

# **iW-Rainbow-G41 Telematics Gateway**



The i.MX 8XLite powered Telematics Gateway is built for rugged applications with extensive interfaces such as 4 CAN ports, RS232, RS485, Analog Inputs and Ethernet. With the support for various wireless technologies such as 4G, Wi-Fi and Bluetooth, Telematics Gateway is a vehicle diagnostics system that allows users to remotely monitor the key parameters of a vehicle. With the support for multiple protocols such as J1939, CANopen and ISO 15675-4, the gateway is suitable for wide range of applications.

#### **HIGHLIGHTS**

- Powered by NXP i.MX 8
- Wireless Connectivity: 4G LTE Cat-4 / Cat-M1 / NB-IoT / Wi-Fi / Bluetooth
- Supports 4 CAN FD Ports
- Multitude of Protocols: ISO 15765-4 CAN, ISO 11898, J1939
- M.2 Expansion Connector: 5G / Wi-Fi 6
- Wired Interfaces: RS232 / RS485 / Automotive Ethernet / Analog Inputs
- High Accuracy GNSS Module & UWB Radio (Ultra Wide Band)
- Internal Battery Back-Up
- IP Enclosure for Rugged Installations

#### **APPLICATIONS**

- Heavy duty trucks
- Industrial machinery
- Passenger cars
- Forklifts/Cleaning Machine
- Diesel Engine
- Fleet Management



## iW-Rainbow-G41 SPECIFICATION

#### **Processor Core**

CPU: NXP i.MX 8 DXL

RAM: 1GB LPDDR4 (Upgradable upto 2GB)

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

#### **Wireless Communication**

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

Wi-Fi: 802.11 a/b/g/n/ac/ax \*

Bluetooth: BLE 5.0

Ultra-Wideband (UWB) wireless transceiver\*

#### **Interfaces**

CAN: 4 CAN FD Ports

10/100 Mbps Ethernet

RS232/RS485\*

K - Line\* / LIN Interface\*

Analog Input x 2

GPIOs x 4 (2DI, 2DO)

#### **Software**

Operating System: Linux 5.4.70

Protocol Stacks: ISO 15765-4 CAN, ISO 11898.

J1939

#### **GNSS**

GPS/GLONASS/BeiDou/Galileo

#### Sensors

Accelerometer, Gyroscope, Magnetometer

**Temperature Sensor** 

#### **Antenna**

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

#### **Power**

9V/12V/24V/36V

#### **Connectors**

Enclosure Connector: 36 Pin Micro-fit

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

#### **Enclosure**

Protecting Class: IP67 with tamper detection

Mounting Options: Cable Tie Slots/Mounting

**Brackets** 

#### **Environmental**

Operating Temperature: -40°C to +85°C

(Excluding Battery)

Note: Optional features are not supported in default configuration.

#### **RELATED PRODUCTS**



#### **Telematics Control Unit**

TCU is built to power your connected mobility and telematics applications across a range of connected vehicles. It is integrated with multiple CAN ports, a wide range of protocol support and a multitude of wireless connectivity options.



### **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).

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