

FACT SHEET

KVS-106 UPS battery backup with 5AH battery for 12V vehicle equipment

The Backup-Mobile UPS is designed to keep your equipment from losing power or rebooting during engine startup, ensuring these spikes and sags in power don't shorten the life of your mission critical electronics. We do this by providing uninterrupted, clean, consistent power to your equipment, extending the life of your electronics up to 2 to 3 more years.

The system prevents your equipment from running the vehicle's battery down avoiding jump-starts. It switches over to the auxiliary battery when the engine is shut off and the alternator stops or the car's battery drops below 11.8 volts. This means you never have to worry about that after-market equipment leaving you with a dead battery in the morning.

The PowerStream Backup-Mobile UPS isolates its battery from the vehicle, so it can't be discharged by the vehicle's other electronics, and it won't try to participate in the engine startup process.

The DC-UPS powers your equipment in the vehicle using the car electrical system, but switches to external battery power when the car's battery is removed, stolen, or drops below a predetermined voltage, acting as a battery backup (BBU) and power conditioner.

Allows for safely charging our internal battery from the car's electrical bus by isolating and current regulating the connection to the auxiliary battery. Which means you will also get years of faithful service from your Backup-Mobile UPS.



SPECIFICATION

Item	Specification
Detailed Specifications	Backup-Mobile DC UPS
Maximum pass-through current	12 amps continuous, 15 amps available on request
Max Charge Current	400 milliamps.
Temperature dependence of charge current	The charge current is reduced at higher temperatures to maintain reliable heat management. At 40°C the charge current limit is 850 mA
Maximum input voltage (steady state)	15V
Maximum input voltage (transient)	40V
Maximum pass-through wattage	144 watts (180 Watts on special order)
Transient pass-through current	13 amps for 40 seconds 20 amps for 5 seconds Over 20 amps immediate shutdown
The available custom setpoints are Main On, Main Off, Charger On, Charger Off, Aux On, Aux Off	This document describes how to engineer and specify the 6 custom setpoints if desired
Transition time	less than 50 microseconds from main battery to auxiliary battery less than 50 microseconds from auxiliary battery to main battery. We have a capacitor to keep the voltage up during the transition and have not had any problem with customer's equipment dropping out during the switchover.
Auxiliary battery charging starts when main voltage is:	Factory selectable, default is 11.8V
Internal battery	5AH Sealed Lead Acid battery
Charge algorithm	Constant current until the battery voltage reaches 13.4 volts, taper charge above 13.4 volts to zero current at 14.1 volts
Nominal Battery Voltage	12 Volts
Size	6" x 4.5" x 6" at mount points (6." Wide x 6.5" long x 4.9" tall)
Vehicle's electrical bus reconnects to the load when its voltage raises to:	13.5 volts
Load is switched to the auxiliary battery when the main voltage drops below	11.8 volts
To protect the auxiliary battery, auxiliary battery is disconnected from the load when the auxiliary battery's voltage drops below	10 volts
Temperature Range	Minimum ambient temperature -10°C (-40°C available upon request) Maximum ambient temperature of 70°C

*Kogee Co.,Ltd. retains the right to modify design and specifications without prior notification

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	When the case temperature gets above 45°C the charge current is automatically reduced to maintain system operation at higher temperatures.
Storage Temperature	-20°C to 70°C
Connection	Red wire: Vehicle (+) battery terminal Black wire: Vehicle (-) ground Green wire: Load (+) White wire: Load (-) The black connectors are Packard Electric Pack-Con-III connected to the Red and Green wires
Weight	6 lbs or 2.7 kg
Theory of operation PDF	User's guide for 5A terminal strip version User's guide for the 12A terminal strip version
3-D Models of the Backup-Mobile	backup-mobile-assy.IGS backup-mobile-assy.STEP

FEATURES AND BENEFITS

1. Easy to keep your equipment from losing power or rebooting.
2. Protection against power variances.
3. With the protection of a UPS unit, data record could be store safer.
4. Help to saving time to redoing work.