

The Rugged Telematics Device with IP67 protection class is integrated with security module, 3 CAN Ports, RS232, RS485 and various wireless connectivity options such as 4G, Wi-Fi and Bluetooth. With the support for multiple protocols such as J1939, CANopen, ISO 15765-4 CAN and powerful edge firmware, the Rugged Telematics Device is suitable for wide range of applications that operate in harsh environments and procedures.

Powered by NXP i.MX 6ULL application processor

LINUX 5.4 BSP with software flexibility

IP67 protection class for Rugged Installations

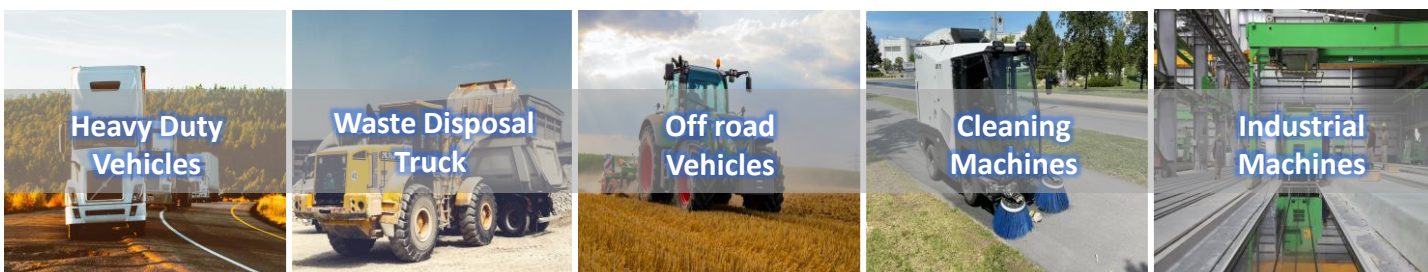
External antenna with IP rated SMA connectors

3 CAN Ports / RS232 / RS485 / Analog Input

Integrated Security Element



APPLICATIONS



Processor

CPU	NXP i.MX 6ULL
RAM	512MB DDR3L SDRAM
FLASH	8GB eMMC Flash

Wireless Connectivity

Cellular Connectivity	LTE Cat 4 / Cat M1
Wi-Fi	802.11a/b/g/n/ac
Bluetooth	Bluetooth v5.0 BR/EDR/LE

Interfaces and Peripherals

CAN	3 Ports (HS CAN x 2, CAN FD x 1)
RS232 / RS485 ¹ / K-Line ¹	RS232: 2-wire x 1 port
	RS485: 4-wire x 1 port
	K-Line: 1 port
Ethernet	10/100 Mbps x 1 port
Digital I/O	Digital Input x 2, Digital Output x 2
Analog Input	1 port

Sensors

Accelerometer	±2/ ±4/ ±8/ ±16 g full scale
Gyroscope	±125/±250/±500/±1000/±2000 dps
Magnetometer ¹	Upto ±50 gauss magnetic range

Satellite Location

GNSS	GPS / GLONASS / BeiDou / Galileo
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Antenna

Internal Antenna ¹	GNSS, Cellular, Wi-Fi/BLE
External Antenna	IP rated SMA connectors x 3

Microcontroller

MCU	32-bit Arm® Cortex® microcontroller
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Security

Security Module ¹	High-performance microcontroller
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SIM Provision

SIM connector	Micro SIM Connector/eSIM ¹
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Battery Pack

Battery Capacity	Up to 1500mAh
Battery Technology	Lithium-ion Polymer (LIP)
Charging Temperature	0°C to 45°C

Power Characteristics

Power Input	9V – 36V
Sleep Current	< 1mA

Environmental

Operating Temperature	-40°C to +70°C ²
Storage Temperature	-40°C to +85°C ²

Enclosure

Protection Class	IP67
Mounting Options	Panel mount
Dimension	125 x 124 x 42.43 mm

Software

Operating System	Linux 5.4.70
Protocols ¹	ISO 15765-4 CAN, ISO 11898, UDS, K-Line, CANopen

Note:

¹ Optional features: Please contact iWave sales team at mktg@iwavesystems.com

² Temperature range subject to use case and operational functionality

RELATED PRODUCTS



Telematics Control Unit

Telematics Control Unit 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.



Telematics Gateway

The i.MX 8XLite powered 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.



Protocol Stacks

J1939
UDS
CANopen



Software Add On Modules

Custom Software Build
Cloud Integration
OTA
Security Suite



Accessories

Custom Harness Cables
e-Sim Integration
Custom application
flashing at factory



Customization Options

Hardware
Enclosure
Branding

iWave Systems Technologies is a product engineering organization offering an extensive portfolio of Telematics Solutions, System on Modules and avionic solutions. With over 21 years of embedded industry experience and designing solutions for automotive customers across the globe, iWave is driven with the aim to be a reliable global technology partner.

