

Savari SW2000 C-V2X Road-Side Unit (RSU)



Savari is the leading vendor of DSRC-based RSUs in ITS test beds and commercial applications. The **Savari StreetWAVE® SW2000** is based on the SW1000 DSRC RSU and is capable of providing **C-V2X (PC5)** as well as **DSRC** connectivity. It offers multiple configuration options for V2X radios, optional Wi-Fi and GNSS, and is based on the United States Department of Transportation (USDOT) RSU v4.1a specification. To prepare for the European market, the SW2000 is ETSI ES 202 663 compliant. The RSU is based on the industry's first C-V2X development in close partnership with the leading C-V2X chipset vendor and field tests and demonstrations in partnership with 5GAA and leading Automotive OEMs. Savari RSUs have been used by industry leading test-beds and US-DOT pilots like the Ann-Arbor Safety Pilot Model.



Key Features

Mobility

- Ease of implementation and deployment
- Ease of configuration
- Sturdy mechanical design

Features

- Configurable for C-V2X or DSRC
- On-board GPS for position and timing synchronization
- PoE with full surge protection
- FCC certified* (*Currently for DSRC only)
- USDOT rQPL vendor
- Remote management support
- Remote device and application health monitoring, message and event logging
- Optional support for WiFi

DSRC Message support

- WSA broadcasts
- Traveler information messages
- SPaT, SRM, SSM messages
- GID/MAP messages
- RTCM messages

Standard support

- IEEE 802.11p - 2012
- IEEE 1609.2/3/4 - 2016
- SAE J2735 – 2016
- C-SAE 53-2017 (China)
- NTCIP 1202/UDP-Push* (select traffic controllers)
- USDOT v4.1a RSU specification (*DSRC only)
- ETSI ES 202 663

Networking, Administration and Management

- IPv6 and IPv4 support
- SIT tunnel support
- SSL, SSH, TLS
- Web Graphical User Interface
- Interoperable with US-DOT CAMP SCMS

Applications

Selected V2I Safety (sample)

- I2V - Traffic signal violation warning
- I2V - Curve speed warning*
- I2V - Left turn assistant
- I2V - Red light violation warning*
- I2V - Reduced speed zone warning*
- I2V - USDOT SPaT Challenge
- I2V - Traffic Signal Priority

*Savari RSUs used by CAMP-V2I

Components

Processor

800 Mhz, iMX6 dual core

Memory

2 GB DDR DRAM

Storage

4 GB Flash

DSRC Interfaces

Dual radio support

C-V2X Interfaces

PC-5 (Qualcomm MDM 9150)

GNSS

Multi-constellation, -160db sensitivity

HSM

Infineon SLI 97

Power Rating

IEEE 802.3 at PoE

Power Consumption

<10W

Temperature

-35C to +75C

Dimensions

8" (L) x 8 1/2" (H) x 2 3/4" (D)

Antenna Connectors

N-Type Male (V2X Radio) & SMA (GNSS)

LED's

WiFi (built-in)

Standards Compliance

Power, Status & Diag

USDOT RSU v4.1a specification*

(*Full Compliance for DSRC only)

ETSI ES 202 663 specification

FCC, CFR 47 Part 90* (*DSRC only)

Multiple traffic controllers – US & China

Pole mounting kit

PoE (Power over Ethernet) controller

