



## 5G Telematic Unit

### General description

By fulfilling the latest 4G, 4.5G and 5G standards, our Telematics Unit offers a wide range of attractive features to keep the vehicle up-to-date and the driver connected. With the in-house developed network access devices (NADs) and Telematics software framework from Continental, our Telematics Control Units (TCUs) are highly customizable and ready-to-use in different regions.

Our TCU provides sophisticated over-the-air updates, a solution for multiple electronic control units in the car as well as proven security solutions rounding off the attractive feature set for the next generations of Telematics products. With high bandwidth and reduced latency, the new mobile network standard 5G offers all pre-requisites to connect vehicles in real-time. Continental is comprehensively testing Cellular V2X (Vehicle-to-Everything) to make our Telematics products ready to support predictive and autonomous driving.

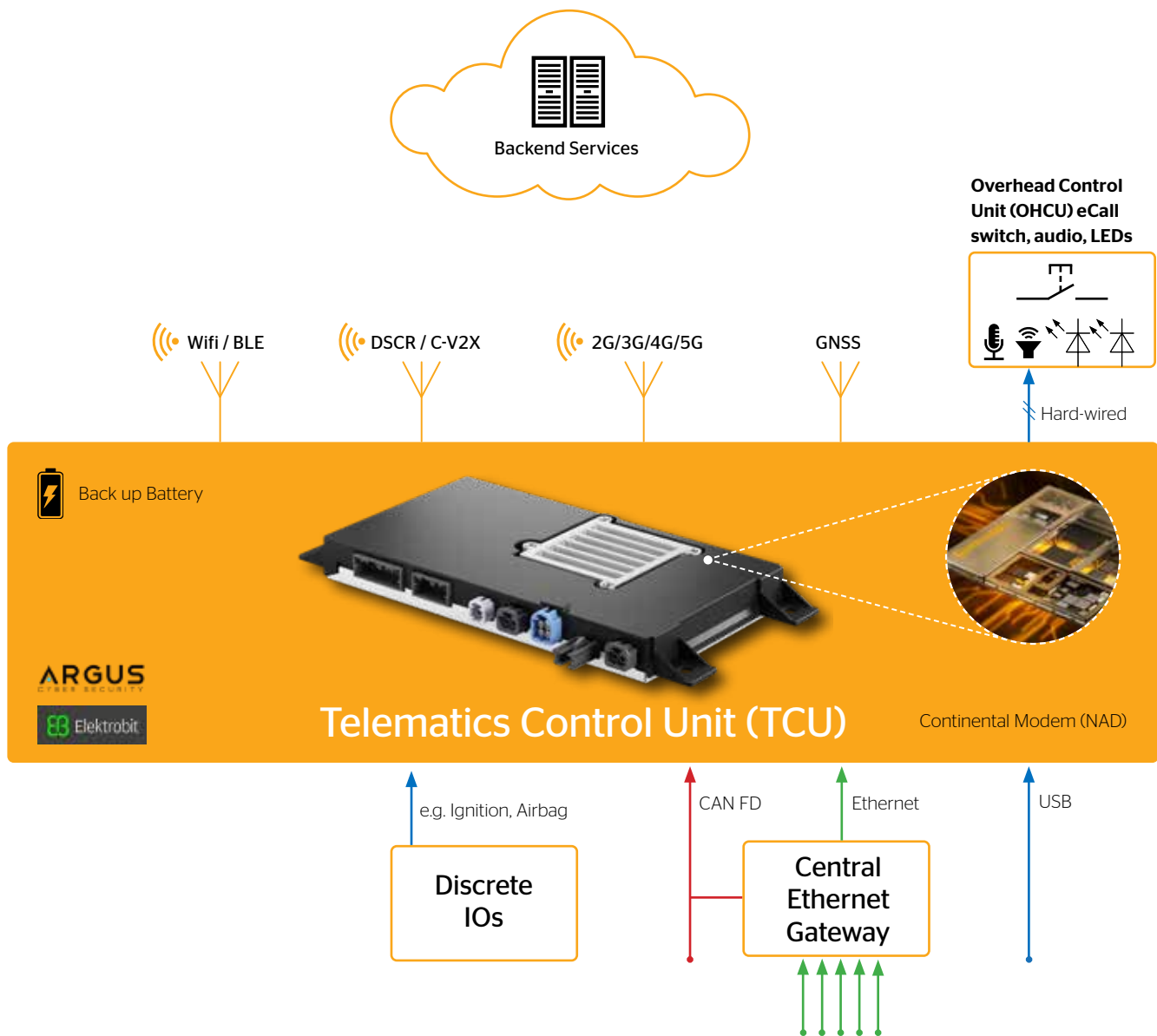
### Features

- › Continental NAD (network access device) based on Qualcomm Chipset
- › Powerful Application Processor w/ Linux OS
- › Continental Open Telematics Platform Software Framework
- › Advanced security options
- › TCU and multi-ECU software updates (FOTA-Master)
- › Hardware separation using independent vehicle processor
- › HSM (Hardware Security Module)
- › Dead Reckoning
- › BuB (BackUp Battery)
- › HighSpeed Vehicle Interface with 1000BaseT1 Ethernet
- › Hybrid V2X Technology (DSRC and/or C-V2X)
- › eCall



5G Telematic Unit - exploded view





### Interfaces

- > LTE/4.5G – Cat19 R14 (1.6 Gbps)
- > 5G – R15 (3 Gbps)
- > V2X (DSRC and C-V2X)
- > Wi-Fi 802.11ac
- > GPS, GLONASS, Galileo, Baidu
- > BT 5.x (incl. BLE)
- > eUICC SIM (e-SIM)
- > CAN FD
- > USB 2.0
- > 1000 Base T1 Ethernet

### Benefits

- > Customized software solutions for telematics use cases
- > Software development kit (SDK) for more flexibility
- > Elektrobit cadian Sync
  - > Secure software updates over the air for multiple electronic units
- > Argus connected ECU Protection
  - > detects and mitigates attacks targeting connected ECUs
- > Lower latencies with next generations of mobile standards
- > Intense C-V2X testing for predictive driving
- > Emergency call in case of serious accidents
- > Localization – Vehicle tracking by GPS or GLONASS
- > Scalability – Enables additional services and features such as stolen vehicle
- > Tracking, remote diagnostics, mobile phone connectivity options

