

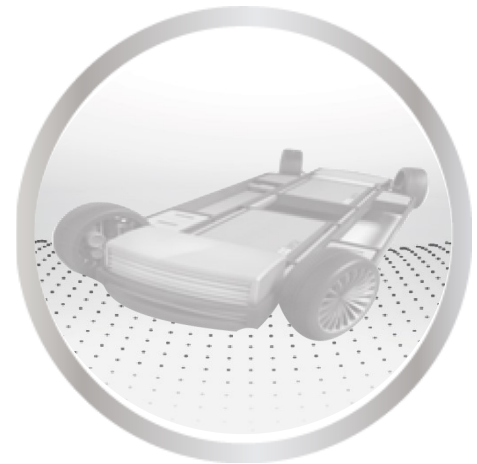


# iMOBYCOM

## Electro-Mobility Platform for Vehicles

iMOBYCOM is an integral electro-mobility platform for public service fleets and private applications in the frame of Smart Green Cities.

iMOBYCOM is a set of mechanical, electronic and mechatronic modules forming a functional electrical platform that moves based on specific instructions.



**From the Vehicular Platforms to the Advanced Vehicles for urban applications in Smart Cities**



Services for the Smart City citizens in the frame of the IoT.

### ECU - SENSOR MANAGEMENT

**iFDC**  
Management of sensors associated to the Front of the platform

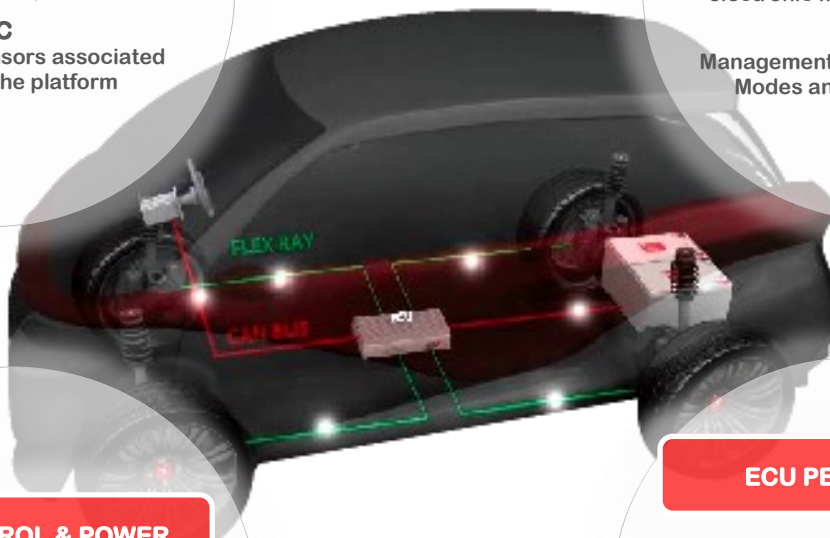
**iRDC**  
Management of sensors associated to the Rear of the platform



### MAIN ECU

**iGCPM**  
Electronics for interface between the electronic modules of the platform

**iVDC**  
Management Electronics for Driving Modes and Vehicle Dynamics



### ECU - CONTROL & POWER

**iMWC**  
Electronics for Control and Power of the Steering and Traction Motors associated with each Mechatronic Wheel

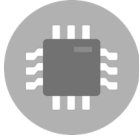
### ECU PERIPHERALS

**iFDC**  
Management of sensors associated to the Front of the platform

**iRDC**  
Management of sensors associated to the Rear of the platform

**iPCM**  
Parking sensors

## APPLIED TECHNOLOGIES



**Electronics**  
Control, Sensors & Power  
of the vehicle platform



**Communications**  
Control & Communication with  
the Smart Green City in the  
frame of the IoT



**Mechanics**  
Configures the vehicle platform,  
with specific characteristics



**Energy System**  
Power source for vehicle  
propulsion

## TECHNICAL SPECIFICATION

### IMWC

iTMC: Drive / iSMC: Steer / iVDC: Communications (core)

Drive motor Up to 7,5Kw

Steer motor Up to 2 motors of 250W

CAN & FlexRay communications / Air cooling

### IGCPM

Gateway for the management of iMOBYCOM modules

### IVDC

2 FlexRay ports / 4 CANBUS ports / 8 Analog Inputs / 12 Digital Inputs

Power supply 12V redundant input ( $\pm 80V$ ) / 5V Output

### IPCM

8 independent parking sensors

CAN 125Kbps communications

### IFDC

Front lights, interior latch, horn, wiper engine and water pump

Position control of view mirrors, rain and light sensors

Defrosting, 2 independent 350W outputs (configurables 0-350W)

3 Dig. Inputs / 2 Analog Inputs. / CAN 125Kbps communications

### IRDC

Rear lights, luggage compartment latch

CAN 125Kbps communications

## SERVICES

R&D capabilities for tailor made solutions  
Hardware-Software development



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