Miovision Detection and Detection Plus

Move traffic through your network quickly and safely

Easy to install and maintain

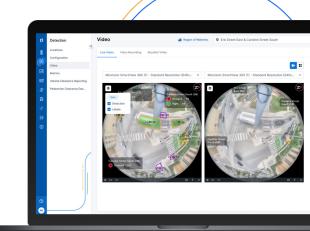
- Remote and roadside access allows you to configure devices to fit your workflow
- Unlimited, VPN protected cellular communications between the Core device and Miovision
 One for easy remote configuration/monitoring/management of your intersection

Reliable in all conditions

- Rugged industrial-grade components ensure maximum product life
- Operation safeguarding in extreme conditions with tools like fog and glare detection

Accurate and multimodal detection

- 98% data accuracy all times of the day in all conditions, rain or shine
- Multimodal detection including pedestrians and cyclists



Detection vs Detection Plus Comparison

Miovision One Features		Detection	Detection Plus
Network Overview	Map view of all intersections, with quick access to key data and information	✓	✓
Administrative Controls	Organization and user management, incl. profile based permission sets and multi-agency sharing	✓	1
Device & Application Management	Remote controller front panel access, time sync capability, and 3rd party device management.	✓	1
Intersection Monitoring	Real time intersection telemetry and intersection alerts, access to live and recalled video	✓	✓
ATSPM Workspace	Signal Performance Metrics, including Approach Volumes, Approach Delay, Arrivals on Green/Red, Occupancy Ratio, Pedestrian Delay, Phase Interval, Purdue Coordination Diagram, Split Failures and Split Trends (depending on the detection inputs available at the intersection.)	✓	*
Detection Features			
Detection Zones	Unlimited presence and pulse detection zones	✓	✓
Multimodal Detection	Detect, actuate, and extend signal phases for all road users including vehicles as well as pedestrians and cyclists	✓	✓
Data Accuracy	Exceeding Florida's Traffic Engineering Research Lab (TERL) standards with 98% data accuracy all times of the day, in all conditions, rain or shine	✓	✓
Live Video	Stream live video with virtual pan-tilt-zoom with telemetry data and detection overlay	✓	✓
Conditional Fail Safe Features	Operation safeguarding in extreme conditions with tools like fog and glare detection, which would trigger low visibility mode	✓	✓
Usability Features			
Cameras	Connect up to six cameras	✓	✓
Advance Detection	Detect vehicles as they approach from 500 ft away (requires SmartView Approach)	✓	✓
Remote configuration and validation	Configure and validate detection performance without a truck roll	✓	✓
Local configuration and data access	Connect directly via Ethernet or existing fiber to perform local configurations, access available data, and manage MQTT APIs and RTSP interfaces	✓	✓
Counts Features			
Multimodal Counts	Computer Vision based counts, including pedestrians and cyclists, by movement and direction		✓
Count Availability	Accessable in Miovision One via Mobility Reports for the life of the device, locally on the device for rolling 365 days or via API		4
Charts and Dashboards	15 minute binned data with Single Day or Volume Trend Dashboards		✓
Safety Reports	Red Light Running and Pedestrian/Vehicle Compliance Reports*		✓

^{*}Included in the ATSPM Workspace



Hardware

The Miovision Detection solution is built on the industry's most versatile and scalable traffic operations hardware platform.



Core DCM

Miovision Core® DCM

Full–stack ITS solution for managing and analyzing your intersections

Open and secure platform provides wireless connectivity and communications to access your cabinets from anywhere. The improved modular design optimizes performance and reliability in all environments and can be upgraded to expand functionality and evolve with the development of your traffic network.

Miovision Core device comes with access to Miovision One platform and unlimited, VPN protected cellular communications between the Core device and Miovision One.

The high-performance NVIDIA Volta™ GPU enables you to process detection and count data at the source with industry-leading precision and accuracy giving you the power to make real-time decisions with accurate and complete data.

Required Hardware. See the Miovision Core DCM Datasheet for full specifications.

Industry Certified

NEMA TS-2 Compliant
UL and cUL certified power source

Controller/Cabinet Ready

16 Discrete Detection I/Os - For TS1 or non standard cabinets

64 SDLC (BIU) Detection Channels – Support for TS2 and 2070 controllers/ cabinets

128 SDLC (SIU) Detection Channels – Support for ATC controllers/cabinets

Secure

TPM with secure RSA key generation and management

Camera Support

Support for two SmartView 360 cameras with future extensibility

Color Display

2.4" TFT color display



SmartView 360

Miovision SmartView™ 360

Get a 360° birds eye view of your intersection

Designed for robust operation in all weather conditions delivers high-resolution video streams required by a range of traffic operations solutions.

Required Hardware. See the Miovision SmartView 360 Datasheet for full specifications.

ensor

4K, 9 megapixel, 360° fisheye lens

Angular Field of View

Horizontal: 182°, Vertical: 176°



SmartView Approach

Miovision SmartView[™] Approach

Detect vehicles as they approach your intersection

Move traffic efficiently through your network by using anticipated demand to build responsive control schemes and measuring free-flow traffic to understand how effectively you are servicing demand.

Optional Hardware. See the Miovision SmartView Approach Datasheet for full specifications.

Sensor

Approx. 1/2.8 type CMOS image sensor. 1280x960

Maximum Detection Range

Angular Field of View Horizontal: 15° (Zoom).

Horizontal: 15° (Zoom) Vertical: 9° (Zoom)

For more information, visit <u>miovision.com/trafficlink/video-detection/</u>, email us at <u>hello@miovision.com</u>, or call us NA Toll-free at <u>1-855-360-7752</u>

