



TELTONIKA | Easy key to IoT

E-MOBILITY AND MICRO-MOBILITY

AGENDA

- USE CASES – Micro-Mobility
- USE CASES – E-Mobility
- Key Functionality Introduction
 - Manual CAN
 - API
 - Key Features
- Devices and the best use for each USE CASE
- NEW! E-Bike Tracker (EMB100)
- LIVE Q&A Session

KICK E-SCOOTER TRACKER^{EASY}

(TST100)



KICK E-SCOOTER MANAGEMENT

Geofencing zones set-up, battery & speed management

CONTROL

Remote lock/unlock feature

ECU DATA

Data reading from Kick E-Scooter ECU (Segway ES2/ES4/Max, Xiaomi, FitRider and others)

POWER SUPPLY

Wide power supply voltage range for integration variety (9-50 V)

OTA UPDATES

Convenient OTA (over-the-air) updating through user-friendly applications

E-SCOOTER TRACKER^{PLUS}

(TFT100)



CONFIGURABLE I/O

Configurable analog and digital inputs

OTA UPDATES

Convenient OTA (over-the-air) updating through user-friendly applications

DIFFERENT INTERFACES

CAN, RS232, RS485, UART interface support depending on chosen modification

E-SCOOTER SUPPORT

Various E-Scooter models support (Askoll, Govecs, Nuuk mobility, SuperSocco..)

POWER SUPPLY

Wide power supply voltage range for integration variety (10-97 V)

E-FORKLIFT TRACKER^{PLUS}

(TFT100)



BLUETOOTH

For external devices and Low Energy sensors

OTA UPDATES

Convenient OTA (over-the-air) updating through user-friendly applications

DIFFERENT INTERFACES

CAN, RS232, RS485, UART interface support depending on chosen modification

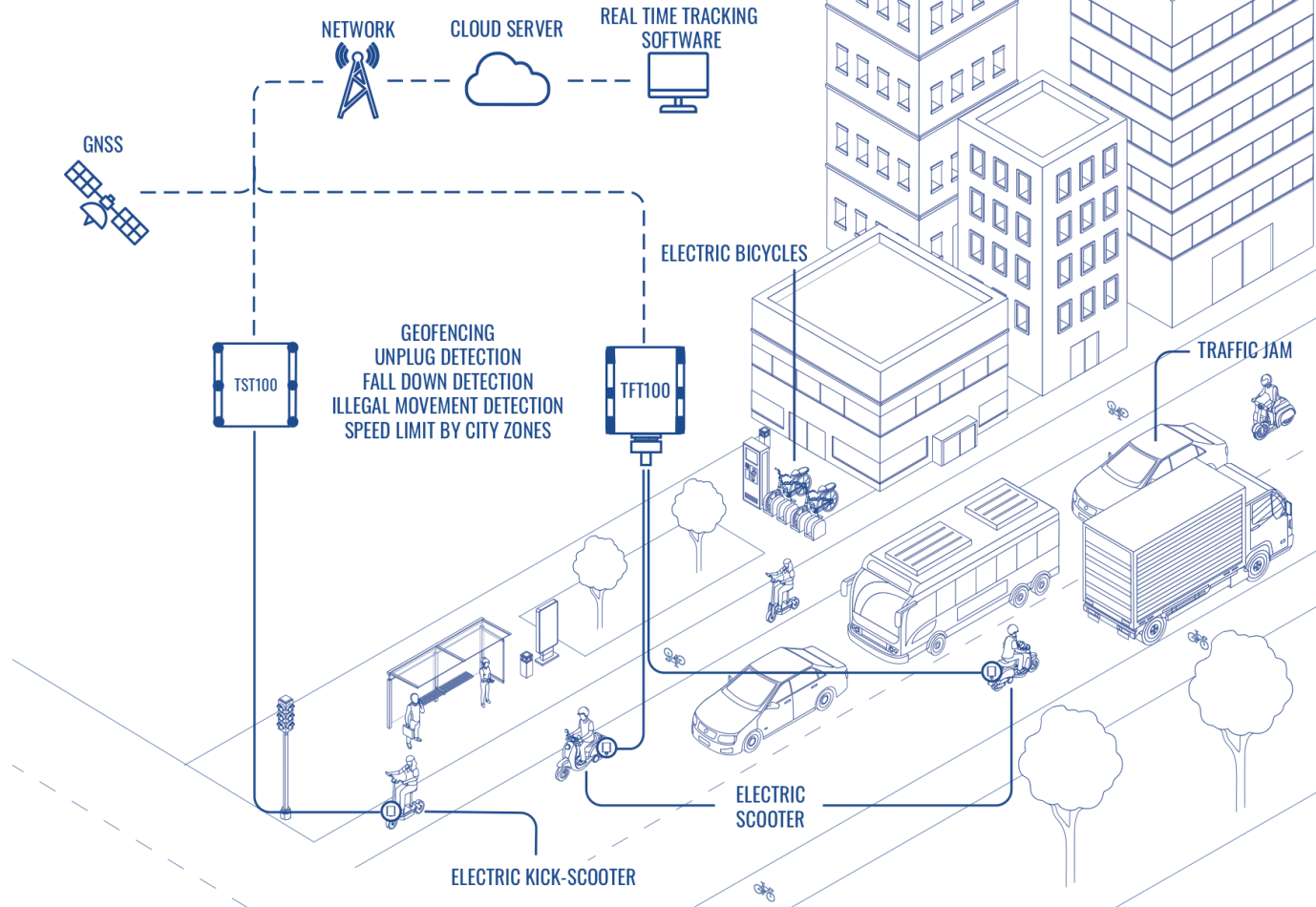
NEW! MANUAL CAN

Supported for extended DATA reading. Including J1939!

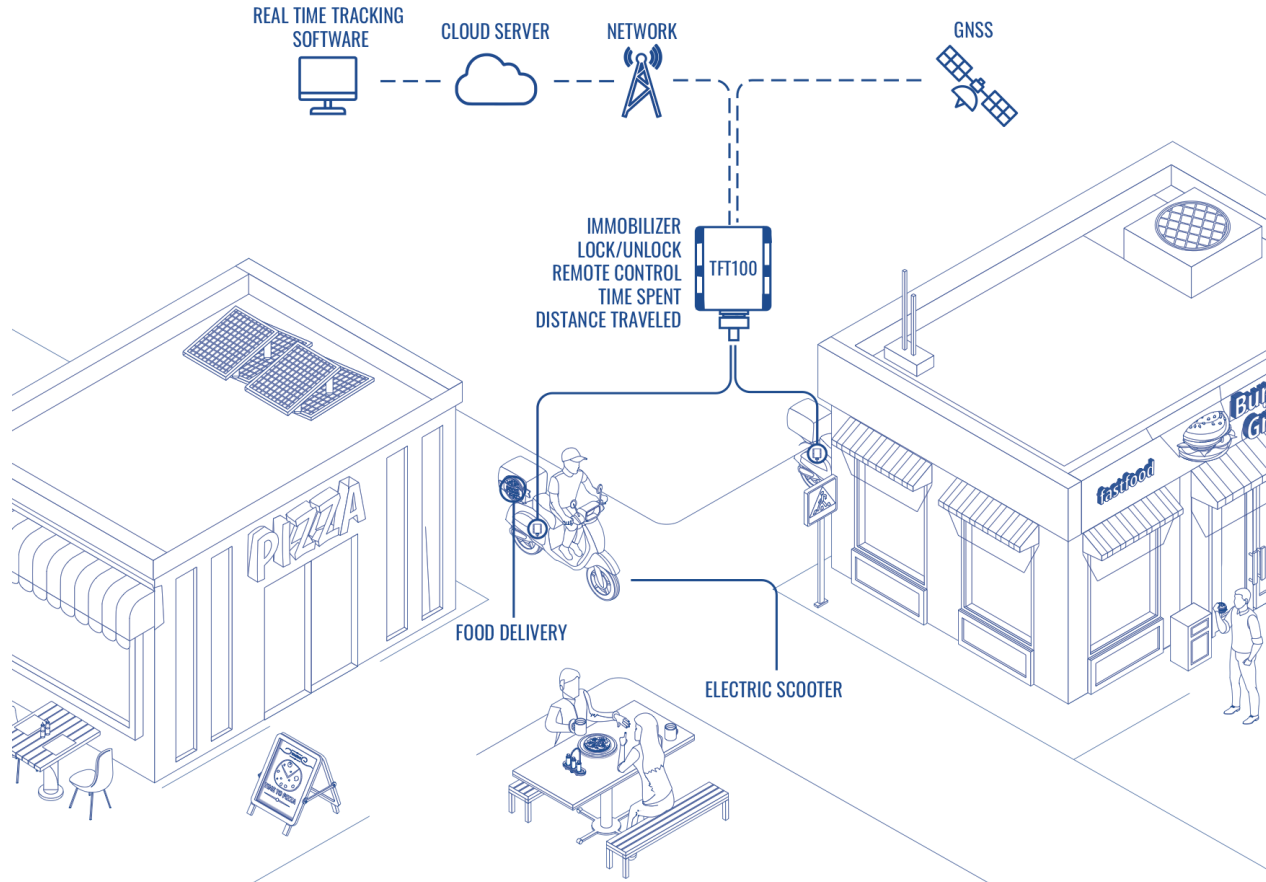
POWER SUPPLY

Wide power supply voltage range for integration variety (10-97 V)

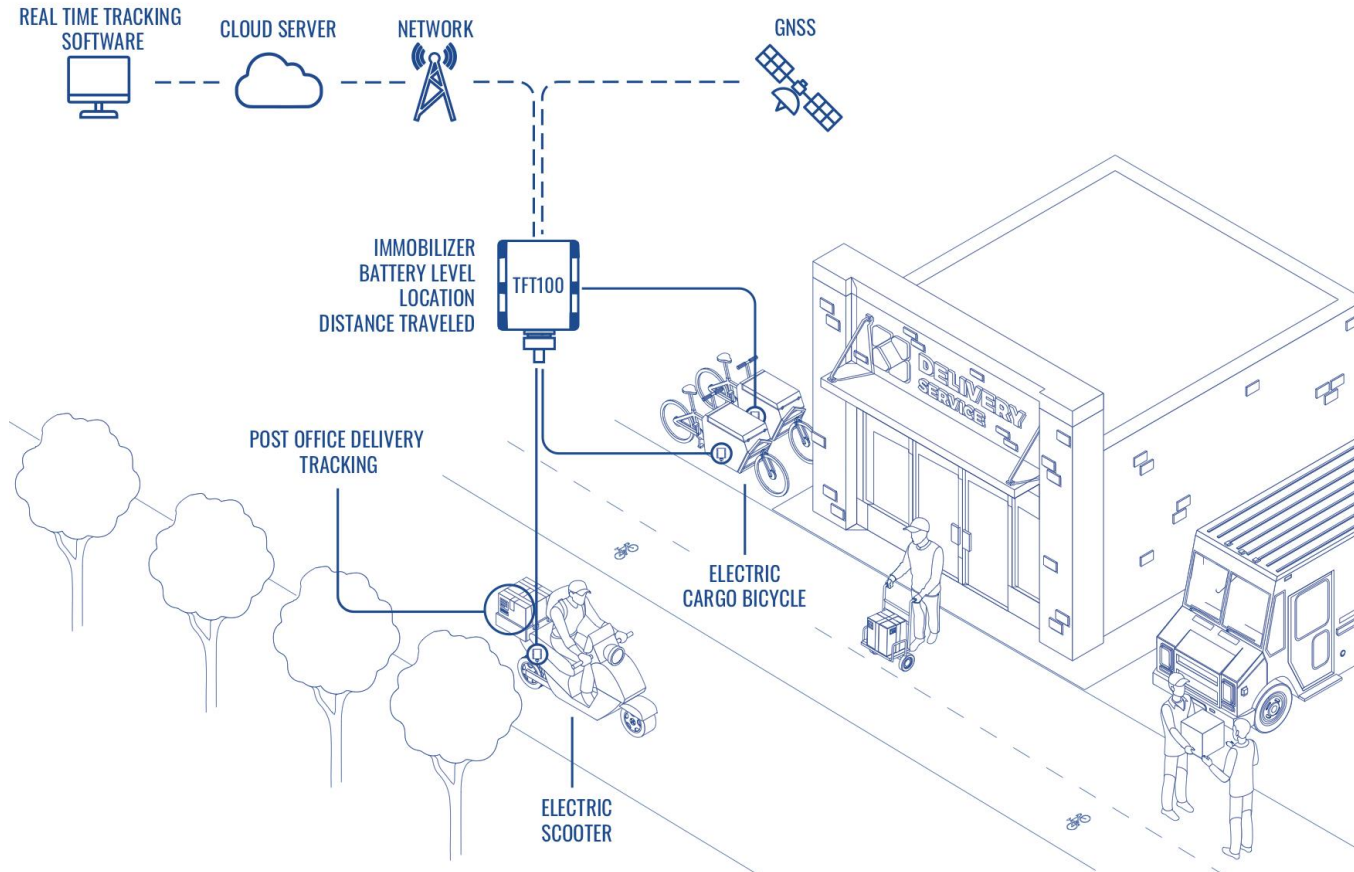
USE CASES: SHARED MOBILITY



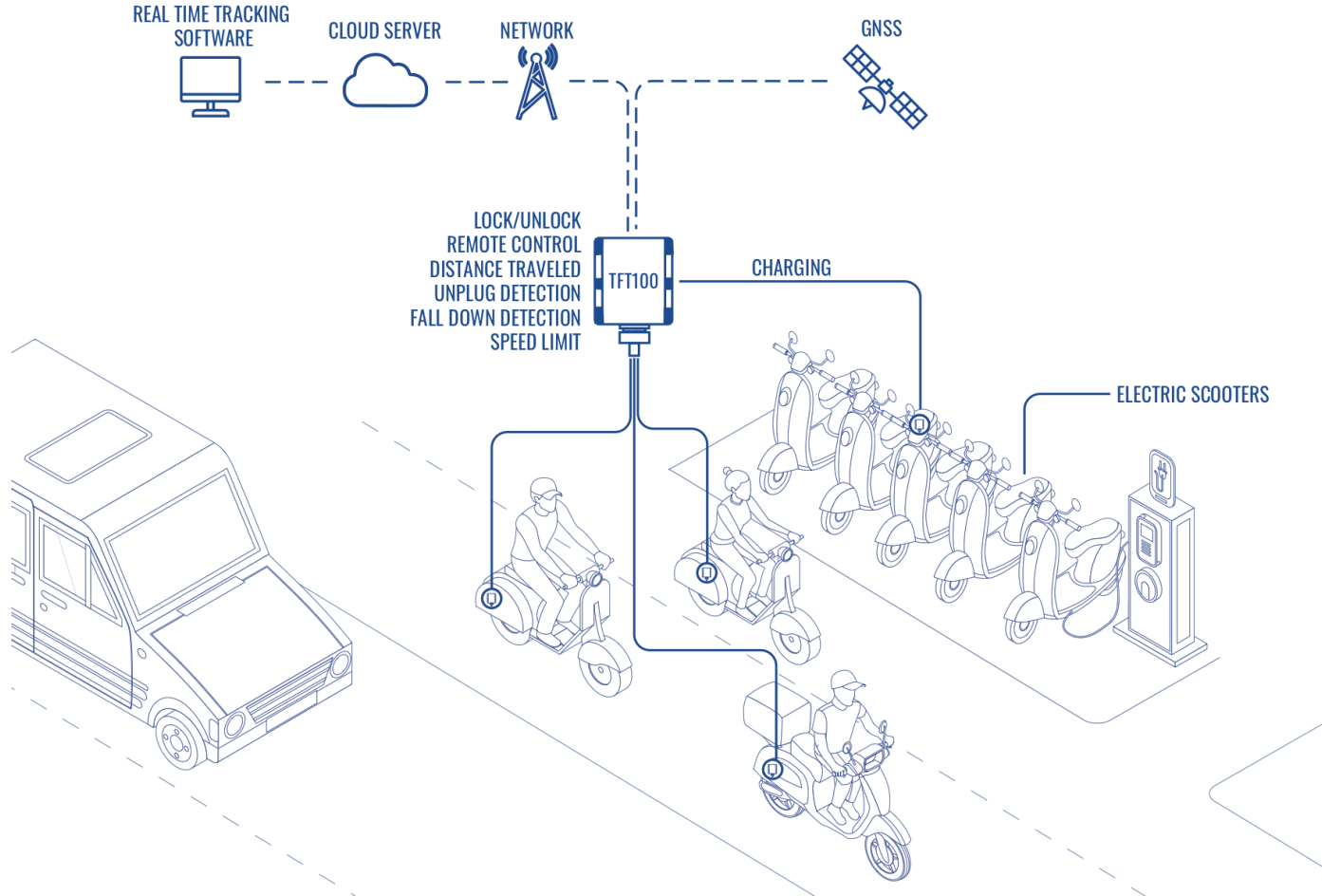
USE CASES: FOOD DELIVERY



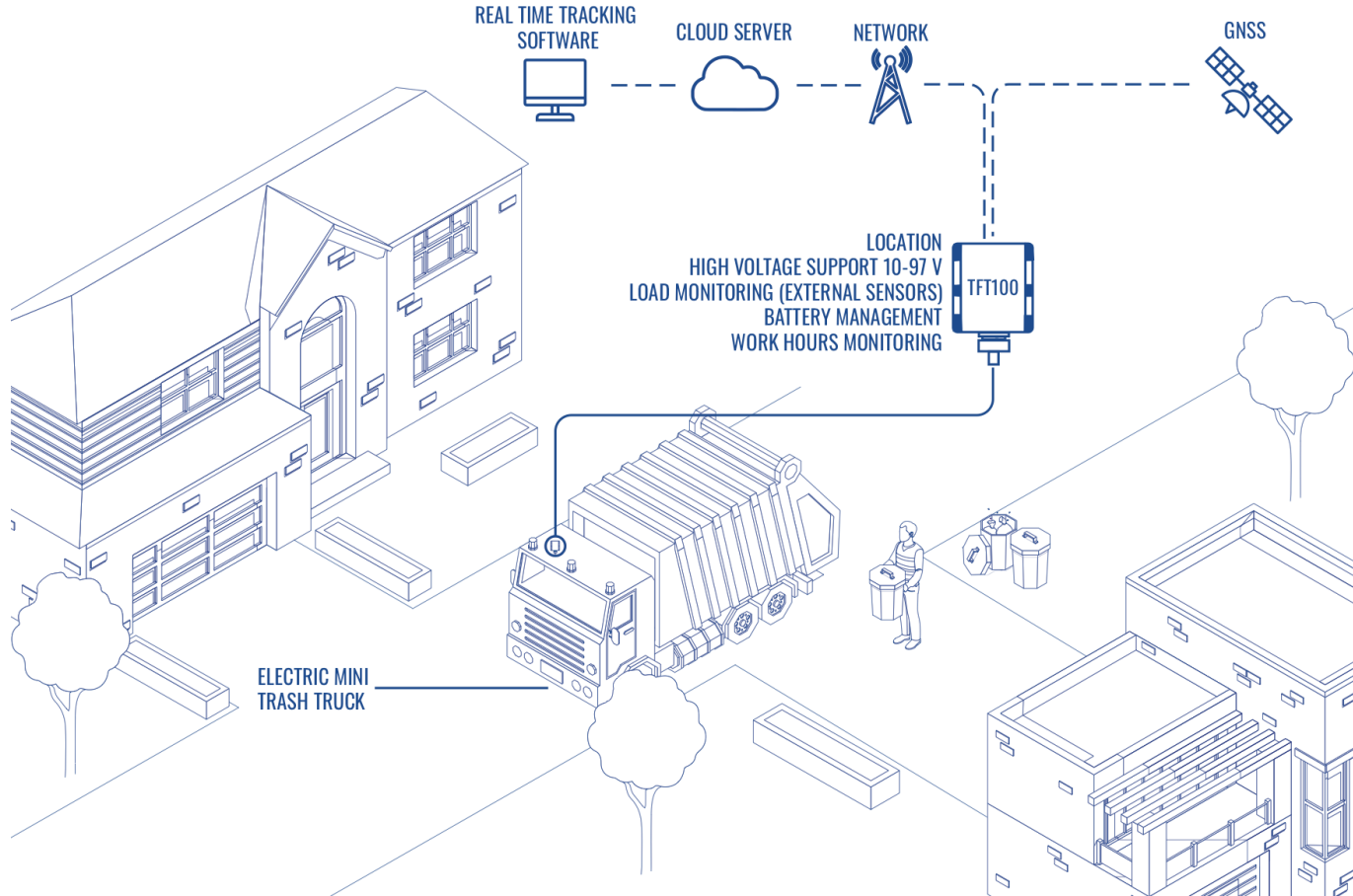
USE CASES: POST OFFICE



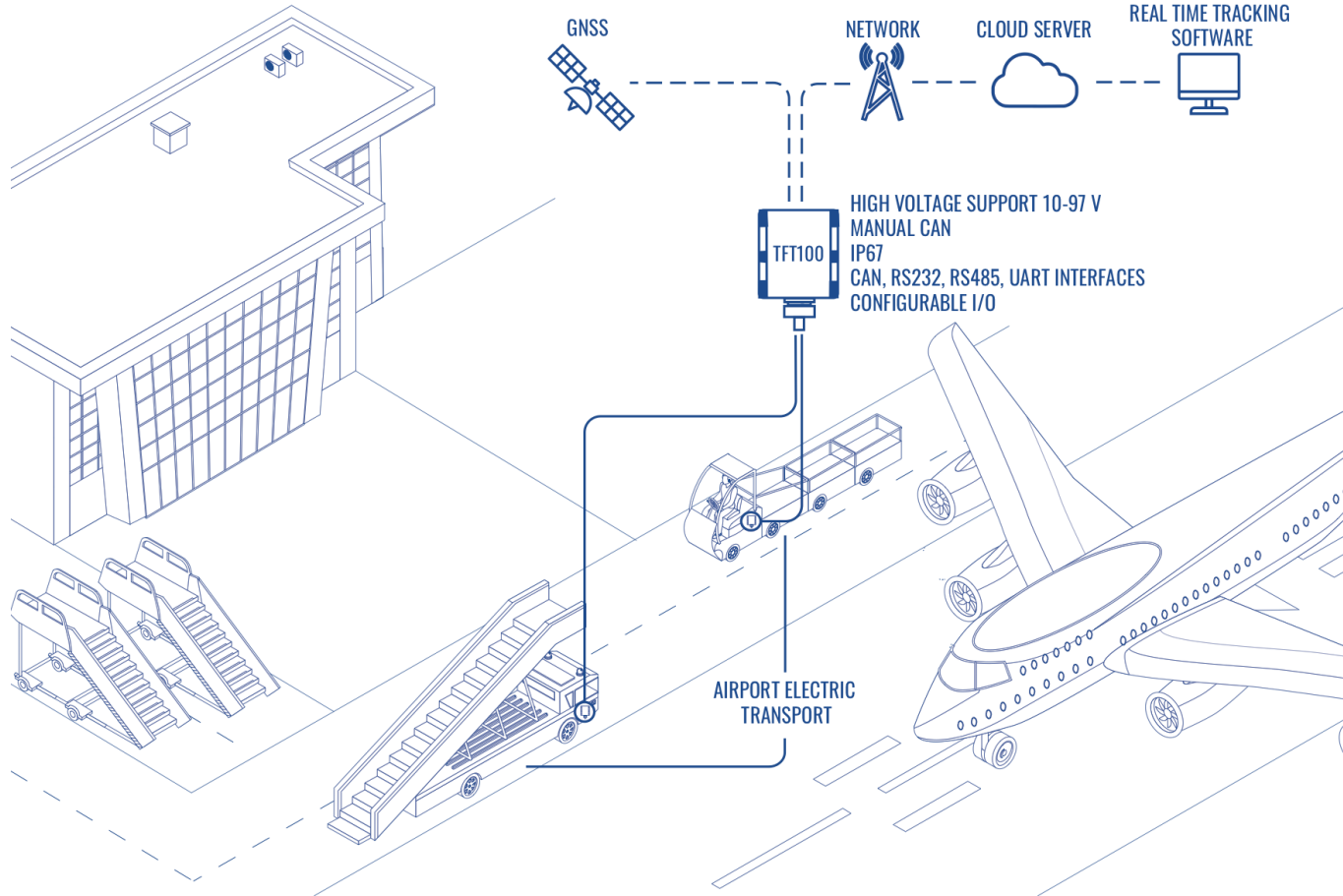
USE CASES: E-SCOOTER SHARING



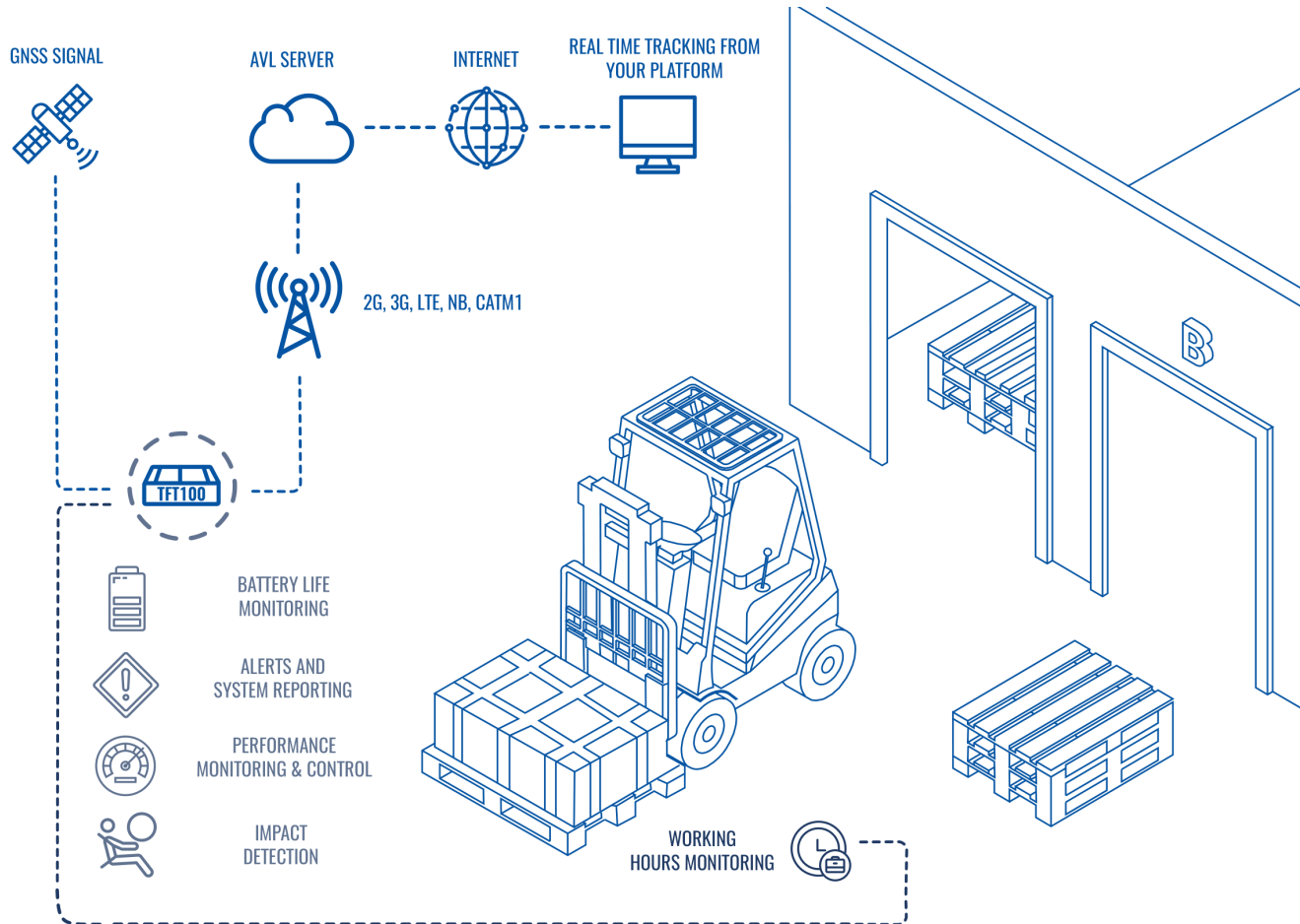
USE CASES: MINI TRASH TRUCKS MONITORING



USE CASE: ELECTRIC AIRPORT TRANSPORT MANAGEMENT



USE CASES: E-FORKLIFT MANAGEMENT



KEY FUNCTIONALITY INTRODUCTION

- **MANUAL CAN**
- **API + FLESPI**
- **E-SCOOTER & KICK E-SCOOTER SUPPORT**
- **CUSTOM OEM PROTOCOLS**
- **FULL SHARING FUNCTIONALITY**
- **HIGH VOLTAGE SUPPORT**
 - **E-SCOOTER TRACKER 10-97 V**
 - **KICK E-SCOOTER TRACKER 8-50 V**

MANUAL CAN & J1939

- No need of protocol implementation!
- Know battery level, speed, odometer values and other parameters
- Simply configurable via Teltonika Configurator
- Predictive maintenance
- Work hours monitoring
- Battery health
- **Custom OEM PROTOCOLS**
 - E-Scooter manufacturers
 - Kick E-Scooter manufacturers

API + FLESPI

- REST API for access to historical messages
- Parses RAW telemetry data and saves into unified JSON format
- MQTT API for instant access to real-time data
- Supports different data access methods
- Pushes the data to Amazon AWS IoT, Google IoT Cloud, Microsoft Azure IoT, or your own server!

```
"result": [  
  {  
    "battery.current": 0,  
    "battery.level": 89,  
    "battery.voltage": 4.005,  
    "channel.id": 4295,  
    "device.id": 1014337,  
    "device.name": "tst100 e-scooter (teltonika)",  
    "device.type.id": 562,  
    "engine.ignition.status": false,  
    "event.priority.enum": 0,  
    "external.powersource.voltage": 40.18,  
    "gnss.state.enum": 1,  
    "gnss.status": true,  
    "gsm.cellid": 38844,  
    "gsm.mnc": "24601",  
    "gsm.signal.level": 100,  
    "ident": "358480081816771",  
    "lock.status": true,  
    "movement.status": false,  
    "peer": "188.69.192.130:64830",
```



FULL SHARING FUNCTIONALITY

FOR E-SCOOTERS & KICK E-SCOOTERS

- Control over GPRS
- Lock/Unlock
- Speed limit set up
- Remote control
- Eco/Sport modes (if supported)
- LED control
- Distance traveled
- Unplug detection
- Fall down detection

OUR DEVICES SUPPORT

○ E-SCOOTERS

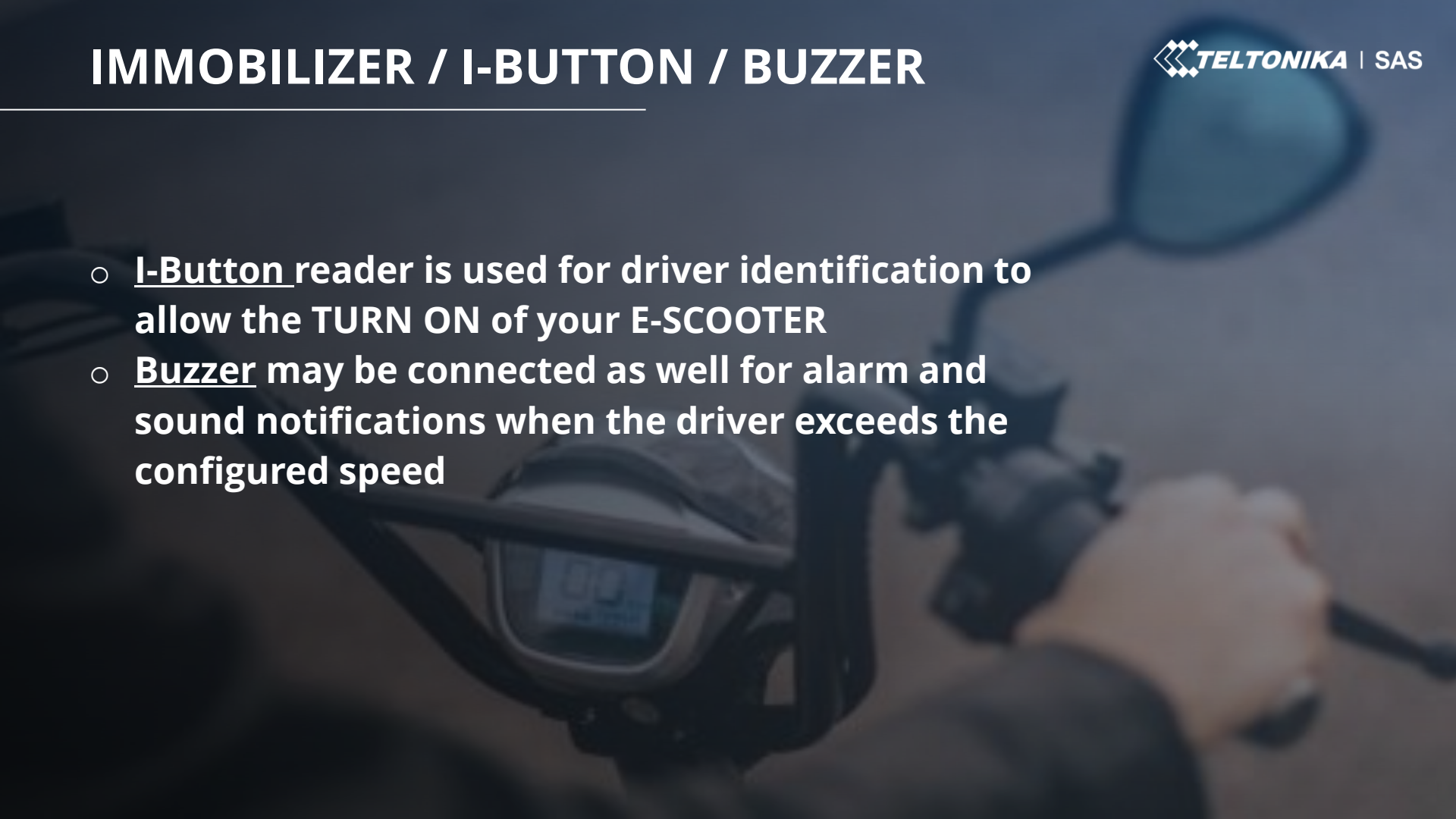
- GOVECS
- ASKOLL
- SUPERSOCO
- OTHERS ON THE LIST!

○ KICK E-SCOOTERS

- SEGWAY
- XIAOMI
- FITRIDER
- OTHERS ON THE LIST!

IMMOBILIZER / I-BUTTON / BUZZER

- I-Button reader is used for driver identification to allow the TURN ON of your E-SCOOTER
- Buzzer may be connected as well for alarm and sound notifications when the driver exceeds the configured speed



NEW! E-MOBILITY TRACKER^{PRO} (EMB100)



NEW! EXTERNAL GNSS ANTENNA

Added external high gain GNSS antenna on CAN version

OTA UPDATES

Convenient OTA (over-the-air) updating through user-friendly applications

NEW! LTE

LTE CAT-M1, LTE CAT-1 connectivity support depending on chosen modification

DIFFERENT INTERFACES

CAN, RS232, RS485, UART interface support depending on chosen modification

POWER SUPPLY

Wide power supply voltage range for integration variety (5-97 V)



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Subject:
E-Mobility WEBINAR