iWave

Embedding Intelligence

iW-Rainbow-G26
J1939 OBD logger

Heavy Duty OBD device supports J1939 protocol with Customizable rugged enclosure and is equipped with an GPS receiver, Wi-Fi, BLE 5.0, 4G communication and integrated with Accelerometer, Gyroscope and Magnetometer sensors onboard enabling driving analysis. The OBD Logger can be connected to heavy duty vehicles such as trucks, tractors and road cleaning machines. As a rugged device, the OBD Logger is compatible with manufacturer specific protocol within short spans of time.

HIGHLIGHTS

- Powered by NXP i.MX 6

- Wireless Connectivity: 4G LTE Cat-4 / Cat-M1 / NB-IoT / Wi-Fi / Bluetooth

- 3 CAN Ports: CAN FD/HS CAN

- Software Flexibility and Transparency: LINUX 5.4

- Protocol supported: J1939

- On-Board Sensors: Accelerometer / Gyroscope / Magnetometer

- Global Certification: FCC / CE / ISED

- Internal Battery Back-Up

- Secured Solution: Secure Boot / Storage / Filesystem encryption and decryption

APPLICATIONS

- Machinery Efficiency

- Heavy duty vehicles

- Off road vehicles

- IndustrialEquipment

- Diesel Engines

- Fleet Management

Processor Core

CPU: NXP i.MX 6 ULL

RAM: 512MB DDR3L SDRAM

FLASH: 8GB eMMC Flash

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 v5.0 BR/EDR/LE

Interfaces

CAN: 3 Ports (HS CAN x 2, CAN FD x 1)

10/100 Mbps Ethernet*

GPIOs x 2 (1DI, 1DO)

Sensors

Accelerometer, Gyroscope, Magnetometer*

Battery

Lithium-ion Polymer (LIP) 3.7V 1500mAh

Software

Operating System: Linux 5.4

Protocol Stacks: J1939

GNSS

GPS/GLONASS/BeiDou/Galileo

Security Suite

Secure Boot/ Storage*

Filesystem Encryption and Decryption*

OS Hardening*

Power

9V/12V/24V/36V from TCU Port

Antenna

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

Certification

CE, FCC and ISED Certified

Enclosure

Protecting Class: IP30

Mounting Options: Cable Tie
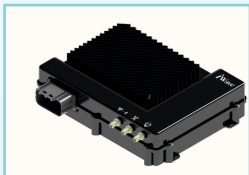
Dimension:106 X 87 X 28.5 mm

Environmental (Excluding Battery)

Operating Temperature: -20°C to +70°C

Storage Temperature: -20°C to +70°C

Note: Optional features are not supported in default configuration.

RELATED PRODUCTS

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 wide range of applications.

V2X Connectivity Hub

Integrated with C-V2X and DSRC technologies, the hybrid V2X Connectivity Hub provides as a scalable and modular platform. Designed to serve a plethora of V2X Applications, the V2X Gateway can be positioned as an On-Board Unit (OBU) or as a Road-Side Unit (RSU).