BLUE-BAND

INTEGRATOR-AI™

SMHS-IAI-0005 – Key Features

THE MOST VERSATILE EDGE COMPUTE SOFTWARE IN TRAFFIC

"Our technology is designed to leverage existing and emerging technologies to create a fully integrated smart transportation infrastructure." Kevin Yorke, CEO

BLUE-BAND

Key Features

Platform: A single platform at the edge to integrate various smart city devices.
Real-time Processing: Instantly analyzes data for quick decision-making.
Scalable Design: Can accommodate growing city needs.
Intuitive User Interface: Easy to navigate and customize.
Data Analytics: Deep insights into traffic patterns and behaviors.
Modular Connectivity: Control, Monitor, and Report with universal connectivity.
DIY Automation: Build and automate your own use case interventions.
Driver Platform: Agnostic integration of all sensory and infrastructure interfaces.

id — Interface Drivers Analytics / Sensory Connection Types

- Video Analytics
- Cloud Services Data
- LiDAR Perception
- Transportation Radar
- Blue-Band Wireless Magnetometer

ic — Interface Connectivity / Infrastructure Connectivity

- ➢ **RSU (Roadside Unit) messaging Interface:** Connects with RSUs for connected vehicle messages.
- ➢ **Digital Message Sign Interface (NTCIP 1209):** Sends messages to digital signs for public communication.
- ➢ **Traffic Signal Controller**
  - ❏ **Contact Closure Interface:** Direct card rack interface with traffic signal controllers.
  - ❏ **SDLC:** Direct serial interface with traffic signal controllers.
  - ❏ **NTCIP 1202:** Direct ethernet interface with traffic signal controllers.
- ➢ **ANALOG / DIGITAL INPUT/OUTPUT INTERFACE**
  - ❏ SCADA
  - ❏ PLC
  - ❏ Analog Hardware Control
  - ❏ Digital Hardware Control
  - ❏ Legacy Hardware Automation

USE CASE EXAMPLES

1. **Traffic Signal Control:** The Integrator-AI receives data from sensors (like LIDAR or cameras) and makes decisions on traffic light timings to ease congestion or prioritize emergency vehicles.

2. **Vulnerable Road User Safety:** By integrating with pedestrian detection systems, it can extend crossing times for slower pedestrians or alert drivers of pedestrians in crosswalks.

3. **Incident Management:** In the event of accidents or road obstructions, the system can reroute traffic and inform drivers via connected digital message signs.

4. **Connected Road-User Messaging:** Create and automate safety messages to connected road users.

5. **Un-Connected Road-User Messaging:** Dynamic message signs and flasher control.

6. **Data Collection for Urban Planning:** Collects traffic and pedestrian data for better city planning and infrastructure development.

7. **Automate SPM+:** Automate signal performance measures and run reports for efficient and safe corridors.

8. **Maintenance support:** Track uptime and health of all networked devices.

In essence, the Integrator-AI is a city's command center, a central brain that at each location connects and communicates with various devices and fuses the data to make an informed decision and provide actionable interventions in real time to make traffic flow smoother, keep pedestrians safe, and provide invaluable data for the future.