



## 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](http://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
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## 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
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## 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

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