




μlink
Connected Car

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HELLO! WE ARE SMARTO



SMARTO is a Startup specialized in the Internet of Things and particularly in the connected car. Through a significant investment in research and development, SMARTO aims to develop and market innovative products for easy use and offer a new experience to users.

Unlike the premium car manufacturers (BMW, Mercedes, Audi), the generalists (PSA, Renault, GM,

Ford and VW) and the giants of the net (Google & Apple), engaged in a fierce battle to impose their technologies to connect new vehicle models, SMARTO aims to connect the existing global fleet, which now represents more than 1.6 billion cars.

The economic advantages of the connected car are intimately linked to the data collected. These are the source of new services such as predictive, contextual and intuitive mobility that will enhance the driving experience, coaching the driver in how to reduce carbon emissions and fuel bills, predictive maintenance to predict and anticipate failures and the wear of parts, a smart insurance to pay the right price

"pay as you drive".

This, new services consisting of suggesting to the driver a gas station, parking, a repair garage, a hotel, a restaurant or any type of shop. These services are of strong interest to the net giants and car manufacturers, who see these services as a new revenue stream.

The Smartphone is now central to marketing strategies, it has revolutionized our habits, and therefore we have based our connected car strategy around the Smartphone and dongle for which we have set ourselves the challenge of overcoming three key issues: congestion, safety and security.

This brochure will present the μlink solution for the connected car, the fruit of 18 months' work of an ambitious engineering team, which has overcome difficulties one by one to produce the most miniature, safety & secure dongle in the world.

μLINK OBD-CAN



μlink is an OBD-CAN dongle that connects your car via bluetooth with your smartphone and the Cloud. The dongle connects to the diagnostic socket that is on all vehicles since 1996, it retrieves vehicle data through the OBD diagnostics requests and functional CAN frames.

μlink allows you to improve your driving, reducing fuel consumption, locate your car and many more features to facilitate the car usage and offer a new users experience.

An OBD dongle Ultra-Thin, Safety & Secure

The global market is full of OBD dongles. However, these dongles mainly from Asia do not always meet the European and North American standards for safety and security.

We focused mainly to overcome three constraints : miniaturization, safety and security

Ultra Thin

We solved the problem of miniaturization and aesthetics, an OBD dongle with a thickness of 6mm, finish fuses hatches, glove boxes and other compartments that do not close.

Safety

The OBD dongle is not intrusive to protect the safety of occupants and pedestrians, just by listening

the communication protocol is detected, and vehicle data are retrieved.

Secured

The communications between the OBD dongle and Smartphone are encrypted; the Bluetooth pairing is simple and secure.



The μLink OBD dongle is a concentrate of technology, based on automotive certified electronic components, it is designed around three cores Cortex M0, M3 & M4 from Texas Instruments, it includes a Bosch accelerometer and a 64Mb of memory.

TECHNICAL SPECIFICATIONS

- SOC 3 cores Cortex M0, M3 & M4
- Dual CAN 2.0 A & 2.0 B, 32 Mailbox
- Transceiver NXP TJA1042 certificated Automotive
- Line K & L, PWM & VPW
- 64 Mb of memory, saving and data timestamp
- Configurable accelerometer 2g to 16g
- Bluetooth BLE 4.0 compatible BLE 4.2
- Data security cryptage AES128
- Operating temperature -45° à +85°
- Power consumption 20mA, 5μA in sleep mode
- OTA On The Air firmware upgrading

CERTIFICATIONS



ECO-DRIVE

There are many detailed studies on fuel consumption and the gains which can be obtained by various actions.

Training programs for drivers and learning eco-driving can allow to expect a reduction in the up to 20%.

This conclusion comes from a training program organized by the Swiss organization Quality Alliance Eco-drive, and confirmed by several other European studies.



µLink OBD-CAN
ECO-DRIVE mode
let you easily reduce
average fuel consumption

UP TO **20%**

Over the past decade, engine technology and vehicle performance have improved dramatically. Emissions of CO, HC and NOx are reduced through the introduction of catalytic converters.

Fuel consumption and CO₂ emissions can also be reduced through technological innovations but this is only partially effective in real traffic conditions.

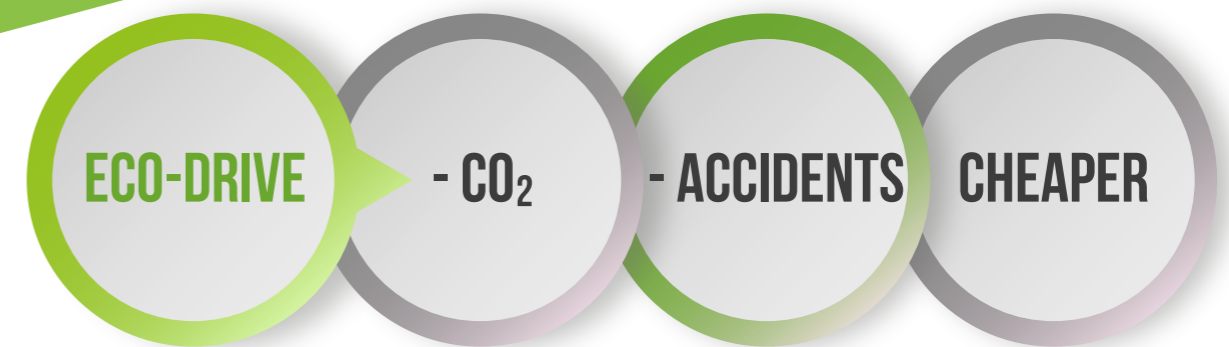
In fact, most people do not drive their vehicle as require the design and calibration of the engine.

Manufacturers calibrate the engines of their vehicles in order to establish a delicate balance between optimum maneuverability and optimal exhaust emission levels.

Through µLink eco-drive Mode, it is possible to approach the optimal conditions.

Eco-driving has the potential to make significant fuel savings. But besides the fuel consumption reduction, there is other benefits like :

- Reducing emissions of greenhouse gases in particular in terms of CO₂, which has a direct impact on global warming.
- The reduction in risk of accidents through better anticipation and smoother ride
- The ride is more comfortable for the driver and passengers through style smoother driving.
- The vehicle is quieter with a pipe at lower speed.



µLink OBD-CAN algorithms are based on the following rules :



1

Switch to high gear as soon as possible. Raising the speed between 1500 and 2000 r / min.



2

Maintain a steady pace. Snap the highest gear possible and drive with low engine speed.



3

Anticipate traffic. Looking as far as possible and anticipate surrounding traffic.



4

Decelerate gradually. Whether to slow down or stop, decelerate smoothly by releasing the accelerator in time, leaving the car in jack (engine braking).



5

Regularly check tire pressure. A pressure 25% too low increases rolling resistance by 10% and fuel consumption by 2%.



RELAX WE BUILT A HIGH QUALITY APPLICATION

µLink Dongle OBD is linked with an interactive application, simple and optimized to fit all user profiles.

Application available on



µLINK APP

Connect your car with the world of tomorrow! Reach your destination safely and without traffic jams while saving on gas and money, get help in case of a breakdown or an accident and receive traffic relevant information right when you need it.

The µlink App (iOS & Android) connects your car via bluetooth with your smartphone and the digital world and offer several innovative features that make driving stress-free, cheaper, and safer.

Whether your car is brand new or decades old, it has data hidden inside it about your mileage, gas usage, performance, and even its engine health.

OUR FEATURES

When you drive, the app wirelessly pairs with the adapter via Bluetooth and securely stores each trip in the cloud.

The app offers features every driver should have like engine diagnostics, parked car locator, and emergency crash response.

You'll see a route map with distance, time, MPG, and the cost of gas for every trip you take.



01

01. CHECK ENGINE LIGHT

Decode engine problems like a pro

μLink diagnoses your check engine light with easy-to-understand descriptions of what's wrong. Clear the light right from the app if it's something you can fix yourself, like a loose gas cap. If it's serious, a listing of well-reviewed mechanics is just a tap away.

02. FUEL EFFICIENCY

Improve your driving with real-time feedback

To help you save money on gas, the adapter's built-in speaker can remind you to drive more smoothly and efficiently. Audio alerts signal when to ease off the gas and brake pedals and help you avoid high speeds. The app shows your progress and scores your driving each week, just a tap away.



02

Locate your parked car

03. WHERE'S MY CAR?

μLink always remembers where you parked so you don't have to. See a parking map in the Automatic mobile app or on your wrist with Apple Watch or Pebble. There's even walking directions to help you find your way.



03

04. Trip Mode.

Store every trip you make

This feature allows you to store all the data of your trips : time & date, distance traveled, amount of carbon emissions, amount of fuel consumed and cost of trip.



04

AND MORE FEATURES

The μlink App is available in English and French.

The economic advantages of the connected car are intimately linked to the data collected. These are the source of new services such as predictive, contextual and intuitive mobility that will enhance the driving experience, coaching the driver in how to reduce carbon emissions and fuel bills, predictive maintenance to predict and anticipate failures and the wear of parts, a smart insurance to pay the right price "pay as you drive".



SMART INSURANCE

Using our Connected Car solution, insurance companies can adapt their offerings, and offer the "pay as you drive" to encourage drivers to adopt responsible driving, to reduce carbon footprint and reduce accidents.



PREDICTIVE MAINTENANCE

Predictive maintenance can predict and anticipate failures and wear of automobile parts. This is a very valuable help to avoid failure in the middle of the road and reduce traffic jams.



FIRMWARE UPDATE

The dongle and the mobile application are updated continually to integrate over the air new features.



EXPERT MODE

Advanced Mode for technophiles, engineers in the automotive industry, it allows you to view the CAN exchange, log the CAN traces, and access the diagnostic data. Writing diagnostic requests, byte by byte in hexadecimal format, and read the responses sent by the ECUs.



DATA LOGGING

Recording of all trips vehicle data in the Cloud for an offline analysis, for the drivers and vehicle fleet managers.



MAKE DRIVING EXPERIENCE SAFER - EASIER - ECONOMIC

CONTACT US!

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