

# **TTConnect Wave 4G**

#### Description

TTConnect Wave 4G is designed to connect vehicles and machines to TTConnect Cloud Service platform in the easiest and most comprehensive manner in the industry. The device provides standard in-vehicle interfaces such as Ethernet and CAN in addition to its wireless and cellular interfaces. TTControl's end-to-end management system offers true plugand-play functionality and allows customers to monitor and manage vehicles and fleets with unrivaled out-of-the-box experience. TTConnect Wave 4G enables applications that range from simple machine data monitoring and data logging, to more advanced functionalities such as prognostics and predictive maintenance.



| Unit dimensions       | 176 x 216 x 40<br>(With fasteners) | mm                |
|-----------------------|------------------------------------|-------------------|
| Weight                | 650                                | g                 |
| Operating Temperature | -40 to +85                         | °C                |
| Supply Voltage        | 6 to 32                            | V                 |
| Peak Voltage          | 36                                 | $V_{max}$         |
| Standby Current       | 3                                  | mA <sub>max</sub> |
| Current               | 1,3                                | A <sub>max</sub>  |

#### **Standards**

| CE-Mark               | 2014/30/EU             |  |
|-----------------------|------------------------|--|
| E-Mark                | ECE-R10.05             |  |
| FCC                   | Part 15                |  |
| IC                    | ICES-003               |  |
| Other regional        | Please consult with    |  |
| certifications        | TTControl              |  |
| EMV                   | ISO 11452-2            |  |
|                       | ISO 11452-4: 2005      |  |
| ESD                   | ISO 13766              |  |
| Load Dump             | ISO 16750-2            |  |
| Ingression Protection | EN 60529 IP67          |  |
|                       | ISO 20653 IP 6K9K      |  |
| Temperature           | EN 60068-2-1, -14, -78 |  |
| Vibration, Shock      | IEC 60068-2-64, -27    |  |



## **System Components**

- Freescale i.MX6S application processor 32bit Cortex A9 @ 800MHz
- 4 Gb flash; 1 GB RAM
- Separate core for vehicle communications
- Internal temperature sensors for ambient and CPU temperature
- Accelerometer/gyroscope
- Real-time clock

#### Interfaces

- 1 x 10/100Base-TX Ethernet
- 2 x CAN
- 1 x LIN interface
- 802.11b/g/n/ac WiFi
- USB 2.0 and OTG
- 1 x RS 232
- · SIM card connector interface

### **EU Variant**

- Penta Band LTE: 800/900/1800/2100/2600 MHz; FDD-Band (20,8,3,7,1)
- Tri Band UMTS (WCDMA):900/1800/2100 MHz; FDD-Band (8,3,1)
- Dual Band GSM/GPRS/EDGE: 900/1800 MHz US Variant
- Quad Band LTE: 700/850/AWS (1700/2100)/1900 MHz; FDD-Band (17,5,4,2)
- Tri Band UMTS (WCDMA): 850/AWS(1700/2100)/1900 MHz; FDD-Band (5,4,2)
- Quad Band GSM/GPRS/EDGE: 850/900/1800/1900 MHz

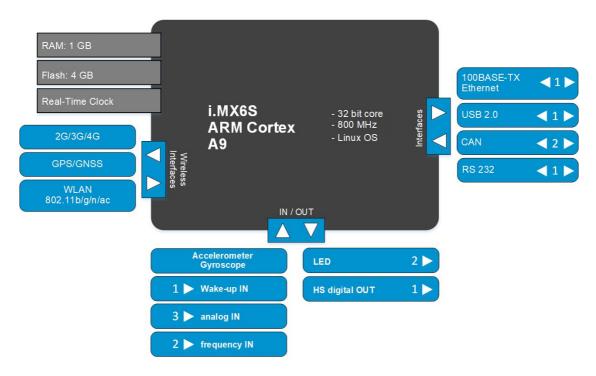
### Inputs and outputs

- 3 Analog inputs
- 2 Frequency inputs
- 1 digital output HSD
- 1 wake-up input

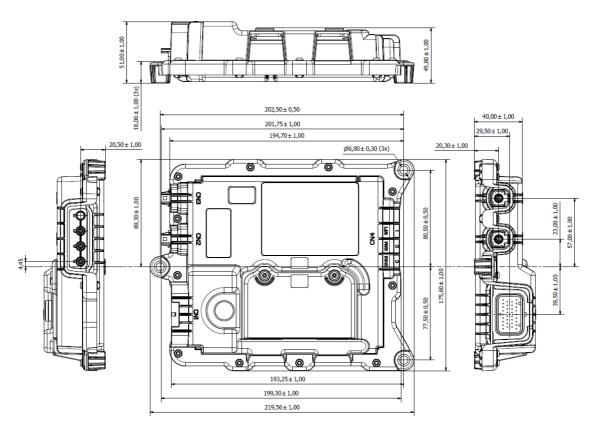
Reverse polarity protection and protection of all external interfaces against short circuit to GND and BAT+.



## **Block Diagram**



## Unit's housing and connectors with dimensions (not to scale)



For further information, including price and availability, please contact <a href="mailto:products@ttcontrol.com">products@ttcontrol.com</a>.

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