%, irrespective of size or type.

2 Year Warranty

Features

Automatic Input Selection

Automatically selects the input, Alternator, Solar, DC, based on the Active input. No manual switching required.

Dual Charging Mode

Works with both fixed voltage (standard voltage 12-24V) and variable voltage (Smart Alternators).

Ignition Connection

Allows "Low Input Operation" suitable for variable voltage alternators.

Multi Chemistry Charging

Capable of charging a variety of rechargeable batteries, like Lead Acid Wet / Flooded types, GEL, AGM, MF, Calcium and Lithium batteries.

Solar MPPT Regulator

Maximises the power available from solar panels even in low light.

7 Stage Intelligent Switch Mode Charging

Unique charging algorithm enhances the life of batteries by ensuring a full charge and conditioning. It also recovers batteries many times faster than an alternator.

Wide Operating Range

Vehicle voltage input from 11 – 32 Volt, Solar input is from 9 – 42 Volt and DC input (40amp only) 11 – 32 Volt.

Temperature Compensation

Using the temperature sensor, the charger continually adjusts its charge rate to suit the battery temperature protecting the battery from overcharging and overheating.

Super Quiet Operation

No internal fan ensures a super quiet operation.

Optional Terminal Block

Additional accessory that provides ease of wiring when multiple earths are required.

Compatible Battery Monitor

An additional accessory the LCD display monitors the Main & Auxiliary batteries status.

Parallel Connection Units

Can be connected in parallel to provide more output when using high output alternators.

Protection

Reverse Polarity

Detects reversed connection on the input or output terminals preventing internal damage.

Built in Battery Isolator

Isolates the main and auxiliary batteries at preset parameters preventing the main battery from being drained by the accessories connected to the auxiliary battery.

Spark Free

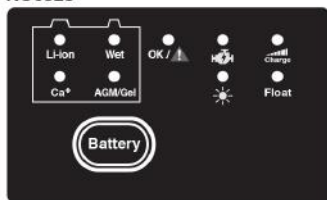
Will not begin charging unless the load is securely fastened, preventing output leads from sparking due to an accidental short circuit.

Versatile Installation

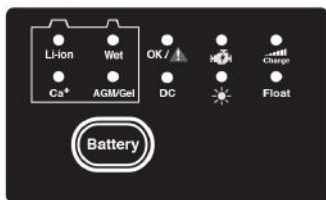
IP67 Rating, sealed against dust and water ingress. Safe to operate in -20°C to 85°C temperatures.

LED Indications

HU6525



HU6540



Item	Indication	LED
AGM/Gel	Battery Type Selection (default)	ON: Blue
Wet	Battery Type Selection	ON: Blue
Ca+	Battery Type Selection	ON: Blue
Li-ion	Battery Type Selection	ON: Blue
OK/Error	Battery OK.	ON: Green
OK/Error	Battery Bad/Charging Error/Fault	ON: Red
Alternator	Active Input Indication	ON: Yellow
Solar	Active Input Indication	ON: Yellow
DC (DX-40)	Active Input Indication	ON: Yellow
Charge	Bulk Charging Stage	Blinking: Blue
Charge	Absorption Charging Stage	ON: Blue
Float	Battery Analysis	Blinking: Blue
Float	Float Stage	ON: Blue

DC-DC Battery Charger

25Amp

HU6525



25 Amp

12 Volt

7 Step

Solar MPPT
12/18/24V

12/24V Alternator
11-32V

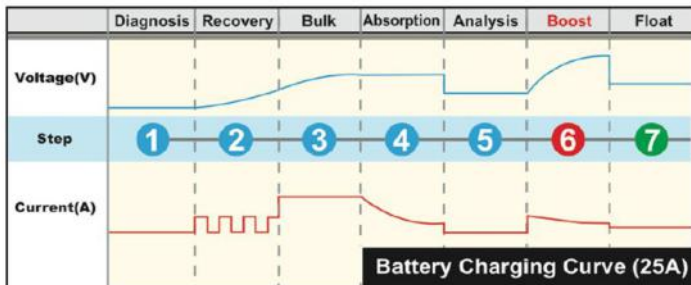
Max. Temperature
85°C

Lead Acid ————— Lithium



Battery Type	Bulk Voltage
AGM / Gel	14.4V
Standard Wet	14.6V
Calcium	14.8V
Lithium-Ion	14.4V

Charging Phases



DC-DC Battery Charger

40Amp

HU6540



40 Amp

12 Volt

7 Step

Solar MPPT

12/18/24V

12/24V Alternator

11-32V

Max. Temperature

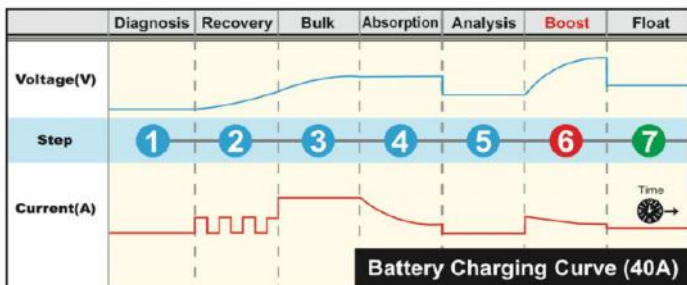
85°C

Lead Acid ————— Lithium



Battery Type	Bulk Voltage
AGM / Gel	14.4V
Standard Wet	14.6V
Calcium	14.8V
Lithium-Ion	14.4V

Charging Phases



Specifications

Electrical Specifications

	HU6525	HU6540
Input Range		
Alternator		11-32 V
Solar		15-41 V
DC	n/a	11-32 V
Solar MPPT		
12V Panel	25 A max.	40 A max.
18V Panel	25 A max.	40 A max.
24V Panel	25 A max.	40 A max.
12V Alternator Input		
Low Voltage Turn OFF		12.6 V
Low Voltage Turn ON		13.2 V
Over Voltage Turn ON		14.8 V
Over Voltage Turn OFF		16 V
24V Alternator Input		
Low Voltage Turn OFF		25.2 V
Low Voltage Turn ON		26.4 V
Over Voltage Turn ON		29.6 V
Over Voltage Turn OFF		32 V
Ignition Override		
Low Voltage Turn OFF		11.5 V
Low Voltage Turn ON		12 V
Over Voltage Turn ON		31 V
Over Voltage Turn OFF		32 V

	HU6525	HU6540
DC Input		
Low Voltage Turn OFF	n/a	11 V
Low Voltage Turn ON	n/a	12 V
Over Voltage Turn ON	n/a	31 V
Over Voltage Turn OFF	n/a	32 V

	HU6525	HU6540
Output		
Voltage	3-15 V	
Current	25 A max.	40 A max.
Power	375 W max.	600 W max.
Operating Temp	-20 to 85 °C	
Protection Class	IP67	
Standard	EN55014, AS/NZS CISPR14	
Dimension (mm)	158x115x53	178x125x58
Weight (g)	800	1140
Remote Display	Optional	

Battery Type	Bulk Voltage	Float Voltage
AGM / Gel	14.4V	13.6V
Standard Wet	14.6V	13.6V
Calcium	14.8V	13.6V
Lithium-Ion	14.4V	13.6V

Battery Temperature Compensation

High temperature..... -17mV per°C above 30°C

Low Temperature..... +17mV per °C below 21°C

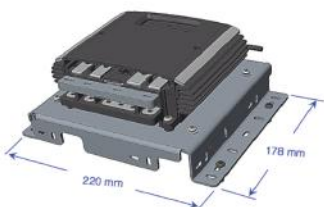
Battery over-temperature protection..... 50°C

Accessories

HU6527 MOUNTING BRACKET



Combination of three mount parts with four screws



Horizontal Mounting & Bracket Size



Vertical Mounting

Black Metal Mounting Bracket that suits both the HU6525 and HU6540 HULK DC-DC Battery Chargers

Versatile design allows for both horizontal or vertical mounting on any of the 4 x sides

Heavy Duty, pre-holed, black enamel steel bracket provides quick installation

Accessories

HU6525B TERMINAL BLOCK TO SUIT HU6525



HU6525B Terminal Block

An ideal wiring aid for the HU6525 HULK DC-DC Battery Charger.

Eliminates the complexity of the wiring connections by providing a dedicated ground for each input and output.

Clear plastic hinge cover covers all terminals for further protection.

Copper with nickel plating terminals ensure no power loss.

M5 dedicated studs ensure secure electrical connections.

HU6540B



HU6540B Terminal Block

An ideal wiring aid for the HU6540 HULK DC-DC Battery Charger.

HU6526 Remote LCD Display

TO SUIT HU6525 & HU6540



High Contrast
LCD

Wide Viewing
Angle

Swivel
Mounting Bracket

The **HULK Professional Series LCD Battery Monitor Display** is suitable for use with both the 25 and the 40amp HULK Professional Series DC-DC Battery chargers. It provides the precise status of your battery system and charger.

The user can select from three default screens that display critical information on the status of the auxiliary battery, output current, output voltage and input voltage. Backlight intensity can be dimmed during night viewing or increased during the day. The display can be fixed on any flat surface with either screws or adhesive tape or alternatively, using the swivel arm, the unit can be set at the desired viewing angle.

The display features auto standby for low power consumption and is equipped with a 3.5m Data cable with a Type C Connector. All connections are extremely secure and designed to withstand the toughest of conditions.

Includes 3.5m Cable

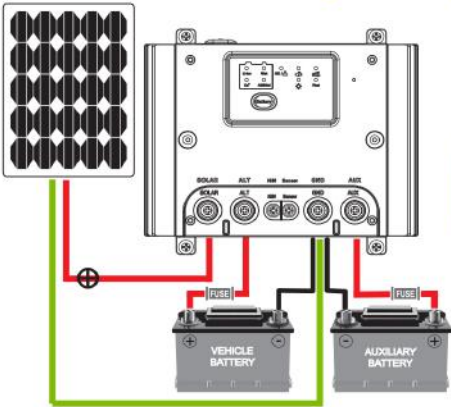


Swivel-mount bracket



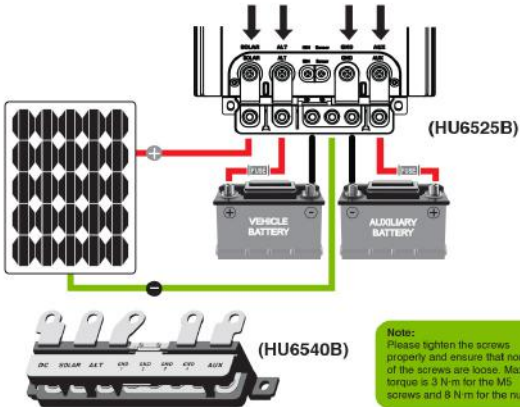
Connection

Connecting the Charger



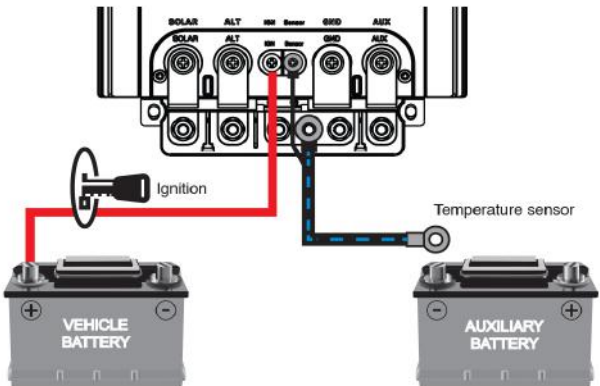
Note:
Please tighten the screws properly and ensure that none of the screws are loose. Max torque is 3N·m for the M5 screws and 8N·m for the nuts.

Connecting the Charger using the Terminal Block



Note:
Please tighten the screws properly and ensure that none of the screws are loose. Max torque is 3 N·m for the M5 screws and 8 N·m for the nuts.

Temperature Sensor and Ignition Sensor Connection





Automotive Imports Pty Ltd
22 – 28 Lexton Road, Box Hill,
Victoria, Australia

AUS: www.hulk4x4.com.au **NZ:** www.hulk4x4.co.nz