

# Sensors for Traffic Detection

## Autoscope® *RackVision™ Terra*

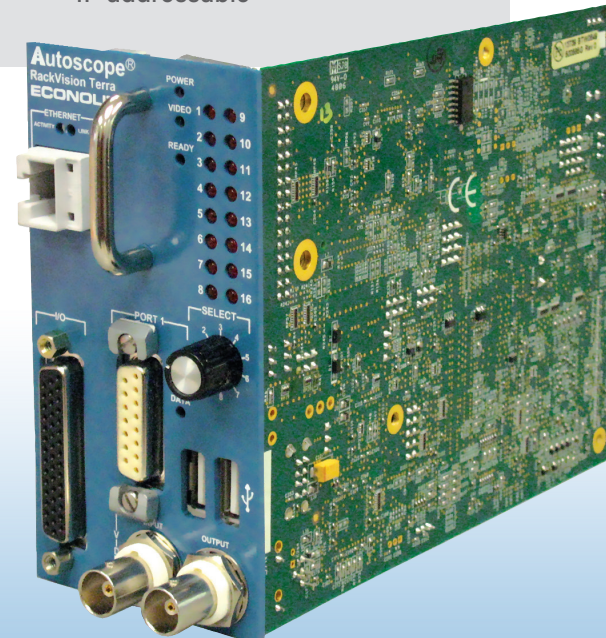
The Autoscope RackVision™ Terra Machine Vision Processors (MVP) is a video detection solution that features simple setup, robust color or black and white image processing, and provides MPEG-4 video compression to a laptop at the cabinet or traffic management center (TMC). RackVision Terra also delivers timely, high-quality traffic information required for today's sophisticated traffic management and ITS programs.

Autoscope RackVision Terra connects to existing color or black and white Autoscope or (other compatible camera) sensors to provide transportation agencies with expanded traffic information and multimedia capabilities, including vehicle detection, comprehensive traffic data, and bicycle detection and differentiation. The simple mouse and keyboard operation enable custom positioning and detection zone setup.

Autoscope Terra technology combines state-of-the-art advances in digital image signal processing, and System-on-Chip (SoC) processors to add versatility and boost performance, helping enable today's information-driven Intelligent Transportation Systems (ITS). By increasing the capabilities of existing video detection systems, including already-installed cameras, agencies improve safety, reduce vehicle emissions, and mitigate traffic congestion.

### Key Features

- RackVision Terra Traffic Video Detection
- Vehicle detection, traffic data collection and incident detection
- Up to sixteen (16) modular video input channels (PAL, CCIR, NTSC or RS170)
- Dual-core processor for advanced image processing
- MPEG-4 digital streaming video output or analog output
- EasyLink broadband communications
- IP addressable





## Set-Up & Operation

The RackVision Terra detector card is easy to set up and adapts to a user's detection objectives. The Autoscope Configuration Wizard® quickly sets up intersection or highway incident detection applications. Simple mouse and keyboard operations allow custom positioning for up to 99 virtual detectors per field-of-view. Detection zones provide traffic count, presence, speed, and incident detection alarms. Incident types include freeway congestion, stopped vehicles, wrong direction vehicles, slow-moving vehicles, debris, pedestrians, 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.

The RackVision Terra detector card interfaces detector outputs directly to NEMA TS1/TS2, Type 170/179, or 2070 ATC controllers. The optional Terra Access Point (TAP) can also assign detector outputs. For central systems, the optional Software Developer's Kit (SDK) can quickly integrate traffic data into a proprietary database. In TS1 or 33x cabinets, the RackVision Terra can interface to select TS2 traffic controllers with a Port 1 SDLC communications cable.

With the RackVision Terra you can also use SmartMouse™. SmartMouse allows the traffic engineer or signal technician to connect a mouse and monitor to the video output of the RackVision, without having to use a laptop. By using SmartMouse, you can configure stop-bar and advance extension video detection zones in moments, without extensive training. Also available is a C1Y Cable for easy cabinet integration without the need for re-wiring or modifications to the traffic cabinet detector rack.

## Benefits

- Cost-effective solution for traffic management
- Field-proven accuracy and reliability
- Easy to install and configure
- Superior to other detector system in value and performance
- Use in all cabinet types with TS2 SDLC communications

## Applications

- Traffic incident management for highways, tunnels, and bridges
- Junction control
- Traffic data collection
- Work-zone safety and traffic control
- Traveler information systems
- Journey time (travel time)
- Remote video surveillance
- Central office processing

## Specifications

### Temperature

- -29°F to +165°F (-34°C to +74°C)
- 0 to 95% relative humidity

### Power

- 12 or 24 VDC 11 Watts maximum
- Consumption, current - @12VDC: 6W, 500mA/@24VDC: 7W, 290mA

### Dimensions

- 4.5 in. (H) x 2.25 in. (W) x 7 in. (D)  
(11.4cm x 5.7 cm x 17.8 cm) plus handle
- 0.5 lb (0.2 kg)

