MK5 OBU

Cohda Wireless' 5th generation market ready On-Board Unit

Cohda's fifth-generation On-Board Unit (OBU), the MK5 is a small, low-cost, rugged module that can be retrofitted to vehicles for aftermarket deployment or field trials, and can also serve as a design reference for automotive production and Smart City deployments.

The MK5 exchanges data at high speeds over extended distances, providing class-leading reaction times to potential hazards and safety critical scenarios. In challenging outdoor conditions where no line-of-sight is available, its radio performance is unmatched.

Based on the automotive-grade RoadLINK chipset developed by Cohda in collaboration with NXP Semiconductors, it is a leader in global V2X trials and offers a robust, secure foundation for the intelligent transport systems of the future

Cohda Wireless is a global leader in the development of Connected Vehicles and Connected Autonomous Vehicle software with proven applications for Smart City, Mining and other environments.

Cohda Wireless' V2X technology is proven with inclusion in the first two production vehicles giving Cohda Wireless practical experience in bringing automotive ITS solutions to industry.

cohdawireless.com

MK5 OBU

TEST STANDARD CONFORMANCE	
DSRC V2X	IEEE 802.11- 2012 IEEE 1609 - 2020 ETSI ES 202 663 SAE J2735 – 2020
CERTIFICATION	EU RED, FCC

CORE FEATURES	
CPU	NXP i.MX6 DL (4000 DMIPS)
OS	Ubuntu 20.04 LTS with Linux 4.14.98
RAM	1GB SDRAM
FLASH	4GB eMMc
STORAGE	4GB
ETHERNET	10/100 Mbps
POWER SUPPLY	7V – 36V DC
RECEIVER SENSITIVITY	-99dBm @ 3Mbps
MAX Tx POWER	DSRC: +22dBm (ETSI Mask C)
BANDWIDTH	10 MHz
POSITIONING	GNSS -167 dBm navigation sensitivity, 2.5m accuracy
SECURITY	SXF1700
ENVIRONMENTAL OPERATING RANGE	-40°C to + 85°C
DIMENSIONS	130mm x 120mm x 35mm
MOBILITY & MULTIPATH TOLERANCE	Doppler Spread: 800 km/hr Delay Spread: 1500ns

WIRELESS CONNECTIVITY	
DSRC	NXP RoadLink® SAF5100

CONNECTORS	
ANTENNAS	2 x Radio 5GHz, 1x GNSS
INTERFACE	1 x Ethernet (IEEE802.3)
POWER	1 x Molex Micro-fit 3.0 4 pin connector

KITS CONTENTS	
ANTENNAS	1x DSRC Antenna
OTHER	1x DC Cord