



*Paving Intelligence into
Safety, Security & Mobility*

MediaTD™

Video-Based Non-Intrusive
Real Time Traffic Data Collection Solution

Citilog's MediaTD is a video detection unit (VDU) for traffic data collection. It allows traffic operations management to more effectively plan, develop and address traffic concerns for roadways, highways, tunnels and bridges. It requires no roadwork during installation or maintenance, making it more cost-effective and with simpler integration than traditional embedded inductive loop detectors. Real-time traffic data provided includes volume (classification), speed, occupancy and headway.

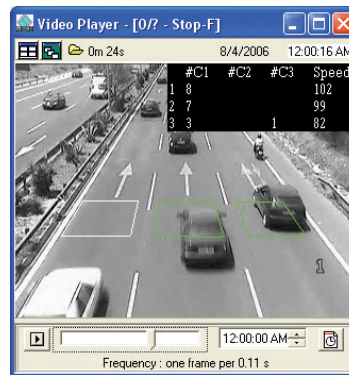
With MediaTD, Traffic Operations Centers can realize many significant advantages delivered by this video-based traffic data collection solution, and it integrates seamlessly with other Citilog traffic incident detection solutions. Video detection is often less costly to install and maintain than inductive loop detectors which require roadwork. MediaTD's video detection is flexible and adaptable to changing conditions on roadways that include lane reassignment, temporary lane closure or work zone activities. MediaTD is also an excellent solution where loop installation is physically impractical (or have short life spans) due to changing pavement conditions or maintenance or installations on bridges.

MediaTD's innovative algorithms are based on 15 years of strong research and development and field testing. It uses Citilog's tracking algorithm and enhanced filtering techniques which enable higher detection accuracy. One video input can cover up to four lanes of traffic and the number of detection zones per camera is unlimited. This software-based system uses existing video signals from any Closed Circuit Television (CCTV), analog or IP camera, thus requiring no new camera hardware or infrastructure additions.

MediaTD is flexible and adaptable to changing environmental conditions (night or day, sun or rain) to maximize traffic data collection capabilities. This includes intelligent shadow filtering techniques for improved performance, without which reading errors could occur.

With MediaTD, the volume of all vehicles on the roadway can be accounted for to provide comprehensive traffic data collection. Other measurable variables include speed (per lane average speed), occupancy (amount of time a detection zone is occupied by a vehicle), and headway (time between the front of two consecutive vehicles), all with one camera on four lanes.

System setup is performed with a few mouse clicks thanks to the friendly graphical user interface (GUI), allowing for quick and easy setup and modification



KEY CAPABILITIES

- Obtain meaningful traffic data for more effective traffic statistics (travel time computation, planning and development) to better address traffic concerns on roadways, highways, tunnels and bridges.
- Seamless integration into existing infrastructure of Closed Circuit Television (CCTV), cameras: analog, digital / IP, etc.
- Continuous traffic data collection no matter the environmental condition (rain or sun, day or night, roadwork or not) and without installation limitations of traditional embedded loop detectors.

KEY BENEFITS

- Reduce the negative economic, social and environmental impact from traffic disruptions and congestion.
- Improve roadway, highway, tunnel or bridge infrastructure efficiency and availability.
- MediaTD's video-based traffic data collection provides a more cost-effective solution requiring no roadwork for installation or maintenance and with better traffic data results.
- Advanced traffic data collection enables more effective plans for safety, security and mobility.



of areas to be monitored including, coverage of non-rectangular zones (curves in roads). MediaTD can be configured to perform loop emulation. It outputs through open collectors and can behave just like standard inductive loops, thus ensuring reliable and robust data for various applications, including travel time and ramp metering.

In addition, MediaTD offers comprehensive video storage capabilities. Permanent recording allows periodic manual verifications of data collected. This is ideal - among other applications - for shadow tolling solutions where data accuracy and data integrity are important.

MediaTD is a cost-effective solution to rapidly migrate from traditional traffic data collection means to an advanced video-based traffic data collection technology to better study, plan and develop solutions for traffic concerns. Above ground detection technology has today become a standard solution to replace in ground inductive loops for traffic data collection. MediaTD significantly lowers the cost of inductive loops installation and maintenance. It also helps maintain a high level of availability of roads or bridges thus, enhancing the return on investment (ROI) both in operations and in risk escalation reduction.

To further improve infrastructure ROI, MediaTD can be combined with other Citilog products to design full infrastructure surveillance solutions that improve mobility, security and safety across roadways, bridges and tunnels.

DETECTION HIGHLIGHTS

- Classified traffic counts based on vehicle length.
- Speed collected per traffic lane.
- Time-based occupancy.
- Headway data for effective congestion measurement.
- Advanced video recording and performance analysis tools to verify data integrity.
- Shadow-removal algorithm ensures accurate data collection is not hindered by shadows.
- User-definable detection zones enable data collection flexibility and adaptability.

Technical Specifications

Equipment

- For cost efficiency and upgradability, Citilog exclusively uses standard "off-the-shelf" hardware for its equipment: analyzers and servers.
- Up to 4 video inputs per analyzer (depending on options and video mode).
- Usable with any camera and most video sources: analog (PAL, NTSC), digitally encoded (IP cameras, IP encoders), IR, color/BW.
- Video recording and performance analysis tools.

Architecture

- Easy integration with any CCTV architecture.
- Equipment can be deployed centrally (TMC) and/or locally (roadside cabinet).
- All Citilog products are compatible and can be easily integrated in the same GUI.
- The system is capable of emulating embedded loops for seamless integration into existing systems.

Latest Hardware specifications available upon request.

Communications

- Standard Software Developer's Kit
- TCP/IP Client-Server
- ActiveX
- Open collectors
- Serial
- Wireless
- Loop emulation



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