

CUSTOM DUPLEXER DESIGNED FOR LAW ENFORCEMENT VEHICLE FLEET APPLICATION



Access to reliable communication equipment is essential for law enforcement agencies where a short response time is critical in what could be a life or death scenario. Sinclair Technologies understands that reliability is always a major consideration in the design process for public safety products.

A duplexer is an integral component of the communication system which allows interference-free and simultaneous operation of a paired transmitter and receiver on a single antenna. The isolation provided by the duplexer prevents RF interference that could disrupt mission critical voice communications.

Sinclair Technologies Offers a Customized Solution

A key law enforcement agency presented a requirement for a high performance duplexer to operate in a challenging mobile environment within very compact space constraints. Product samples that met all of the requirements were submitted and then subjected to intense environmental and laboratory testing by the agency's new product evaluation team. Working closely with the agency during this process, Sinclair designed and manufactured a heavy duty 700/800 MHz duplexer model PR4330 for this application.

Sinclair's PR4330 was based on state of the art optimal-Q filter design technology. The law enforcement agency's product evaluation team verified that Sinclair's duplexer delivered high performance over extreme temperature fluctuations and the team was notably impressed with the superb stability of the PR4330. Equally important was the robust mechanical design, which proved to be rock solid under the extreme conditions of vibration and the impact encountered within the on and off road test vehicle environment.

Due to Sinclair's superior product design and performance, the PR4330 was rewarded by the agency with high scores and received official agency approval.

Company Overview: Sinclair Technologies

Sinclair Technologies is the premiere provider of innovative communication solutions for remote and challenging applications. Sinclair's mobile antenna and duplexer products are used extensively in vehicle fleets communicating over a variety of mobile radio networks. Designed to function in extreme weather conditions, Sinclair's products offer high performance, reliability, durability, and value. Sinclair remains committed to staying at the forefront of innovation by tailoring solutions that meet specific customer needs.