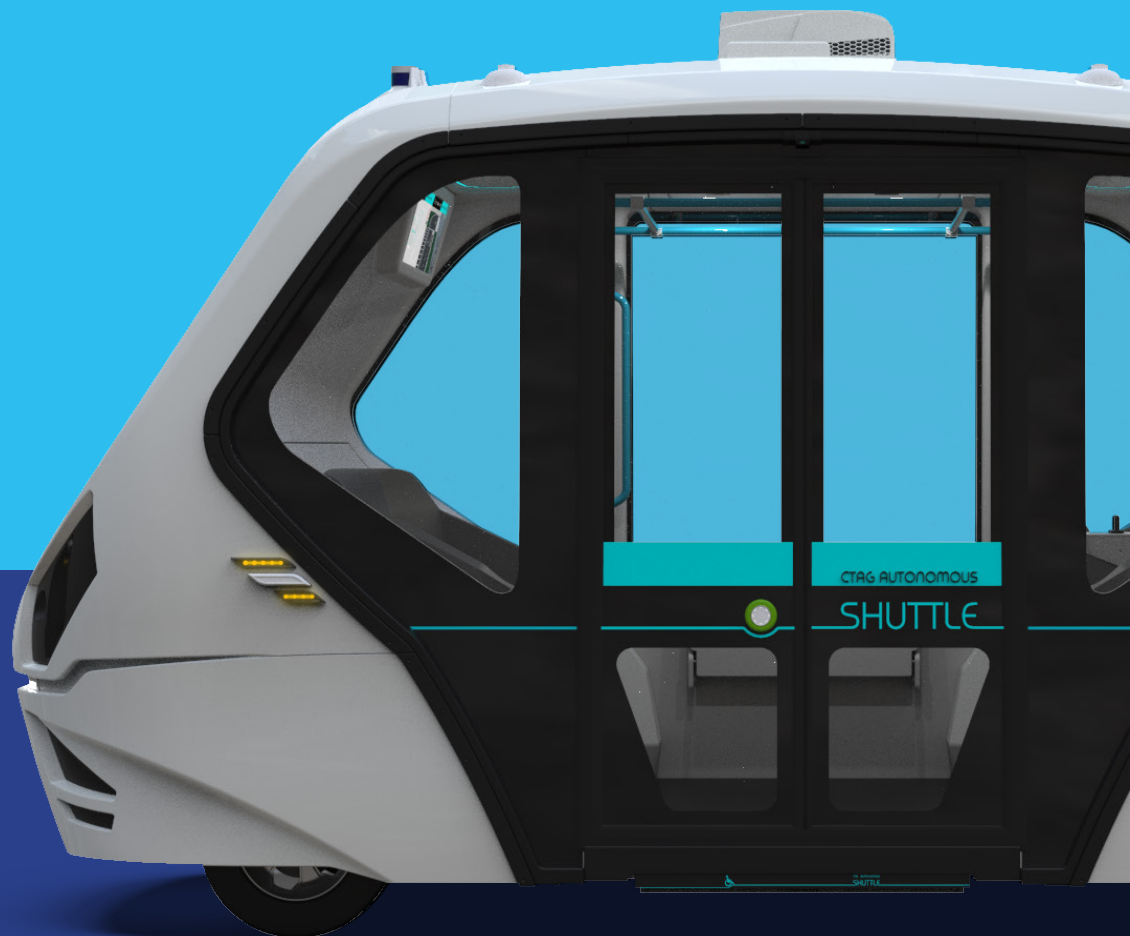


CTAG´s Cooperative & Autonomous SHUTTLE

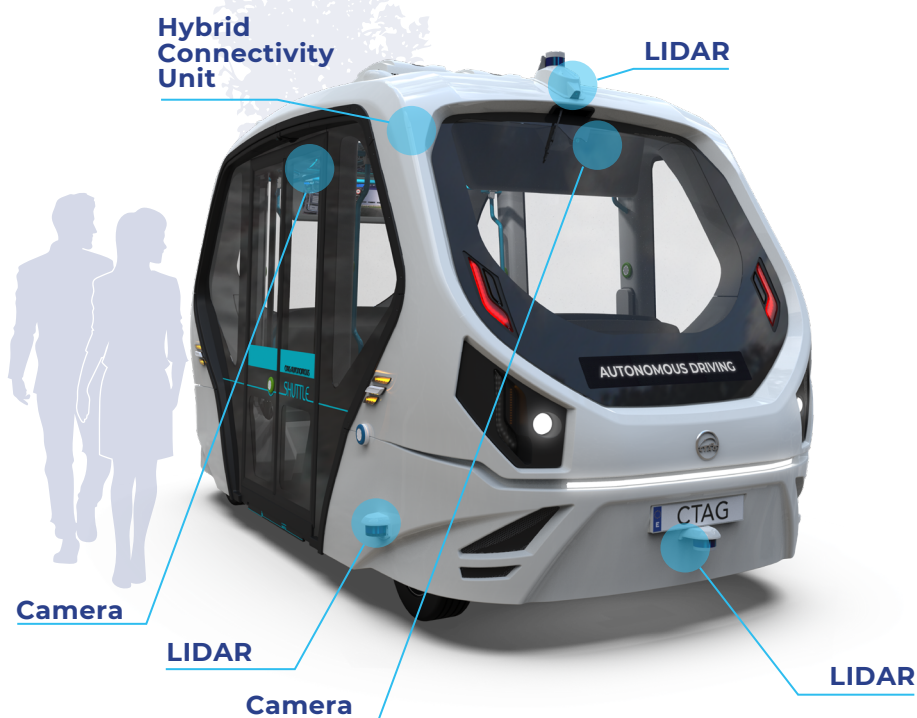
CTAG Cooperative and Autonomous Shuttle is an innovative and sustainable mobility solution that covers first and last mile transport, as well as micro transit use cases.

Main characteristics

- 100% electric, connected and autonomous
- Maximizes the use of cooperative technologies and services
- Seeks to satisfy the needs of different kinds of users enhancing user experience



ELECTRONICS AND
SMART MOBILITY DIVISION



CTAG's autonomous and connected last-mile Shuttle arises as a new solution for the set of next-generation smart mobility products, giving an answer to demographic, social and urban / rural transport challenges.



WHO STANDS TO BENEFIT?



Public Transport
Connections



Industrial
Hubs



Airports



Universities



City
Center



Rural
Areas



Other
Possibilities

KEY FEATURES



Autonomous L4

Its level of autonomy allows the shuttle to perform under almost any circumstance.



V2X Connectivity Module

A powerful unit capable of dealing with long-range (4G, 5G) and short-range (ITS-G5) frequencies



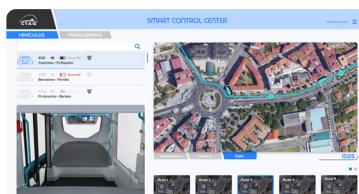
Remote Driving Setup

CTAG's Shuttle could be remotely controlled from a desk support thanks to 5G network



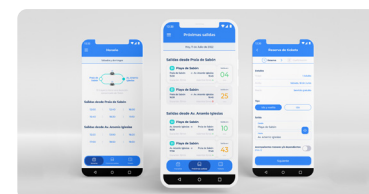
Wheelchair Ramp

With a capacity up to 12 passengers, CTAG's Shuttle also offers a ramp for people with reduced mobility



Fleet Management Center

A web-based platform to control the shuttle fleet and manage the routes, control the interior view and get real time information of the service



User App

The digital face of the shuttle, offering users the chance to discover routes, manage their tickets and look for timetables

CHARACTERISTICS

Range

Average range (Nominal) 11 hours

Power System

Max Capacity (kWh)- 20,48
Charge Time (230V A/C single-phase) 2h (90%) 3h (100%) three phase

Dimensions

Length 5225 mm
Width 2409 mm
Height 3013 mm
Wheelbase 3185 mm
Passenger Room Height 2231 mm

Communication

Communication Unit CTAG HMCU
(ITS-G5, 3G/4G, PC5, 5G)

Weight

Curb Weight 2000 kg
Carrying Capacity 1500 kg

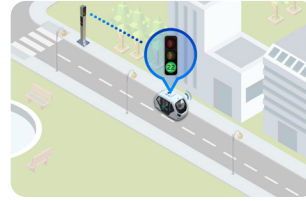
Equipment

Emergency stop buttons 3
Emergency brake Yes
Parking brake Yes
Safety Pack *Optional seat belt for people with disabilities*
Air conditioning Yes
Heating Yes
Windows Glass
Internal visual Information 4 information screens
External visual information 2 information screens (Ledmatrix)
Audio information Yes
Lighting *Exterior LED strips under the headlights; Interior: LED lights & LED strips under seats & roof*
Light/rain sensor *Automatic wiper & light control (on/off)*

Others characteristics

Up to 12 passengers
Driver cockpit
Lighting effects
Motorized ramp
360° Vision system

COOPERATIVE SERVICES

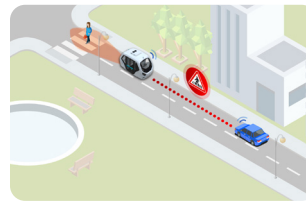
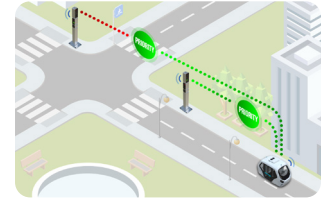


Glossa

The shuttle is capable of communicating over short-range networks with traffic lights to find out their current status and the time remaining to change phase

Green Priority

In addition to the ability of consulting information related to traffic lights status, it also has the ability to request priority

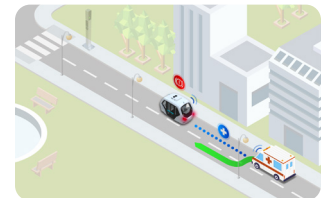


Cooperative Sensing

Notification to other vehicles by V2V messaging of obstacles detected on the road, improving safety

Emergency Vehicles

Reception of notifications of emergency vehicles in service, giving way or facilitating their operation

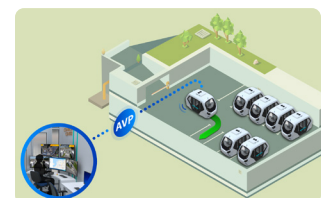


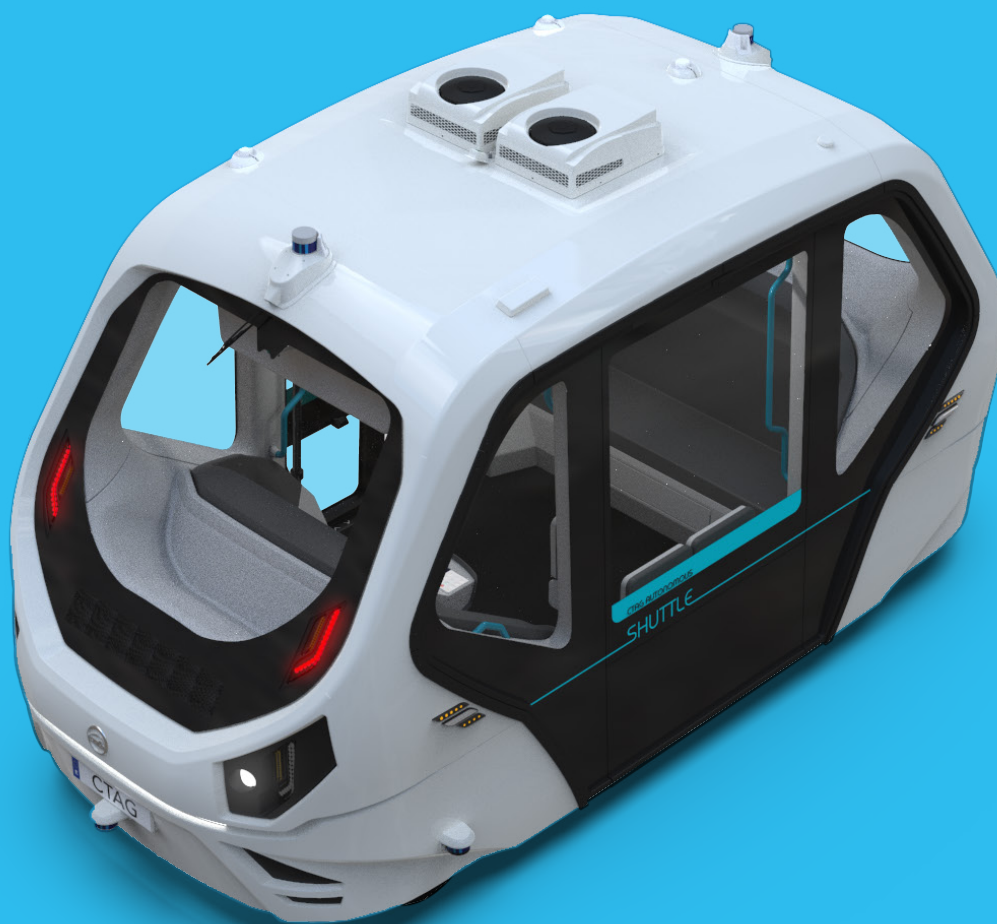
Remote Control

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Automated Valet Parking

Ability to maneuver in tight spaces to park without human intervention





Polígono Industrial A Granxa. Calle A, parcelas 249-250
E-36475 Porriño (Pontevedra) CTAG

Tel.: +34 986 900 300

Fax: +34 986 900 301

e-mail: electronics@ctag.com



ELECTRONICS AND
SMART MOBILITY DIVISION

 Shuttle by CTAG

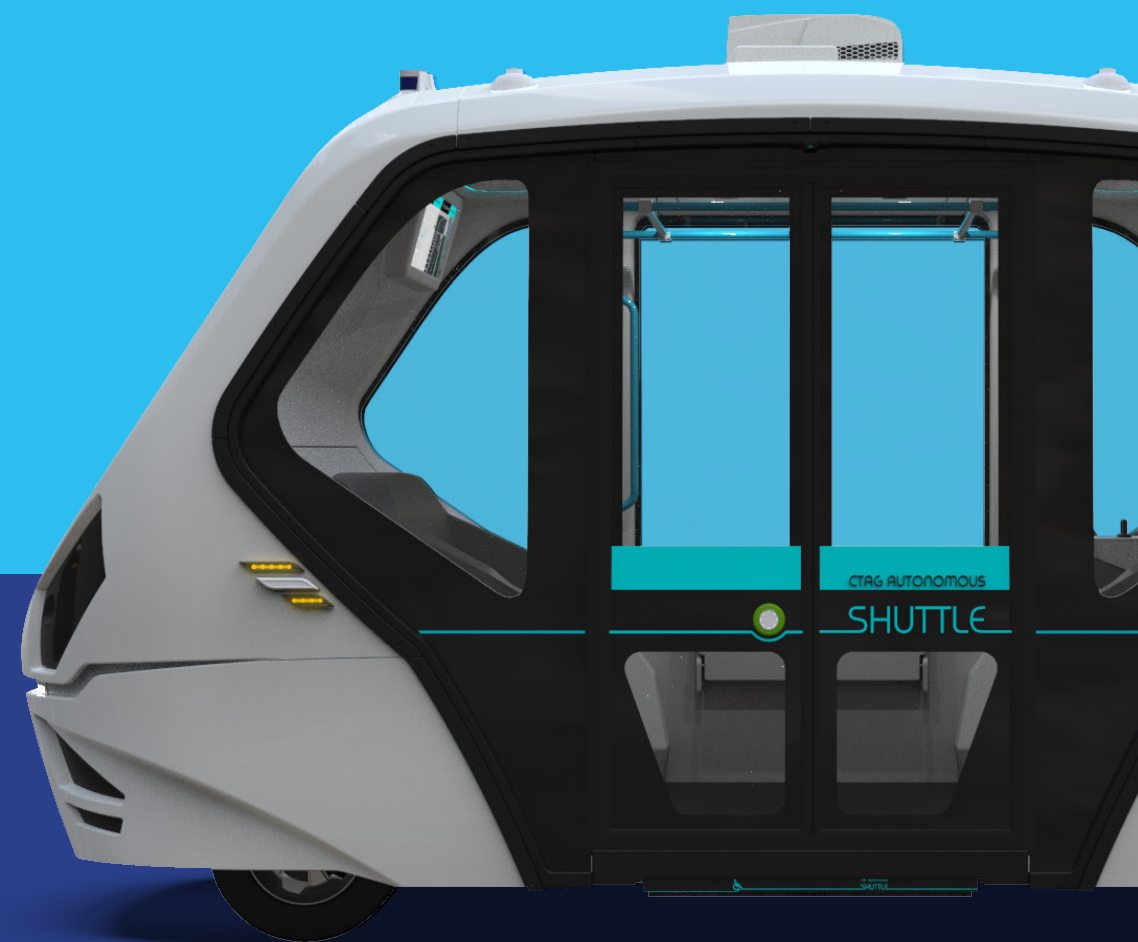


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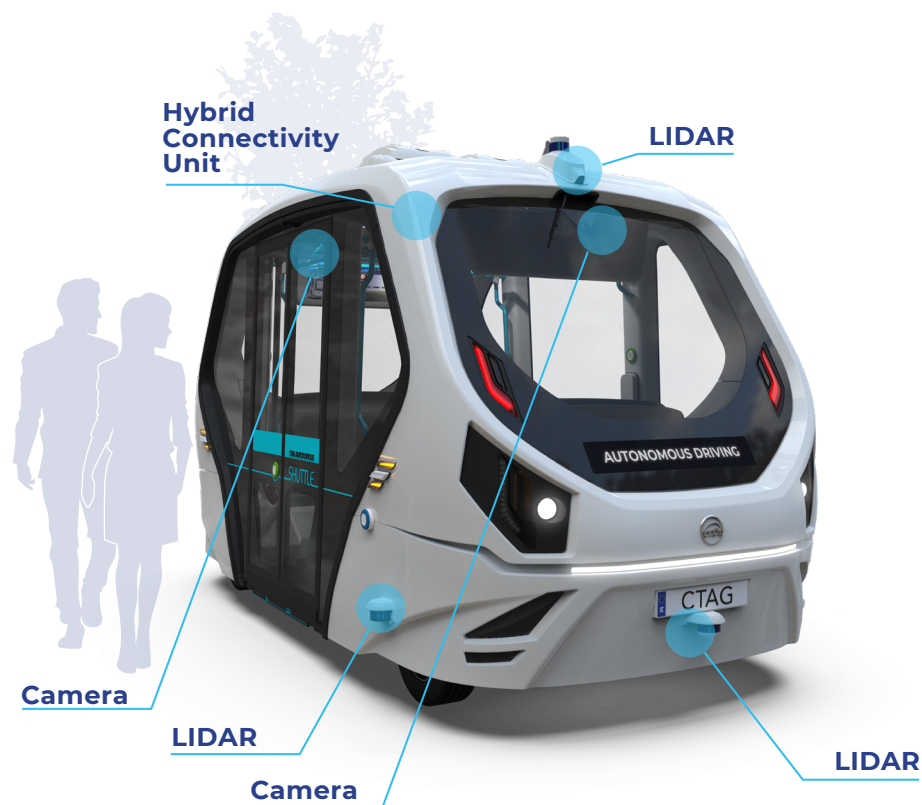


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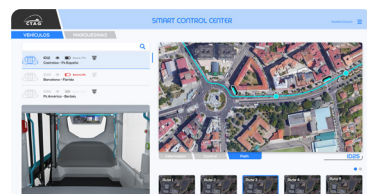
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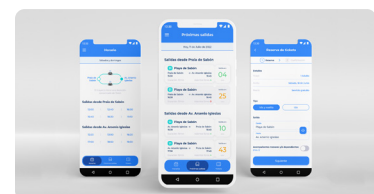
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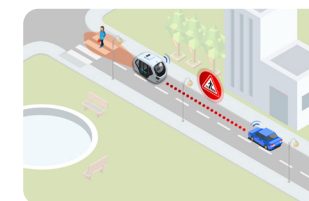
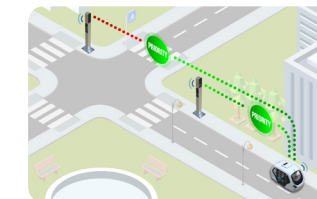


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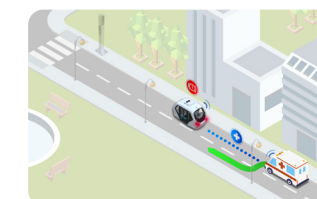


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