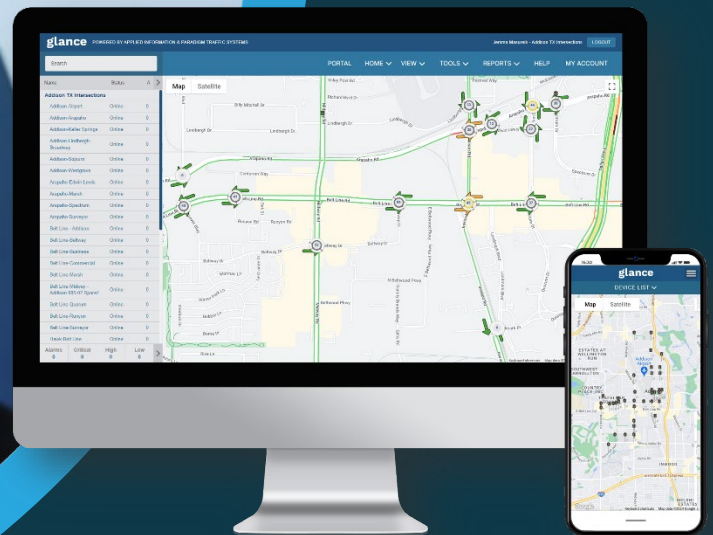




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INFORMATION®



## AI-500-095 C-V2X Enabled Roadside Unit OVERVIEW

The AI-500-095 Roadside Unit (RSU) from Applied Information® plays a pivotal role in advancing the real-world deployment of connected vehicle technologies. Leveraging C-V2X Direct 5.9GHz radio the AI-500-095 provides real-time, reliable, low-latency connected vehicle alerts, crucial to providing motorists with safety critical messages. The device's ability to integrate with a range of traffic devices—from intersections to slow speed zones, including school zones, pedestrian mid-block crossings, and work zones—highlights its versatility in providing connected vehicle messages, improving connectivity, safety, and mobility.

Designed for seamless integration, the pole-mounted AI-500-095 RSU streamlines installation and enhances maintenance efficiency by eliminating the need for a bucket truck for regular upkeep. Equipped with high-gain omnidirectional antennas, it optimizes line-of-sight communication, enhancing operation. All messages transmitted by the RSU adhere to the SAE J2735 standard for C-V2X messages, promoting clarity and consistency across different platforms and devices, while supporting the interoperability of the connected vehicle ecosystem.

The AI-500-095 RSU is designed not as a standalone unit but rather integrates with a new or existing cellular-enabled Applied Information device. This strategic integration facilitates a dual-layer communication framework, combining C-V2X Direct for real-time, safety-critical messaging and C-V2X Network (cellular) capabilities for advanced warnings and safety alerts to motorists. This comprehensive approach ensures motorists receive both immediate and anticipatory safety information, designed to enhance roadway safety. Furthermore, the RSU's seamless compatibility with the Glance® Platform enables effective monitoring and management of the system for optimized performance.

## FEATURES & BENEFITS

- ✓ C-V2X enabled
- ✓ Easy installation and maintenance
- ✓ Exclusive access to the Glance platform
- ✓ Email and text alerts of system faults
- ✓ Future proof traffic infrastructure with C-V2X Network and C-V2X Direct
- ✓ Provides connected vehicle applications through the smartphone app, TravelSafely™
- ✓ Passthrough communications
- ✓ Redundant communications supporting both 900MHz radio & Cellular communication



## HARDWARE SPECIFICATION

<b>AI-500-095</b>	
<b>Connectivity</b>	
C-V2X Direct	Yes
5.9 GHz Radio	Yes, Cellular, C-V2X Ready
Ethernet Port (10/100 Base-T)	4
GPS	Yes
SCMS Ready	Yes
<b>Power</b>	
Input Voltage	10-30 VDC
Power Consumption	5W
<b>Miscellaneous</b>	
Operating Systems	Linux
Operating Temperature	-37°C to 74°C
Humidity	5-95% non-condensing
Dimensions	12" W x 10" H x 5" D
Battery Backup	Yes
Mounting	Pole-Mounted
<b>C-V2X Applications Include</b>	
School Zones	Yes
Pedestrian Crossings	Yes
Work Zones	Yes
Slow Speed Zones	Yes
Intersections	Yes
Connected Vehicle Applications	Yes
<b>Supported Communications</b>	
J2735 MAP and SPaT	Intersection Applications
J2735 SRM	Emergency Vehicle Preemption
J2735 TIM	Zone or Curve Warning
NTCIP 1218 RSU	RSU Management