

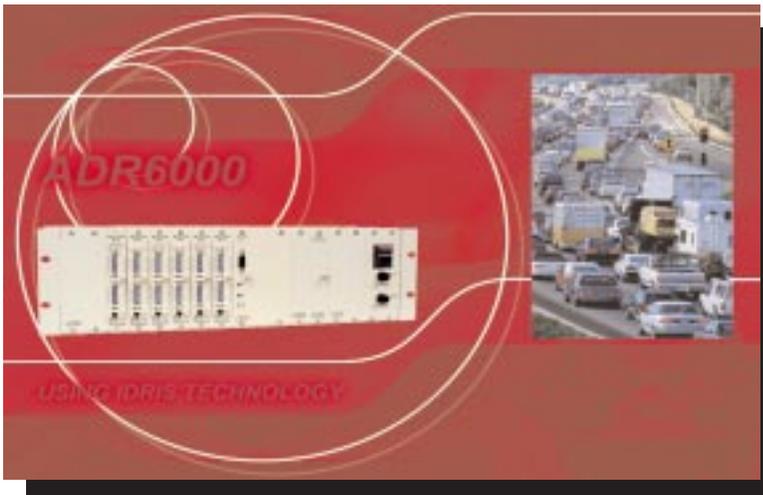
Enhanced with **ADR-6000** Technology

COUNT ON PEEK IN ALL TRAFFIC CONDITIONS

Traffic in the United States has increased 30 percent in the past ten years, and the number of cars on the road is projected to increase by 50% in the next decade. As vehicular traffic increases, it has become increasingly difficult to collect traffic data accurately in congestion using traditional sensors such as piezos, road-tube or standard inductive loops. As our freeways and urban areas become more congested data quality deteriorates. Traditional sensors do not count accurately at low speeds or with bumper-to-bumper traffic. Traditional Inductive Loop technology can join vehicles resulting in lower counts.



Piezos and road tube sensors will miss axles or miscalculate spacing at low or irregular speeds resulting in inaccurate vehicle classification. States have not been able to provide accurate data to the FHWA from major arterials and urban freeways, especially at peak times because traditional sensors are unable to cope with recurring congestion due to sensor saturation.



PEEK TRAFFIC, INC. (PTI) in Sarasota, Florida has responded to this critical problem by combining 40 years of expertise in both data collection and inductive loops with the Idris® Smart Loop algorithms developed by Diamond Consulting Services (DCS). Originally developed in the UK to meet the demanding requirements set fourth by the UK Government DBFO (Design Build Finance and Operate) contracts for open road tolling, they have been extended through joint research by Peek and DCS to incorporate axle detection capabilities. The algorithms,

which run on an industrial Pentium computer, in a specially designed rack enclosure use specially configured Peek high performance loop detectors. By combining these technologies, Peek and DCS developed the first urban data collection device to collect accurate axle classification and volume data in heavily congested areas (>95% accuracy in congestion or in free-flow), using standard inductive loop technology.

The Idris® Smart Loop algorithms utilize sophisticated signal processing techniques to extract minute changes in inductance from standard loops. This provides intelligent profiling and wide area tracking for a variety of applications including Automatic Vehicle Classification (AVC) in the tolling industry. The ADR-6000 will allow Transportation Engineers to better understand traffic characteristics in urban environments during peak hours or where accurate data historically has been unobtainable.