



Irizar

Irizar range



The Irizar Group

Irizar is a business group with an international presence whose business is focussed on the passenger transport, electromobility, electronics, electric motors and generators, connectivity and energy sectors.

The Irizar Group is comprised of seven brands that have production operations in 13 plants spread across Spain, Morocco, Brazil, Mexico and South Africa in addition to its own R&D centre.

Founded in 1889, today, Irizar is a well-established Group made up of more than 3,350 people, with a commercial presence in the five continents. It is geographically and industrially diversified, continuously growing and firmly committed to the brand, technology and sustainability.

Irizar, S. Coop is the parent company of the conglomerate and its headquarters are located in Ormaiztegui (Gipuzkoa, Spain) where Creatio, the Group's Research and Development Centre, is also located.



A unique brand

Safe, reliable and comfortable vehicles

Avoiding problems on the road is a priority for Irizar. That is why, in addition to complying with the most demanding international regulations in force, Irizar buses and coaches have the most advanced active safety systems, including stability control (ESP), adaptive and predictive cruise control (ACC + PCC), advanced emergency braking systems (AEBS), lane departure warning (LDW) and tyre pressure monitoring systems (TPTMS), in addition to full LED headlights and the option of a driver fatigue detector (DFT) and predictive shifting (PS).

With regard to passive safety, it is reassuring to know that, in extreme situations, Irizar buses and coaches have been designed to withstand rollovers and head-on collisions by optimising weight distribution.

Irizar buses and coaches are designed based on the most advanced technologies in design, materials, components and production processes and are subjected to the most rigorous fatigue and reliability tests at one of the world's most prestigious applied research institutes, with excellent results.

The spaciousness and optimal layout of the passenger compartment, the carefully designed ergonomics of the seats, the reduced levels of noise emission and vibrations, the climate control and versatile fixtures and fittings all enhance passenger comfort.

The spacious and ergonomic driver's position with accessible controls, electronics integrated into a single central console (MMI) and high visibility rear-view mirrors, in addition to Irizar's modern and innovative virtual cockpit, further underlines this idea.

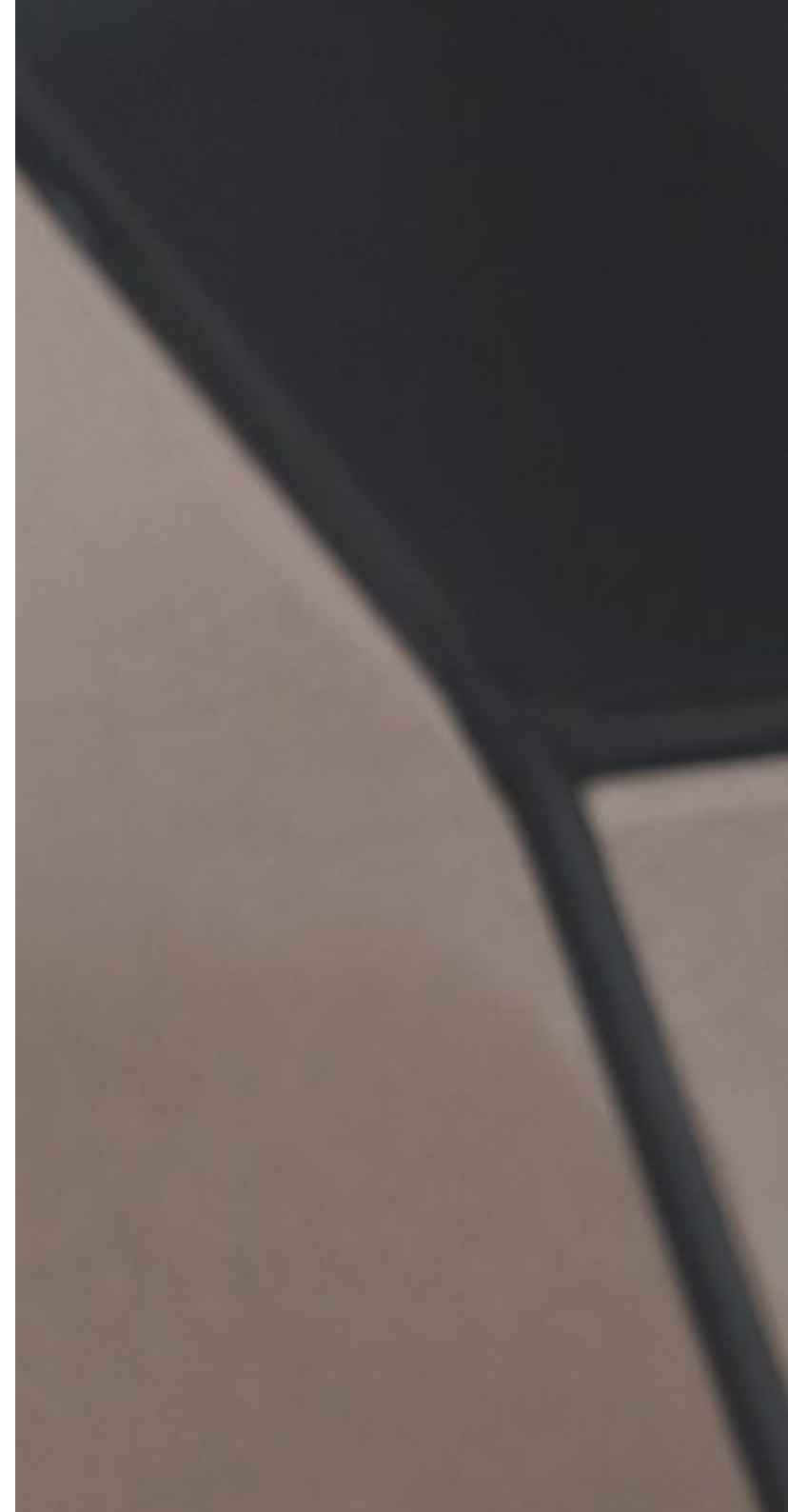




Technology at the customer's service

The Irizar Group is heading towards the future and is committed to its own distinctive and distinguishable technology, geared to the smallest detail.

Creatio, the Group's Research and Development Centre, is the hub of the Group's enormous technological capability. Together with the technology developed by each of the companies that make up the Irizar Group, it addresses all those aspects that are involved in the design and implementation of products and systems, facing the most unique challenges and the increasingly complex demands of customers. This technological capability puts Irizar in a leading position and allows it to participate in important and ambitious projects at European level to outline future directions in mobility and other business areas.



Integral



Smart technology

It is worth highlighting the interior and exterior full LED lighting, the multiplexed architecture and CAN communication protocol that harmonises all of the coach's electronics, enabling diagnosis and data collection using the OBD connector, and provides the operator with intelligent systems. It is also worth noting the driver assistance systems (AEB-LDW), integrated via the touchscreen control and HMI console, from where the driver can manage the entertainment and comfort systems.

Irizar's artificial intelligence technology applied to predictive maintenance, online monitoring and our customer service philosophy play a part in creating a new generation of smart and efficient buses and coaches with the highest levels of reliability.

The integration of new Paccar-DAF engines and the new ZF transmission range brings about the concept of a more sustainable coach, with lower consumption and lower emissions, and that is connected, predictive, reliable, silent and offers a 6% reduction in Total Operating Costs. A generation equipped with new features, such as PreVision GPS, a transmission/GPS system interface that enables a predictive driving strategy by adapting the gear changing sequence to the terrain of the road. For its part, the "direct drive" option for the drive axle reduces noise and consumption. Irizar is making progress with the "power on demand" concept by looking further into systems that consume power only when demanded by the service.

The new virtual cockpit offers innovative functions both in terms of technology and quality. It allows the driver to interact with the vehicle and to quickly receive all the information they need for comfortable and safe driving.





18:28

19°C

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(P)



B 54 km

748 km



12.06.2018

An excellent service...

Irizar has personalised solutions, designed and created to offer the best service: financing, repair and maintenance contracts and pick-up of your used vehicle. The availability of a fully guaranteed comprehensive repair, tune-up and maintenance service 24 hours a day, 365 days a year remains a feature that sets us apart. Irizar has a help desk in each European country and a central help desk with 24-hour support, 365 days of the year.

It offers customers close follow-up and advice that translate into optimization of vehicle reliability and availability. It also includes integrated electronic management, Irizar connectivity, as well as fleet monitoring and management solutions and remote diagnostics that result in a considerable reduction of consumption and emissions.

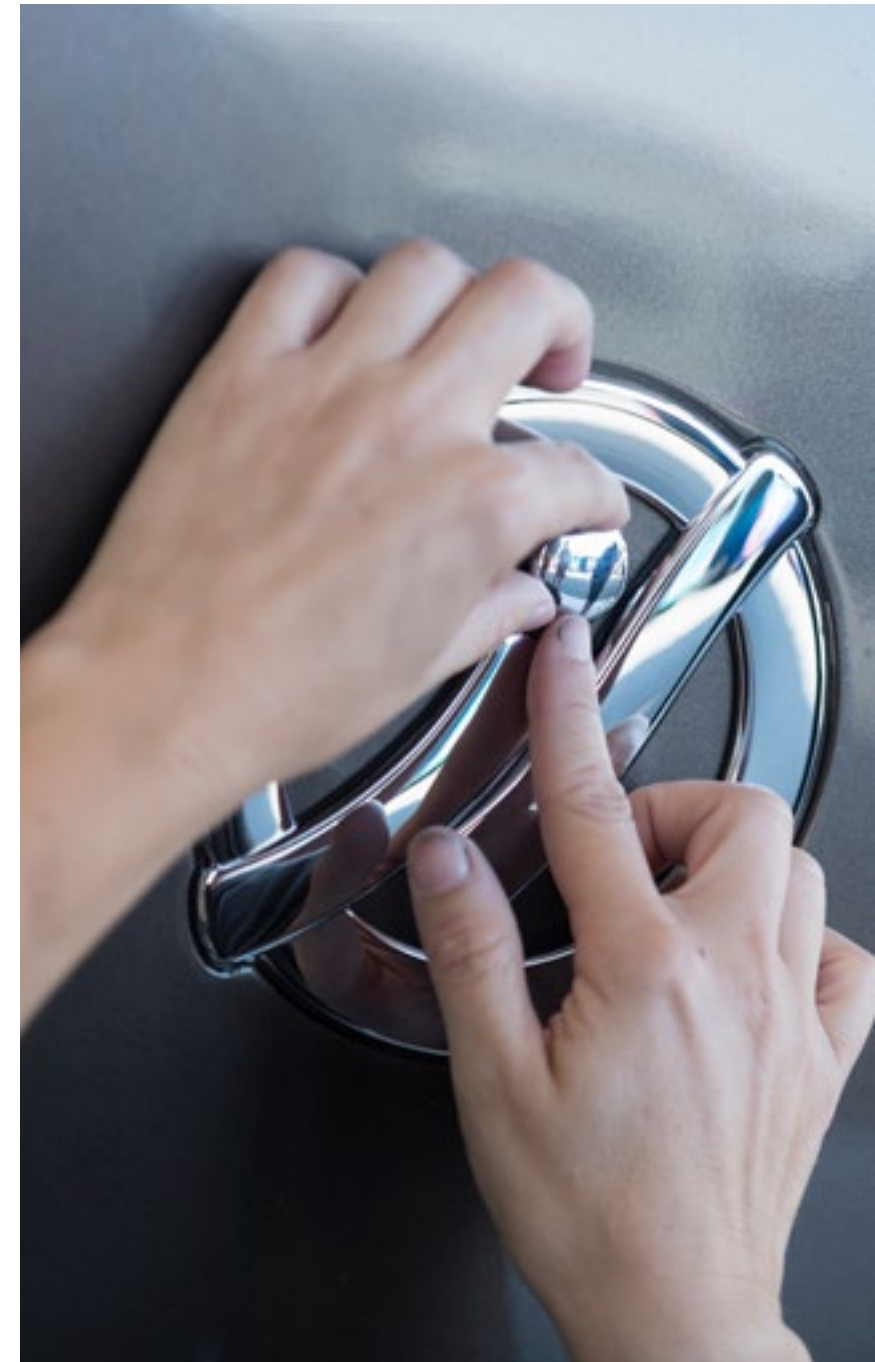
... And great profitability

At Irizar we know that fuel is the major cost component for operators, so Irizar makes every effort to reduce consumption. The combination of latest generation engines and transmissions enables a reduction in fuel consumption as well as a reduction in CO2 emissions.

The long oil and filter change intervals (up to 150,000 km), particle filter with automatic regeneration and without maintenance up to 700,000 km, very competitive spare parts price and the very high residual value of Irizar vehicles, together with an industry-leading after-sales service, result in a very competitive operating cost.

Coaches may be equipped with state-of-the-art technology devices for comprehensive monitoring that helps transport companies optimize operating costs and achieve safer and more efficient driving techniques.

Irizar has the best response to the service and sustainable mobility challenges that may arise as a result of current and future passenger transport needs.









A custom-made coach

One of Irizar's strengths is the spectacular design, thanks to aerodynamics that optimise consumption and bring prestige to its owners. It also offers exceptional comfort to the driver, courier and passengers, ensuring an unforgettable experience.

That is why all Irizar vehicles stand out thanks to their strong and distinctive character, striking visual appearance and extremely versatile fixtures and fittings, in line with the needs of operators and travellers.

And that is not forgetting another of Irizar's watchwords; the option of unlimited customisation that it offers to the market and to operators, which is undoubtedly a feature that sets it apart.

Sustainability, a holistic vision of the future

The commitment to sustainability and well-being of its customers and citizens drives the great commitment of the Irizar Group for the development of products, technologies, and services with a holistic approach that contributes to protecting the environment while reducing the emission of pollutants and the impact of our vehicles on the environment.

We continually invest in new generations of vehicles, seeking to progressively reduce the level of CO2 emissions (fuel consumption). We take into account the selection of materials and processes with fewer pollutants throughout the life cycle of our products; from development, supply chain and production, through use and end of life.

Electromobility, in this sense, is a reliable demonstration of the developments taking place in the areas of artificial intelligence, hybrid technology, and autonomous driving.



The best range of products ever seen

Integral hybrid and electric buses and coaches

Irizar has one of the best and most complete ranges of coaches, buses, and technological solutions aimed at covering all segments of public passenger transport, both for occasional transport and public, urban, intercity and long-distance transport. The current product catalogue includes a new generation of high-tech integral coaches, conventional coaches for the Premium segment, class II intercity coaches with hybrid or biodiesel technology, and class I zero-emissions electric city buses.

Our vehicles comply with the Euro 6D emission regulations to minimise fuel consumptions and emissions.

In the last three years our vehicles have reduced significantly (more than 10%) fuel consumption and emissions.





Isuzu i8

Irizar i8

A unique technological masterpiece

The Irizar i8 is a luxury touring vehicle for long-distance Premium services, regular lines and other special uses and it is equipped with the most advanced technology on the market. This class-leading and iconic coach is the pillar on which Irizar is building its future prospects in the long-distance and occasional service sector.

The Irizar i8 is a combination of design, technology and sustainability that offers exceptional comfort to the driver, courier and passengers and brings prestige to its owners. This makes it the ultimate representation of quality, robustness, reliability and efficiency in a sector where its strong and distinctive character and striking visual appearance stand out.

Upfront we see the attractive V-shaped stainless-steel trim, framed by new stylish, full LED headlights. The groundbreakingly stylish windscreen features inbuilt LED marker lights, which give it a clean and futuristic touch. The pronounced line that flows along the entire side of the coach accentuates its firm and muscular exterior appearance, at once both bold and refined. The rear of the coach is equally evocative, and the V-shaped emblem really catches the attention.

The interior of the Irizar i8 is fully customisable and provides maximum comfort for passengers. The smallest of details help to create this comfort (22" high-resolution monitors, LED ceiling lights, capacitive lights and buttons and state-of-the-art entertainment systems, including individual and multimedia screens).









Objective, enjoy the trip

Travelling becomes a unique experience that combines Irizar luxury and personality, thanks to ideally sized access steps, a large and robust luggage rack with airplane-style covers, a flat floor that creates an increased volume and more space between passengers, as well as carefully designed noise and vibration insulation and personalised interior temperature control.

The elegance of the seats is clear to see, but it is also worth noting their ergonomics, comfort, functionality and adaptability. The seat design also includes 220V and USB sockets, inbuilt monitors, tables, racks, handles and a wide variety of entertainment systems.

The striking and highly ergonomic dashboard area is an industry leader. It is worth highlighting the functionality of its multiplexed keys, the HMI, the central console that integrates all the electronic systems through a simple, quick-access menu, and the Irizar virtual cockpit with innovative features.

In the words of the International Coach of the Year Jury, "the Irizar i8 is a benchmark in terms of total costs, considering the purchase price, depreciation and residual value, consumption and repair and maintenance costs".

Versions

The Irizar i8 is available in integral version and conventional version, in the following lengths: 12.4m, 13.22m, 14.07m and 14.98m





Irizar i6S

The combination of technology and design

The Irizar i6S is a coach designed for medium and long-distance lines and occasional use. Inspired by its own visual style, the appearance of the i6S epitomises the blueprint for Irizar's new generation of coaches.

The design of the front is characterised by new LED headlights and by the detail of the unique trapezoidal integration of the adaptive cruise control system. The lines are more pronounced and aggressive, sculpted on rigid and soft surfaces. Different elements, such as the front fog lights and the position lights on the roof, are harmoniously integrated. A delicate crease along the side communicates a sense of optimisation and high quality.

The interior design of the Irizar i6S is based on providing a sense of well-being at the start of each journey and ensuring that it lasts until the end.

The Irizar i6S's new seats incorporate more ergonomic lines arising from development models and rigorous testing. Wider headrests, impeccable stitching and elegant trims fit perfectly with the vehicle's interior décor. The end result is a seat that transmits comfort and elegance.



Comfy seating and feeling good is how it starts. The driver's seat has been designed to ensure that they can quickly find the most ergonomic sitting position. The seat and steering wheel positions can be adapted to all sizes. The switch panel is fully multiplexed with new icons and colours for easy identification.



The new Irizar virtual cockpit and information screens are in the ideal location. An optional HMI system, exclusive to Irizar, facilitates the handling of all systems through the use of a joystick, buttons for quick access to menus and a 7" colour touch screen to the left of the driver.



Versions

The Irizar i6S is available in integral version and conventional version, in lengths that range from 10.8 to 15 metres







Irizar i6

A versatile coach

The Irizar i6 is a versatile coach, ideal for both regular and occasional services, with an attractive, modern design for customers who are seeking maximum profitability.

It stands out thanks to its features, aerodynamics, attention to detail and comfort.

The Irizar i6 has a wide and comfortable front access and a design which bears the hallmarks of the brand.

The coach has a spacious and ergonomic driver's seat, with all controls within easy reach, allowing for a comfortable, smooth and safe drive. In addition, it offers ideal features to satisfy customers' and users' comfort needs.

The climate control system is independent, powerful and easy to use. The roof space is broad and spacious. The luggage racks are modern. The décor includes a wide collection of colours and materials.





Versions

The Irizar i6 is available in integral version and conventional version, in lengths that range from 10.8 to 14 metres

The front and rear lighting, with daytime and cornering lights, uses LED technology, as do the ceiling and walkway lights inside the coach. The rear-view mirrors are an exclusive Irizar design and comply with all European Directive requirements, including those which state that rear-view mirrors on school buses must only be comprised of two panes of glass.

Furthermore, pultrusion technology is incorporated into the side panels of the Irizar i6, as well as a lightweight mechanism, cushioned with SMC materials, for opening luggage compartments that provide access to large, robust spaces. The same strength can be observed in the door system and the stainless-steel hatches located in the aisle that provide access to the engine.

The Irizar i6 is adaptable, allowing the customer to configure the coach and other equipment options to suit their needs.

Irizar i4

The power of versatility

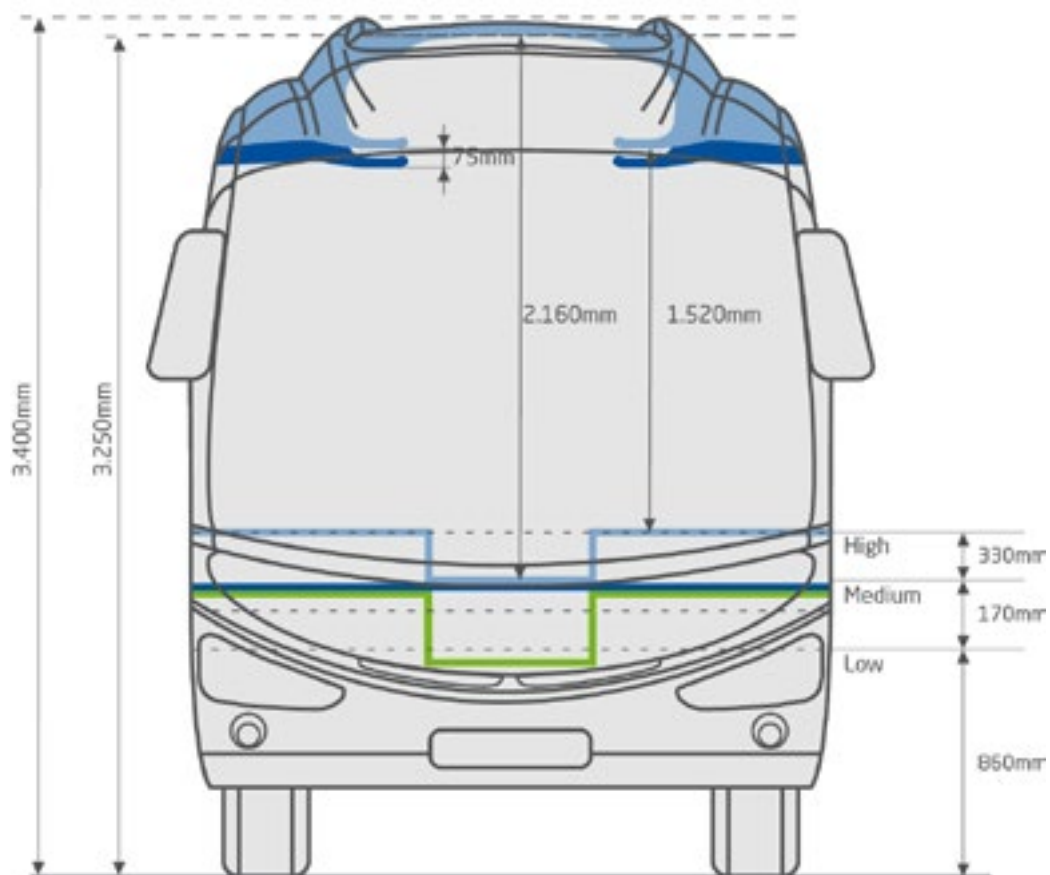
Irizar's versatility also extends to urban and intercity spaces and makes them the ideal environment for the Irizar i4 to showcase its features and personality. The outcome is a vehicle for intercity, school or business transport with a metropolitan predisposition. The different versions of this vehicle (H, M, L) emphasize accessibility. The doors, with different single and double door options, enable lifts to be installed that facilitate access for persons with reduced mobility. The floors, which can be flat or lowered, and the unobstructed aisles underline the concept of adaptability.

The new lighter and more aerodynamic Irizar i4 generation is available with integrated radar in the centre of the front end, new optional full-LED headlights that provide up to 30% more lighting capacity, rectangular end-outline marker LED fog and pilot lights, full LED tail lights, new windscreen with greater curvature, more robust windscreen wiper system, updated lever design, rear end to reduce bumpiness, and a three-section rear bumper.

In the interior, the use of new materials and modern manufacturing technologies improve durability, ageing, and recyclability of side panel, interior visors, and roof centre materials. Notable, also, is the new design of the dashboard that enables modular integration of vending machines and SAE systems, aesthetic redesign of seats and partitions to create a warmer and modern environment, a new line of more robust and functional diffusers, new lighter luggage racks, full LED lighting integrated in the central part of the roof, and panel covers made of stainless steel for improved reliability and access for maintenance tasks.

The structural redesign of this version, the incorporation of new and lighter materials and corresponding reduction of weight, along with a more aerodynamic front end, provide this Irizar i4 with significant fuel savings.





Versions

Its high degree of adaptability to the needs of customers and users is another defining feature of the Irizar i4. It is available in different lengths, ranging from 9.4m to 15m, as well as in several finishes and floor heights; the H, M, and L versions. The H Version, with central aisle, is designed for medium distance routes. The flat-floored M version, with no aisle or steps, may be adapted to different configurations for persons with reduced mobility, both in the front and the rear. The L version is designed for short-distance lines with frequent stops and many standing passengers and has a low floor for better accessibility.

This new i4 version is available in an integral version, with a DAF combustion engine for its entire range of engines; in a hybrid version (Cummins combustion engine with Eaton hybrid package); and in a coach version, available with all current commercial chassis on the market.



Hybrid version

The only class II hybrid coach with a luggage compartment

The Irizar i4 hybrid is available in versions from 10.7m to 13m with two axles. It incorporates parallel hybrid technology made up of a six cylinder, 6.7l, 320 hp, 1166 Nm Cummins Euro 6C and HVO engine and an Eaton e-drive hybrid package with six-speed automated gearbox, 65 kW electric motor and 5.5kW/h lithium-ion batteries.

After more than a year of operation and more than a million kilometres, the reliability of the vehicles as well as their low consumption have been confirmed, reducing consumption by more than 20% compared to an identical vehicle with a 100% combustion engine in intercity travel.

The Irizar i4 hybrid has become the first commuter vehicle with class II hybrid technology for short and medium-distance lines: H, M and L high floor with luggage compartment.

Irizar i3 low entry

Urban spirit

The design of the Irizar i3le responds to two basic premises, accessibility and functionality: ensuring easy access for passengers by adhering to the most stringent regulations in that field. The front interior area complies with the most stringent accessibility guidelines. At the rear, the internal height allows passengers in that area to enjoy a generous amount of comfortable, accessible space with excellent visibility.

The coach has different single or double-leaf door configurations, in addition to the possibility of determining different locations for them. The doors are electric opening, with automatic security sensors and internal emergency devices.

The ramp options are: a manual or automatic PRM ramp - wide, open walkway; a manual access ramp at the front or central door or a telescopic electric ramp at the central door.

When it comes to comfort, this coach stands out thanks to the quality of its design, both inside and out.

This vehicle offers numerous internal layout configurations, along with a wide selection of seats which adapt to the different characteristics of each route. Furthermore, there is the option of seats next to wheel arches and tip-ups in the PRM area in order to maximise the number of seated passengers.

The cabin lighting uses LED technology.

The Irizar i3le is, by its own merits, a leading bus in the commuter segment which optimises operating costs without compromising on the intrinsic values of Irizar products.





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Irizar

Irizar B

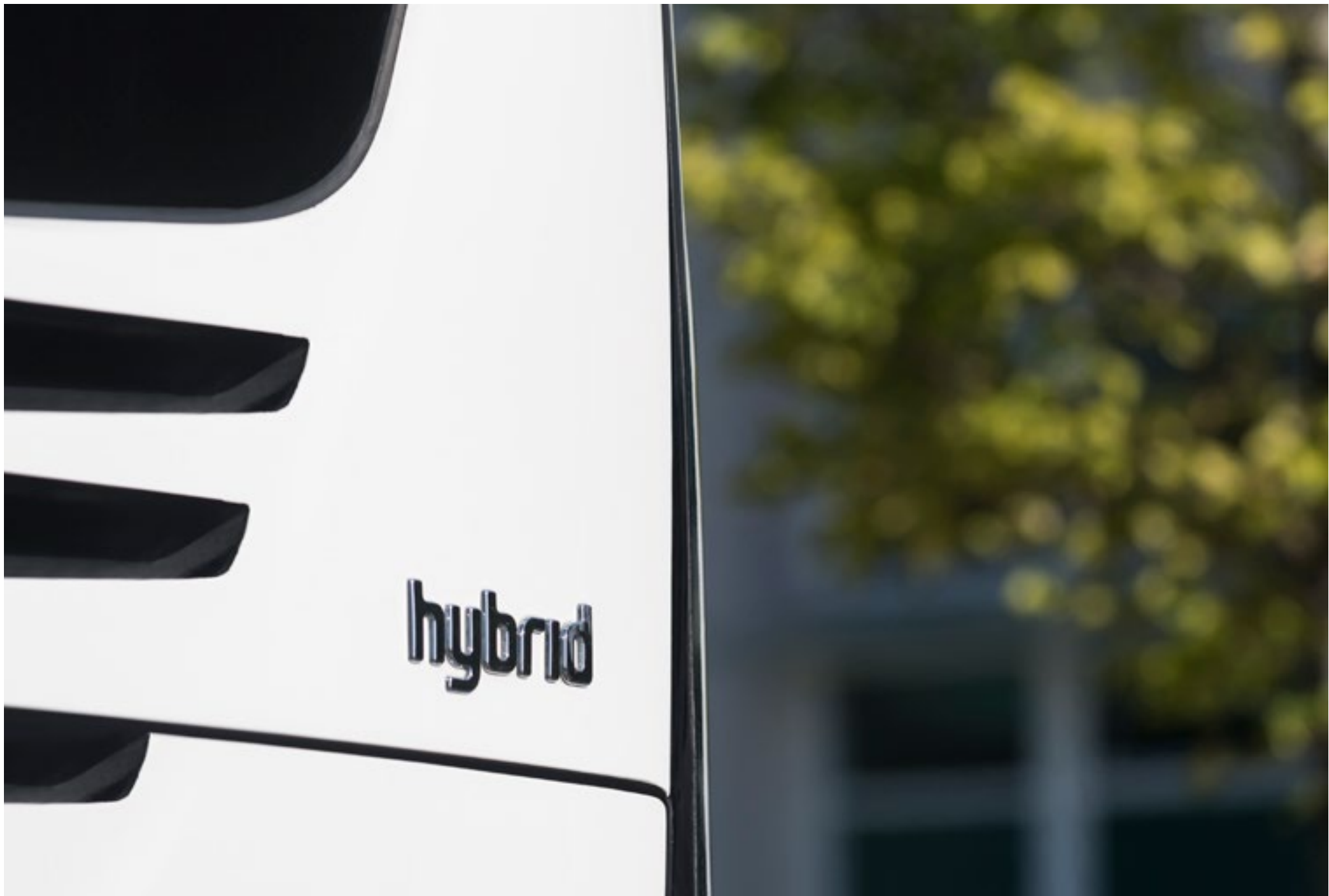


Irizar i3le hybrid version

The hybridisation technology developed by Irizar is parallel hybrid technology.

It combines a diesel or HVO (biodiesel) propulsion engine with an electric motor that, depending on the requirements, can power the vehicle at the same time or separately, achieving optimum efficiency and performance. It is available in versions from 10.7m up to 13m with two axles.

The hybrid buses developed by Irizar reduce fuel consumption by 20%. With a reduction in CO₂ emissions of around 157gr/km compared to conventional buses with combustion engines, an Irizar hybrid bus prevents the emission of approximately 2.5 tonnes of CO₂ during its entire service life (estimated at 100,000km/year for 15 years).



hybrid

Irizar ie bus

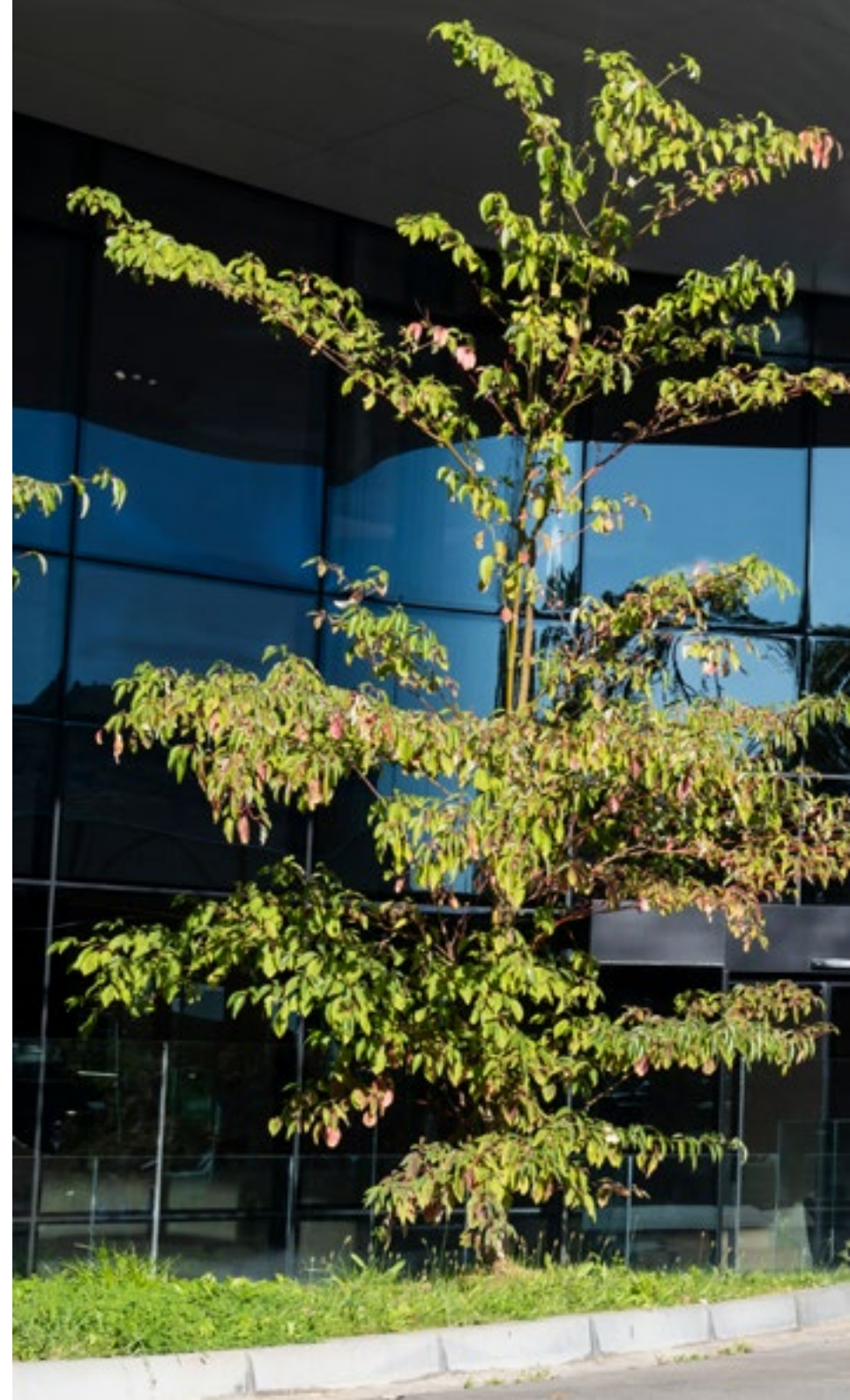
Zero-emissions and silent

The Irizar ie bus is a bus that incorporates 100% electric, zero-emission technology and offers a sustainable and eco-efficient urban mobility solution, while responding to the current and future needs of city transport. It has been designed to achieve the best possible vehicle autonomy and energy efficiency (lowest consumption) as well as optimal end-of-life management.

The arguments in favour of this bus model are that it is a totally safe, reliable, profitable product, with a tried and tested range, efficiency and reliability.

Today, this bus model is used at full capacity in a range of European cities. It is available in 10.8-metre, 12-metre, 15-metre and 18-metre versions, all with 100% electric motorisation and zero emissions.

When it comes to charging, traction and energy storage systems, the Irizar ie bus is a high-tech vehicle that integrates own-brand technology, developed by the Irizar Group, which enables it to offer operators a comprehensive maintenance service for the entire useful life of the vehicle.









Ahead in autonomy

With a single charge of six or seven hours, the Irizar ie bus offers a range of between 200 and 220 km at an average speed of 15-17 km/h, ensuring between 14 and 16 hours of driving in heavy city or intercity traffic conditions.

The bus also has a storage system capable of identifying and efficiently managing energy flows and peaks.

Irizar has designed the batteries following analysis of the needs put forward by the operator with the sole purpose of guaranteeing the maximum possible battery range and also offers the possibility of a pantograph system for fast charging during travel.

The technology of the electric vehicles eliminates direct emissions of greenhouse gases (GHGs) and toxic substances such as NO_x and harmful particulates when operating in urban areas, which contributes to a healthier and more sustainable urban environment.

The electric technology removes the noise of the engine, enabling exterior noise emission when stopped and when starting to be virtually eliminated (0dBA), while the average noise emission of a bus with a conventional combustion engine is 68 dBA.

The Irizar ie bus (10m and 12m) is the first electric city bus on the market that complies with the R/66.01 rollover safety regulations.

Irizar ie tram

A tram on the tarmac

The Irizar ie tram is a 100% electric, zero-emission bus with the appearance of a tram that combines the large capacity, ease of access and internal configuration of a tram with the flexibility of a city bus.

This model is developed in versions from 12m up to the 18m articulated version and with a maximum capacity of 155 people.

The Irizar ie tram offers a clean, minimalist design and all its features correspond to specific functional aspects allowing it to create an identity and an image that are easily recognisable to its users. Accessibility, safety, passenger flow and passenger comfort are the inspiration behind the interior design architecture, resulting in a bright, comfortable, spacious, pleasant and safe interior.

Accessibility and passenger flow are further enhanced by up to 8 sliding doors, the integral low floor, the seating arrangement, the interior distribution with wide aisles, the signage on the seats reserved for wheelchairs and/or push-chairs, the audible stop request information, the installation of ticket validation devices, the design of the driving position and the comfortable and effortless access.





Inzar ietrar

Inzar



A feeling of openness and light

The interior design seeks to offer the user a feeling of openness and light, where the transition between inside and outside is minimised through the transparency of the windows, enabling the passenger to observe what is happening outside the vehicle. The large side windows, together with the LED interior lighting and its central "open air" vault, provide brightness that transports the user to a spacious and pleasant environment.

In the interconnection area, a system with very low lateral inclinations has been designed to provide an open space towards the rear trailer.



The system is translucent and avoids the separation of the two passenger areas. Furthermore, it is equipped with LED lighting. The integral low floor and arrangement of the seats inside the vehicle ensure that passengers can enter and exit smoothly at stations and move around freely inside the vehicle.

For entertainment, Irizar enables the installation of a wide range of solutions: USB chargers, WiFi, Braille buttons, luggage racks, passenger information, interior vinyls, etc.

Irizar has designed the batteries following analysis of the needs put forward by the operator with the sole purpose of guaranteeing the maximum possible battery range and offering the most suitable Irizar charging interoperable solutions, which include slow charging in depots, fast pantograph charging during travel, smart charging and/or pantograph charging in depots.





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