About ENCORE

The advances in digital video and broadband communications technologies continue to open doors to new applications for Intelligent Transportation Systems (ITS) - enhancing traffic networks and inspiring new ITS capabilities. Whether for surveillance, vehicle detection, data collection, or traffic monitoring systems, digital video and broadband communications are increasing ITS performance, cost efficiencies and access to strategic traffic information - helping transportation professionals improve safety, reduce vehicle emissions, and mitigate traffic congestion.

Autoscope ENCORE, is a high-quality, non-intrusive, multitasking video vehicle detection solution. Part of a frontline solution for an ITS program, Autoscope ENCORE can provide the information necessary to enhance the mobility capabilities of today’s most demanding ITS deployments, as well as the evolving transportation needs of the future.
Description
ENCORE features EasyLink connectivity, providing simple installation to the traffic cabinet and integration to an agency’s IP-based communications network. A standard CAT-5 cable connects ENCORE sensors into a network providing easy user access to video, traffic data, and legendary Autoscope vehicle detection.

ENCORE technology uses IP-based addressing with a unique Ethernet MAC address. ENCORE sensors employ a dual-core processor with sophisticated image analysis and Advanced RISC Machine (ARM) general-purpose processing in a small SoC package for exceptional performance and low power consumption. Multi-threaded software processes video images in real-time to detect vehicles, extract traffic data, identify incidents, and transmit detector outputs, while simultaneously streaming quality MPEG-4 video.

Safe and secure, password-protected ENCORE sensors are accessible via common Internet browsers. The embedded web server represents a convenient way for authorized users to view streaming video, modify configurations, and monitor system performance remotely. Configuration Wizards are present for programming both intersection and highway applications through the Network Browser or the web interface.

Each ENCORE sensor is accessed and powered by “3-wires-only”; broadband-over-power cable, no coaxial cable required. An environmentally protected connector simplifies the task of completing secure field terminations. Zoom control and detector configuration may be conducted remotely or at the cabinet. The unique aperture helps keep the faceplate clean for longer periods of time between routine maintenance.

Setup & Operation
ENCORE makes it easier than ever to set up and customize. The Autoscope Configuration Wizard® quickly sets up intersection or highway incident detection applications. Simple mouse and keyboard operations allow custom positioning for virtual detectors per field-of-view. Detection zones provide traffic count, presence, speed, and incident alarms. Incident types include freeway congestion, stopped vehicles, wrong direction vehicles, slow-moving vehicles, bicycles, pedestrians, smoke/fire, debris, or other customized alarms. Real-time polling or stored data include: volume; occupancy; five vehicle classes by length, density, and other traffic data for selected periods or by phase.

Detector outputs can be assigned to interface with NEMA TS1/TS2, Type 170/179 and 2070 ATC controller via the optional TAP. Traffic data is quickly integrated into proprietary software applications with the optional Autoscope Software Developer’s Kit (SDK). Extensive Boolean Logic capabilities provide flexibility in detector layouts to help validate an event or incident alarm.

Applications
- Traffic incident management for highways, tunnels, and bridges
- Junction control
- Traffic data collection
- Work-zone safety and traffic control
- Traveler information systems
- Bicycle detection and differentiation
- Remote video surveillance
- Sub-system of ATMS system

Encore Sensor Specifications

- **Temperature**
  - -29°F to +140°F (-34°C to +60°C)
  - Up to 100% relative humidity per MIL-E-5400T paragraph 4.3.24.4

- **Power**
  - 15W
  - 110/220 VAC 50/60 Hz

- **Dimensions**
  - Overall H x W x L (with sunshield and bracket): 9.5 in x 4.75 in. x 10.75 in. (24 cm x 11 cm x 27 cm)
  - 3.7 lb (1.6 kg)
  - Mounting: Standard camera bracket tilt-top provided