

Law Enforcement:

Law enforcement can have some pretty demanding battery requirements. Vehicle starting batteries are easy, but if those batteries are also used for engine-off surveillance or communication operations, the additional demand on the battery can lead to unexpected early failures. Firefly batteries are designed for these demands and far outlast other batteries in those applications.

The Police Nuisance Abatement Vehicle is an extreme application that put enormous demands on the battery storage system. In Peoria, Illinois these vehicles are called Armadillos and help avoid placing officers in potentially dangerous and exhausting assignments. Placed in trouble areas, the unmanned Armadillo can sit for weeks at a time recording 360 degree audio/visual with the additional capability of communicating with the police station. And, it all runs on Firefly batteries. The engine is off; there is no heating or air conditioning; and the entire system is enclosed in a heavily armored vehicle. Temperature can exceed 140 deg F in the summer



and drop below zero in winter as the batteries continue to provide power to instruments. Add to this the likelihood that the batteries may never have the opportunity to be fully recharged. Where traditional lead acid degrade quickly to failure in several months, the Firefly Oasis last for years. Some Armadillos also include solar panels on the roof to provide extended run-times, but the armoring covers can never provide enough energy to keep the batteries charged. When the vehicle must be moved, often to service a new trouble spot, there is little time to recharge at the station and the vehicle is rapidly put into



service at a new location with the battery still in a PSOC. A perfect application for Firefly; built for abuse, not for light use.