

USMC Logistic Supply Vehicle Power Supply (LVPS)

The US Marine Corps contracted Dewey Electronics to provide a new battery charging Auxiliary Power Unit (APU) to power the IED Defeat System that was being installed on the Logistic Supply Vehicle. The Marines were in need of a power source that would provide 3.5kW of 28VDC to charge a bank of Hawker ArmaSafe Plus batteries that were providing the power for the IED Defeat System. The competitively won contract required Dewey to design and develop a new compact diesel powered generator that would charge batteries and provide 226 systems for delivery all within 180 days from the time of the contract award.

It was soon discovered that the battery bank could draw current that would exceed the capacity of the USMC specified full load rating of the APU. Dewey's engineers discovered that the problem was the AMG battery chemistry that could draw currents as high as 900 Amps for short periods of time when they were in a state of deep discharge. The engineering team came up with a solution to current limit the voltage regulator output. This solution was tested on a prototype APU at Aberdeen and successfully implemented during the assembly process at Dewey.

The dedicated team of engineers, technicians, and factory workers rose to the challenge and shipped all 226 units on time to support the USMC rapid need for power to protect our troops in harm's way.

