Autoscope 2020TM Machine Vision Processor

Field proven cost-effective vehicle detection and surveillance alternative to inductive loop detectors for intersection and freeway applications using external video detection cameras.



Autoscope

Features

- Provides vehicle detection, traffic data measurement, speed, and incident detection.
- Processes inputs from four (4) video cameras simultaneously.
- Stores traffic data in non-volatile memory.
- Low power consumption.
- Self-contained shelf or rack mounted unit.
- IP addressable into Autoscope Solo[®] network using sophisticated networking at high data rates.
- LED indicates status for communications, valid video, data processing and power.
- Optional detector outputs via either Mini-Hub II or Mini-Hub TS2 Detector Port Master Module.
- Software based JPEG video compression with optional wavelet technology hardware compression.

Description

Autoscope[®] 2020 delivers the same high-quality standard of vehicle detection and data collection available in Autoscope Solo Pro[™] using external image sensors. Autoscope 2020[™] may be used with the Autoscope Image Sensor (AIS) or with existing CCTV cameras that meet minimum performance standards.

Autoscope 2020 is designed to operate either shelf or rack mounted in a traffic cabinet or at a central office location. It can easily be integrated into existing Autoscope Solo communications networks.

Autoscope 2020 provides an economical alternative to loops and other detection technologies. Remote connections as simple as twisted pairs, phone line, or wireless radio can bring back video and data to a Traffic Management Center.

Benefits

- Easy to install and configure.
- Field-proven Autoscope Solo Pro accuracy.
- Cost-effective solution for vehicle detection.
- Connects to Autoscope AIS or CCTV cameras (B&W or color).
- Provides the features, functions, and performance of Autoscope Solo Pro.
- Supported by easy-to-use Autoscope Software Suite.
- Native language graphical user interface support.
- Easily replaces an Autoscope 2004 or other video detection system using external cameras.
- Processes video images from Hi-8 quality (or better) video tape.
- Features the Autoscope WizardTM.







Applications

- Intersection control detection.
- Freeway management detection.
- Incident detection and verification.
- Traffic survey data collection.
- Temporary construction and work zone safety.
- Remote video surveillance with video compression.



Specifications

Power

- 115 / 230 VAC 50/60 Hz auto-sensing.
- 30W without optional compression card.
- 36W with compression card.

Video Input

- Composite 75Ω 1 Vpp, BNC connector.
- Color: NTSC or PAL.
- Monochrome: RS-170 or CCIR.

Output

- 1 Vpp, BNC connector.
- NTSC or PAL.
- Switch selectable to output video from one of four video image processors.
- Optional hardware video compression.

Communications

- DB9 RS-232 for local PC communication.
- One RJ-45 connector for RS-485 fullduplex Autoscope Solo network connection.

Detector Outputs

(Optional)

• Choice of either Autoscope Mini-Hub II (Discrete I/O) or Mini-Hub TS2 (Serial I/O) Detector Port Master modules.

Environmental

- -29° F to $+ 165^{\circ}$ F (- 34° C to $+74^{\circ}$ C).
- 0 to 95% relative humidity non-condensing.

Dimensions and Weight

- 5 in. x 11.25 in. x 10.5 in.
- 3 lb, 14 oz (1.75 kg).

Options

- Detector Port Master Module.
- Hardware-based video compression.
- Rack mount kit.

Warranty

- Two-year factory warranty.
- Extended warranty available (5-year warranty package).

Regulatory

- NEMA Compliant.
- CE EN55011.
- CE EN 61000-6-2
- CE EN 60950
- FCC Part 15, Class A

Product Support

Product support and training available by a team of trained Autoscope Technical Specialists throughout the Americas and Caribbean.

Setup & Operation

Simple mouse and keyboard operations add, delete, or position up to 99 virtual detection zones per field-of-view. Customize detection to meet your application specific requirements. Detection zones provide traffic count, presence, speed and incident detection information. Real-time polling or stored data include: volume, lane occupancy, speed, five vehicle classes by length, and other selected traffic data over user-selected time periods.

Status of incident and other alarms are readily available. Easily assign detector outputs to interface with NEMA TS1/TS2, Type 170/179 and 2070 ATC controllers via the optional Mini-Hub II or Mini-Hub TS2. Quickly integrate Autoscope 2020 traffic data into your own proprietary software applications using the optional Autoscope Software Developer's Kit (SDK). Extensive Boolean Logic capabilities provide flexibility in detector layouts and can help validate an event or incident alarm.

© 2003 Econolite Control Products, Inc. All rights reserved. Autoscope and Autoscope Solo are registered trademarks of Image Sensing Systems, Inc. All other trademarks are the property of their respective owners. Econolite Control Products, Inc. reserves the right to change or update these specifications at any time without prior notification.



3360 E. La Palma, Anaheim, CA 92806-2856 Tel: (714) 630-3700 • Fax: (714) 630-6349 E-mail: sales@econolite.com

#81-10294M-02

