

Integrated with C-V2X and DSRC technologies, WaveConnect RSU provides a scalable and modular platform reducing complexity to support global Connected Mobility solutions. WaveConnect Roadside Unit (RSU) communicates between the in-vehicle devices and transportation infrastructures, such as traffic controller equipment and networks. The RSU forms a key component with regard to the implementation and adoption of V2X technology. Integrated with various wireless technologies such as 4G, Wi-Fi, Bluetooth and the support for multiple CAN interfaces, the hub serves to enhance safety and advance intelligent transportation systems.

HIGHLIGHTS

- Hybrid Hub: C-V2X and DSRC Radios
- Powered by NXP i.MX 8
- Wireless Connectivity: 4G LTE Cat-4 / Cat-M1 / NB-IoT / Wi-Fi / Bluetooth
- 4 CAN Interfaces: CAN FD / HS CAN / LS CAN
- High Accuracy GNSS Module & UWB Radio (Ultra Wide Band)
- IP Enclosure with Power Over Ethernet
- Security: Integrated HSM and TPM
- M.2 Expansion Connector: 5G / Wi-Fi 6

APPLICATIONS

V2V

- Lane Change
- Collision Warning
- Driver and Incident Recording

V2I

- Blind Spot visualization
- Curve Zone Warning
- Work / School Zone Warning

V2P

- Pedestrian Notifications
- Infotainment Analytics
- In-vehicle Safety

Processor Core

CPU: NXP i.MX 8 DXL

RAM: 1GB LPDDR4 (Upgradable upto 2GB)

FLASH: 8GB eMMC Flash (Upgradable upto 64GB)

V2X Radio

C-V2X PC5 with 1.28 GHz

DSRC 802.11p operates in the 5.9 GHz band

Wireless Communication

Cellular: 4G LTE Cat 4, LTE Cat M1/NB1

Wi-Fi: 802.11 a/b/g/n/ac in 2.4 GHz or 5 GHz

Bluetooth: BLE 5.0

Ultra-Wideband (UWB) wireless transceiver

Interfaces

CAN: 4 Interfaces (CAN FD / HS CAN / LS CAN)

10/100 Mbps Ethernet

RS232/RS485

K-Line/LIN Interface

Analog Input x 2

GPIOs x 4 (2DI, 2DO)

Security

Hardware Security Module (HSM)

Trusted Platform Module (TPM)

GNSS

GPS/GLONASS/BeiDou/Galileo

Software

Operating System: Linux 5.4.70

Sensors

Accelerometer, Gyroscope, Magnetometer

Temperature sensor

Antenna

1 x GNSS, 1 x Cellular, 1 x WiFi/BLE

Power

12V – 36V/POE support

Connectors

Enclosure Connector: 36 Pin Micro-fit

External Fakra connector: C-V2X/DSRC

External connector: M.2 with Key B/Key E

Enclosure

Protecting Class: IP66 rated with tamper detection

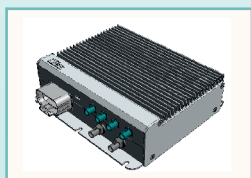
Mounting Options: Pole Mounting

Dimension: 197 x 154 x 41.5 mm

Environmental

Operating Temperature: -40°C to +85°C
(Excluding Battery)

RELATED PRODUCTS



AutoConnect OBU

AutoConnect, The V2X On board Unit is integrated with DSRC and C-V2X radio technologies. Integrated with 4 CAN Interfaces and a multitude of wireless technologies such as 4G, Wi-Fi and Bluetooth. The OBU can enable Vehicle to Vehicle communication and the next generation of connected mobility solutions.



Telematics Gateway

The Telematics Gateway is built with extensive interfaces: 4 CAN Interfaces, RS232, RS485, Analog Inputs and Digital Inputs. With the support for multiple protocols and powerful edge firmware, the gateway is suitable for applications ranging from heavy dirty trucks, vessels, industrial machinery and passenger cars.

Note: iWave reserves the right to change these specifications without notice as part of iWave's continuous effort to meet the best in breed specification. The registered trademarks are proprietary of their respective owners.

INDIA

iWave Systems Technologies Pvt Ltd.
#7/B, 29th Main, BTM Layout 2nd Stage,
Bangalore - 560 076, INDIA.
Ph: +91-80-26683700, 26786245
mktg@iwavesystems.com

iwavesystems.com

JAPAN

iWave Japan Inc.
8F Kannai Sumiyoshi Building, 3-29 Sumiyoshi-cho,
Naka-ku, Yokohama Kanagawa, JAPAN
Ph: 045-227-7626
info@iwavejapan.co.jp

EUROPE

International Sales and Marketing Europe
Venkelbaan 55 2908KE Capelle aan den
Ijssel, The Netherlands
Ph: +31 10 28403383
info@iwavesystems.eu

USA

iWave USA
1692 Westmont Ave.
Campbell, CA95008 USA
Ph: 408-206-5958
info@iwavesystems.us