### Description

The *Autoscope RackVision*™ *Pro 2 MVP* is a dual-channel Machine Vision Processor designed to meet intersection detection objectives of vehicle detection and signal actuation in a typical traffic cabinet. This cost-effective detection solution utilizes the same algorithms that have established *Autoscope* video detection as the global leader for wide-area video vehicle detection.

The *RVP2* MVP fits into a detector rack or shelf-mount unit. Quality sources of video signal include the *Autoscope Image Sensor (AIS)* or existing CCTV cameras that meet minimum performance standards. Multi-threaded software processes video images in real-time to detect traffic. Addressing the needs of video intersection detection and signal actuation, *RVP2* is a cost-effective traffic machine vision processor solution. Leveraging the same algorithms as other *Autoscope* products, *RVP2* processes video images into real-time to detect traffic and provide local traffic actuation. *RVP2* supports *AIS-V*, as well as existing CCTV cameras to address varying traffic detection objectives and scenarios.

### Set-Up & Operation

The *RVP2* detector card is easy to install/configure and adaptable to meet an agency’s detection requirements. *Autoscope Mouse & Monitor* functionality quickly sets up intersection detection applications without the use of a laptop.

Simple Mouse & Monitor setup enables stop lines and advance extension detection zones to be drawn as needed. Users can also easily assign detector outputs to interface with NEMA TS1/TS2, Type 170/179 and 2070 ATC controllers.

With mouse and keyboard operations, users can backup work, troubleshoot with the operations log, and modify the detection layout with the configuration Wizard™ or other tools in the *Autoscope* Toolbox. The optional *Terra Access Point (TAP)* or *RackVision Terra MVP* can also assign additional detector outputs.

### Features

- Provides basic video vehicle detection for intersection stop line and advance extension applications
- Processes input from two (2) video cameras per *RVP2* unit
- Setup with simple Mouse & Monitor interface or configuration Wizards
- Installs in a standard detector rack or self-contained shelf-mount unit
- LED indicates status for communications and valid video sync
- IP-addressable into *Autoscope* network
- Outputs via either card-edge connector or front-panel DB15 connector
- Password protection
- Electrical and optical failsafe detector outputs
- High-energy transient protection
- Self-test on power-up
- Software installation by USB flash drive
Benefits
• No laptop required
• Reliable performance
• Interchangeability with existing solutions
• Compatibility with standard loop detector racks
• Low power consumption
• Minimal maintenance
• Cost-effective solution for traffic detection
• Easy to install and configure
• Field-proven Autoscope accuracy and reliability
• Built on proven Autoscope Terra™ Technology
• Connects to existing Autoscope AIS or other CCTV cameras
• Compatible with color or monochrome cameras
• Native language graphical user interface support

Applications
• Fully-actuated intersection detection
• Semi-actuated intersection detection
• Temporary construction and work zone safety

Power
• 12 or 24-VDC 11 Watts maximum

Video
• 2 Input Channels
  - Color: NTSC or PAL
  - Monochrome: RS-170 or CCIR
  - Composite 75Ω 1 Vpp, BNC connector
• 2 Output Channels
  - Same as input NTSC or PAL
  - Composite 75Ω 1 Vpp, BNC connector

Detector I/O Indicators
• Outputs (open collector, selectable)
  - 4 Rear edge connectors (jumper selectable)
  - 8 Front on DB-15 connector
• Inputs
  - 4 Front on DB-15 connector
• Status output indicates card is processing and detector I/O is valid (open collector, active low)
• LEDs show current state of 8 outputs
• Inputs and Outputs (optional):
  - RVP2 Detector Port Data (Inputs and Outputs) can connect to optional DPM module through rear edge connector, providing additional I/O capabilities.

Communications
• 2 Mini-B USB connectors for mouse or supervisor PC
• RS-485 half-duplex serial for DPM on edge connector (for speed quality outputs)

Environmental Ambient Temperature Limits
• -29°F to +165°F/-34°C to +74°C

Humidity Limits
• 0 to 95% relative humidity (non-condensing)

Dimensions and Weight
• 4.5 in. (H) x 2.3 in. (W) x 7 in. (D) (11.4cm x 5.7 cm x 17.8 cm) plus handle
• 0.5 lb (0.2 kg)

Regulatory
• NEMA TS2 2003 Standard
• FCC Part 15, Subpart B, Class A

Warranty
• Three-year standard warranty
• Extended warranty available (up to six years)

Product Support
• Product support & training by a team of trained Autoscope Technical Support Specialists