



DC-DC BATTERY CHARGERS

— FULLY AUTOMATIC —

PART NUMBERS - HU6520 | 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.

Available in 20A, 25A or 40A and 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.



HU6520
20 AMP | 24 VOLT | 7 STEP



HU6525
25 AMP | 12 VOLT | 7 STEP



HU6540
40 AMP | 12 VOLT | 7 STEP

FEATURES

HU6520 | HU6525 | HU6540

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" suits 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 power available from solar panels even in low light.

WIDE OPERATING RANGE: Vehicle voltage input from 11-32C, Solar input is from 9-42V and DC input (40A only) 11-32V.

SUPER QUIET OPERATION: Not containing an internal fan ensures a super quiet operation.

TEMPERATURE COMPENSATION: By using the temperature sensor, the charger will continually adjust its charge rate to suit the temperature of the battery, which therefore protects the battery from overcharging and overheating.

OPTIONAL TERMINAL BLOCK: This additional accessory provides ease of wiring when multiple earths are required.

COMPATIBLE BATTERY MONITOR: An additional accessory the LCD display monitors the Main and Auxiliary batteries status.

PARALLEL CONNECTION UNITS: They can be connected in parallel to provide more output when using high output alternators.

REVERSE POLARITY: This function will detect reversed connection on the input or the output terminals preventing internal damage.

BUILT IN BATTERY ISOLATOR: It will isolate the main and auxiliary batteries at the 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, which prevents the output leads from sparking, caused by an accidental short circuit.

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

7 STAGE SMART SWITCH MODE CHARGING: Contains a 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.



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ELECTRICAL SPECIFICATIONS

DC-DC BATTERY CHARGERS	HU6520	HU6525	HU6540
INPUT RANGE			
Alternator	11-32V	11-32V	11-32V
Solar	9-42V	15-41V	15-41V
DC	N/A	N/A	11-32V
SOLAR MPPT			
12V Panel	20A max.	25A max.	40A max.
18V Panel	20A max.	25A max.	40A max.
24V Panel	20A max.	25A max.	40A max.
12V ALTERNATOR INPUT			
Low Voltage Turn OFF	12.6V	12.6V	12.6V
Low Voltage Turn ON	13.2V	13.2V	13.2V
Over Voltage Turn ON	14.8V	14.8V	14.8V
Over Voltage Turn OFF	16V	16V	16V
24V ALTERNATOR INPUT			
Low Voltage Turn OFF	25.2V	25.2V	25.2V
Low Voltage Turn ON	26.4V	26.4V	26.4V
Over Voltage Turn ON	29.6V	29.6V	29.6V
Over Voltage Turn OFF	32V	32V	32V
IGNITION OVERRIDE			
Low Voltage Turn OFF	11.5V	11.5V	11.5V
Low Voltage Turn ON	12V	12V	12V
Over Voltage Turn ON	31V	31V	31V
Over Voltage Turn OFF	32V	32V	32V
DC INPUT			
Low Voltage Turn OFF	N/A	N/A	11V
Low Voltage Turn ON	N/A	N/A	12V
Over Voltage Turn ON	N/A	N/A	31V
Over Voltage Turn OFF	N/A	N/A	32V
OUTPUT			
Voltage	12-30V	3-15V	3-15V
Current	20A max.	25A max.	40A max.
Power	600W max.	375W max.	600W max.
Operating Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C
Protection Class	IP67	IP67	IP67
Standard	EN55014, AS/NZS CISPR14		
Dimensions (mm)	158 x 115 x 53	158 x 115 x 53	178 x 125 x 58
Weight (g)	800	800	1140
Remote Display	Optional	Optional	Optional
BATTERY TEMPERATURE COMPENSATION			
High Temperature	-17mV per°C above 30°C		
Low Temperature	+17mV per°C above 21°C		
Battery Over-Temperature Protection	20A: 60°C 25A & 40A: 50°C		

PROTECTION

LED INDICATIONS



ITEM	APPLICATION	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

2 YEAR WARRANTY



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BATTERY TYPE			
BULK VOLTAGE			
AGM / Gel	28.8V	14.4V	14.4V
Standard Wet	29.2V	14.6V	14.6V
Calcium	29.6V	14.8V	14.8V
Lithium-Ion	28.8V	14.4V	14.4V

SOLAR MPPT: 12/18/24V
12/24V ALTERNATOR: 11-32V
MAXIMUM TEMPERATURE: 85°C
FLOAT VOLTAGE: 13.6V

