

Manufacturer: Blue-Band
Product Model: Blue-Band

The Blue-Band operates seamlessly on DFS TrafficXRoads and Enterprise systems, delivering a revolutionary leap in traffic management technology.

“Our technology isn’t just another tool in the toolbox; it’s a game-changer that the industry simply can’t afford to overlook. With its unparalleled versatility and seamless integration capabilities, our edge compute platform revolutionizes traffic management, making it indispensable for optimizing transportation systems and safeguarding vulnerable road users.”

Our Differentiator – A Fully Integrated Ecosystem

At the core of Blue-Band’s power is the Integrator-AI™, functioning as the city’s central command center. It enables full communication between diverse devices at every site, synthesizing data to drive informed decision-making and real-time interventions.

This integration enhances traffic flow, improves pedestrian safety, and delivers actionable insights for future planning, unlocking efficiency, foresight, and safer streets through a single coordinated system.

Integrator-AI™ – Scalable, Secure & Future-Proof

Transportation Fusion is the foundation of Integrator-AI™. This process integrates multiple transportation devices and services simultaneously on a single platform, enabling sophisticated data analysis, coordinated actions, and real-time responses between devices.

This comprehensive solution streamlines the transition from concept to deployment, providing cities with the tools to manage mobility in smarter, more adaptive ways.

SPM+ – Enhanced Signal Performance Measures

SPM+ transforms conventional Signal Performance Measures into a more intelligent, connected, and responsive system:

By fusing connected vehicle data and modern technologies into existing infrastructure, SPM+ delivers life-saving edge computing capabilities as if a dedicated operations team were stationed at every intersection.

SPM+ Core Components:

- 1. Pedestrian and Cyclist Data Integration:** Incorporates VRU data directly into signal operations.
- 2. Safety Conflicts Analysis:** Detects and evaluates near-misses and unsafe scenarios.
- 3. Real-Time Dynamic Interventions:** Initiates automated responses to emerging hazards.

4. Customizable Use-Case Remedies: Allows cities to tailor responses for specific scenarios.

5. Signal Performance Measures Analytics: Provides deep insights into traffic flow and safety metrics.

V2X / Connected Vehicles – Bridging Legacy & Modern Systems

Integrator-AI™ merges sensor data with infrastructure intelligence to create adaptive traffic management. Using real-time analytics, deep learning, and AI, it:

- Optimizes traffic patterns
- Improves road safety
- Reduces congestion

The system dynamically adjusts to changing conditions, providing a flexible and future-ready platform for connected vehicle integration.

Adaptive Pedestrian Detection – Protecting Vulnerable Road Users

This feature uses real-time detection zones to safeguard pedestrians and cyclists. Through advanced edge computing, it connects with a wide range of traffic controllers and notification systems, ensuring sensor compatibility across different technologies.

Key Safety Features:

- **Dynamic Pedestrian Crosswalk Timing:** Adjusts signals in real time based on pedestrian volume.
- **Extended Timing for Slower Pedestrians:** Automatically increases crossing time for those needing more time to ensure safety and accessibility.

Key Benefits of Blue-Band

- Operates seamlessly on DFS TrafficXRoads & Enterprise systems
- Fully integrated ecosystem for unified traffic management
- Real-time data fusion from multiple transportation devices
- Enhanced VRU protection through adaptive detection and intervention
- Advanced signal performance analytics for safer, smoother flow
- Scalable, future-proof platform for evolving transportation needs