



Website: www.ismartways.com

Address: iSmartWays Technology Inc.
10230 Jasper Ave, Suite 1-500,
Edmonton, Alberta, Canada T5J 4P6

Telephone: 780-686-4026

E-mail: info@ismartways.com

MOCAR-OBU SPECIFICATIONS



Make travel smarter, safer, and more enjoyable.

iSmartWays Technology Inc.



V2X On-Board Unit

The MOCAR V-MASTER OBU provides vehicle-based sensory, processing, storage, and communications functions that support efficient, safe, and convenient travel. Using advanced VANET wireless communication and Edge computing, this aftermarket vehicle device provides smart warnings and traffic alerts to drivers and road users.

1. FEATURES

	Operates on MOCAR C-V2X protocol application stack, provides advanced driver assist, and vehicle to infrastructure services.
	Supports 2G, 3G, and 4G data services.
GNSS	Supports GPS, GLONASS, Galileo, Beidou, QZSS.
IMU	Vehicle inertial navigation integrated with motion and direction sensors.
CAN	Supports CAN2.0B specs and dual highspeed CAN channels, each channel can reach a speed of 1 Mbps.
V2X	Supports V2X WAVE Protocol. LTE-V: Supports 3GPP Rel. 14 standard. Working Frequency Band: 5855~5925Mhz. Working Frequency Band: 10MHz max data. Data Transfer Rate: 30Mbps. Transmitting Power: max 23dbm.
Ethernet	Compliant with IEEE1588 specs, 10/100/1000Mbps.
USB	1 channel USB 2.0-host port.
WiFi	Supports 2.4G frequency band 802.11n MIMO (2.4GHz Band/20MHz bandwidth)
BT	Supports BT 4.1 BLE and higher.
RS232	Supports external equipment access such as high-precision GPS equipment. Sleep current is less than 3mA.

2.SPECIFICATIONS

Operating System (OS)	Linux4.9.11
CPU	Cortex-A9 dual 800MHz, Cortex-A9 dual 800MHz, can be upgraded to quad-core 1GHz
RAM	DDR3L 1600Mhz 1GB
Storage	eMMC 8GB
Cellular	GSM/WCDMA/TD-SCDMA/CDMA/FDD/EVDO/TDD
V2X	LTE-V 3GPP compliant Rel. 14 specs
GNSS	BEIDOU/GPS/GLONASS/Galileo/QZSS, max update frequency 10Hz
IMU	3-axis accelerometer, 3-axis gyroscope
WiFi	2.4GHz+ 5GHz, IEEE 802.11a/b/g/n/ac
BT	BT 4.1 BLE and above
CAN	CAN 2.0B x2 channels
RS232	RS232 x1 channel
Ethernet	1000M x1 channel

Electrical Environment Characteristics

Run/Storage Temperature	-40°C~+85°C
ESD	IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
Power Consumption	<12W
Sleep Mode	<3mA
Run Temperature	10% ~ 95% (no condensation)

Physical Characteristics

Dimensions	190mm*137mm*30mm
Colour	Black
Weight	~600g