



ORBIS LiDAR



ORBIS LiDAR is a next-generation traffic monitoring sensor designed to deliver highly accurate, real-time insight into traffic flow without intrusive infrastructure. Using advanced LiDAR technology and onboard processing, the system provides precise spatial detection of vehicles across multiple lanes, enabling road authorities and mobility operators to make reliable, data-driven decisions for traffic management, infrastructure planning, and smart city applications.



Example applications

Traffic studies and infrastructure planning

Accurate vehicle counts, speeds, and classifications for data-driven planning

Smart city traffic monitoring

Continuous monitoring to optimize traffic flow and reduce congestion

Temporary and portable measurements

Rapid deployment for construction zones, pilots, and feasibility studies

Permanent roadside monitoring

Reliable long-term data collection without invasive infrastructure

Implementation

Compact, energy-efficient, and easy to deploy, ORBIS LiDAR enables rapid installation in both permanent and temporary locations without trenching, cabling, or external power requirements. Battery and solar power options allow fully autonomous operation, while mounting on existing roadside infrastructure ensures flexible deployment.

Advantages

ORBIS LiDAR delivers highly accurate, real-time traffic intelligence with lane-level vehicle counting, speed measurement, classification, and tracking across multiple lanes. Its precise spatial resolution ensures reliable performance even in dense or high-speed traffic, providing dependable data for traffic management, infrastructure planning, and smart mobility applications.



Proven accuracy of over 95% in multi-lane environments ensures dependable data quality for both operational traffic management and long-term planning decisions.

LANE-LEVEL TRAFFIC INTELLIGENCE

Accurately counts, classifies, and tracks vehicles per lane and direction with over 95% accuracy

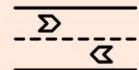


AUTONOMOUS, CABLE-FREE OPERATION

Battery and solar power enable fully independent deployment without trenching or grid connection

TRUE MULTI-LANE SPATIAL DETECTION

High-resolution LiDAR precisely detects individual vehicles across multiple lanes, even in dense traffic



RAPID, NON-INTRUSIVE DEPLOYMENT

Compact design allows fast installation on existing roadside infrastructure for temporary or permanent monitoring



Benefits

Complete traffic data

- Accurate, lane-level vehicle counts, speeds, and classifications in real time
- Reliable insights for traffic studies, planning, and operational decisions

Visibility into traffic flow

- Precise detection across multiple lanes simultaneously
- Clear understanding of traffic patterns

Integration with existing systems

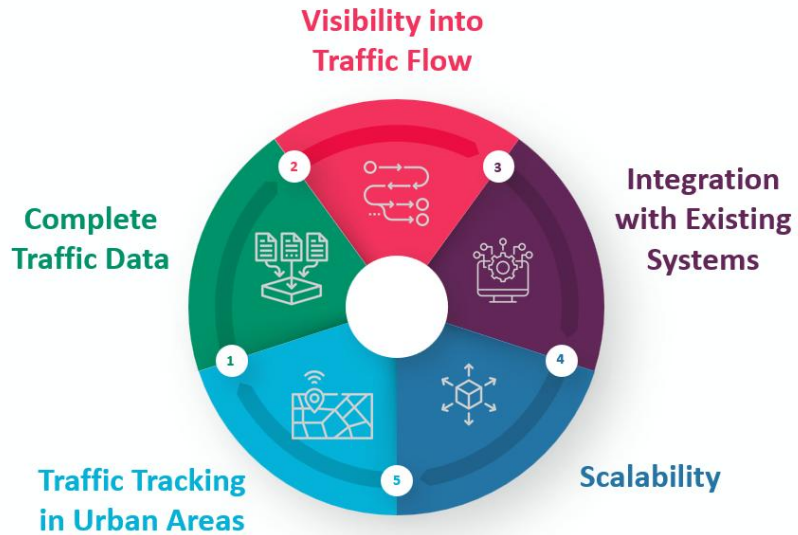
- Seamless connection to traffic management and ITS platforms
- Standardized, secure data output for analysis and visualization

Scalability

- Suitable for both temporary measurements and permanent networks
- Flexible deployment across urban roads

Traffic tracking in urban areas

- Supports congestion mitigation and smarter mobility strategies
- Data-driven improvements to road safety and network efficiency



Choose ORBIS LiDAR for accurate traffic data and improved road network control solutions. Contact us today.

About ARS T&TT

ARS Traffic & Transport Technology (ARS T&TT), headquartered in the Netherlands has been providing intelligent traffic and transport technology solutions to businesses and government bodies for over twenty years. We are an active player in our home market of the Netherlands, with a particular emphasis on meeting the growing international demand for innovative transportation solutions. Our mission as an independent 'Intelligent Transport System' (ITS) solutions provider is to rapidly expand our leading position in the fast-growing smart traffic and transportation markets. We believe continuous improvement and innovation enable us to achieve this mission.

For more information, contact us: info@ars.nl



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