Sensors for Traffic Detection

Autoscope® Comm Manager

What, exactly, is a Comm Manager?
The Autoscope Vision Comm Manager is a powerful device facilitating remote and local communication to deployed Autoscope Vision sensors. The Vision Comm Manager supports 3-wire-only branch cable connections to the sensors, interfaces to the optional Vision I/O 24™ module, as well as full 10/100/1000 Ethernet communication to a local laptop or workstation at the Traffic Management Center (TMC).

Why do agencies use the Comm Manager?
The Vision Comm Manager is quick and easy to install. A single IP address is all that is required to connect the Vision Comm Manager to personnel at the TMC, enabling collection of traffic data and viewing HD video streams, individually or in a quad display. Detection zones may also be created or modified remotely with this simple network architecture.

How does the Comm Manager benefit the driving public?
Power and communications to Autoscope Vision is managed via the Vision Comm Manager. Vision sensors provide high-performance, high definition vehicle detection and bicycle differentiation, using state-of-the-art algorithms to improve safety, reduce vehicle emissions, and mitigate traffic congestion.
Description

Power and communication to Vision sensors is conducted via the Vision Comm Manager. The Vision Comm Manager supports SDLC and wired I/O interface for convenient integration to TS1, 170/2070/33x and TS2 cabinets. The robust and proven broadband-over-power cable technology has a remarkable throughput of 70-90 Mb/sec. This is more than sufficient bandwidth to simultaneously transmit traffic data and multiple streams of HD video.

Applications

Autoscope Vision is capable of concurrently satisfying multiple transportation management objectives:

- Stop bar vehicle detection
- Bicycle detection and differentiation
- Advance vehicle detection up to 600 feet from Vision sensor
- Traffic data collection
- HD video surveillance

Specifications

- Connectors
  - Input power: one (1), 3-position compression block
  - Output power to Vision sensors: four (4), 3-position compression blocks
  - Two (2) USB
  - Four (4), 10/100/1000Ethernet: WAN, Maintenance, Expansion, Reserved

- Communications
  - Wi-Fi 802.11(b/g/n)
  - WAN Ethernet Port 10/100/1000
  - Maintenance Ethernet Port 10/100/1000
  - Broadband-Over-Power 70-90 Mbps

- Environmental
  - -29º F to +165º F (-34º C to +74º C)
  - 0 to 95% relative humidity, non-condensing

- Dimensions and Weight
  - 11” x 7” x 2.5” (28 cm x 18 cm x 6 cm)
  - 2.3lbs (1.04 kg)

- Video Output
  - Digital streaming H.264 720p, 30fps
  - Variable bitrate selectable 100-5000Kbps

- Warranty
  - Three-year factory warranty
  - Extended warranty packages available to six years

- Power
  - 89-265 VAC, 50/60 Hz from the transient-protected side of cabinet
  - Minimum 15W typical without sensors
  - 75 Watts typical with four (4) Vision sensors
  - 140 Watts Maximum
  - 2 spare fuses
  - High-energy transient surge protection

- Indicators
  - Wi-Fi LEDs – active or inactive
  - SDLC LEDs – indicate valid data
  - Ethernet Port LEDs – indicate speed of network connection
  - Power Sensor LED – indicate power to sensor
  - Comm Manager LED - indicator for readiness and status
  - System Status LED - indicating individual sensor status
  - Sensor LINK/ACT LED - indicates communication between the Comm Manager and at least 1 Vision sensor

- Regulatory
  - NEMA TS2 2003 Compliant
  - CE EN 55022
  - CE EN 55024
  - EN 61000-6-1
  - ICES
  - FCC Part 15, Class A