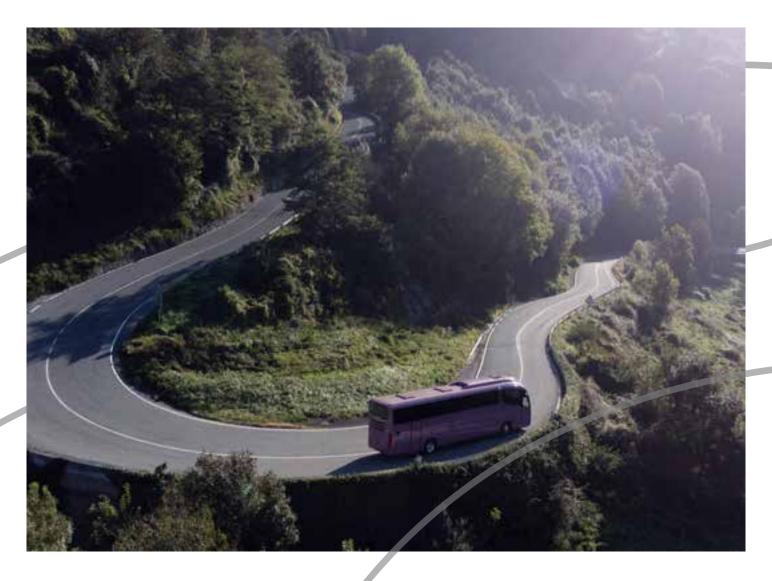
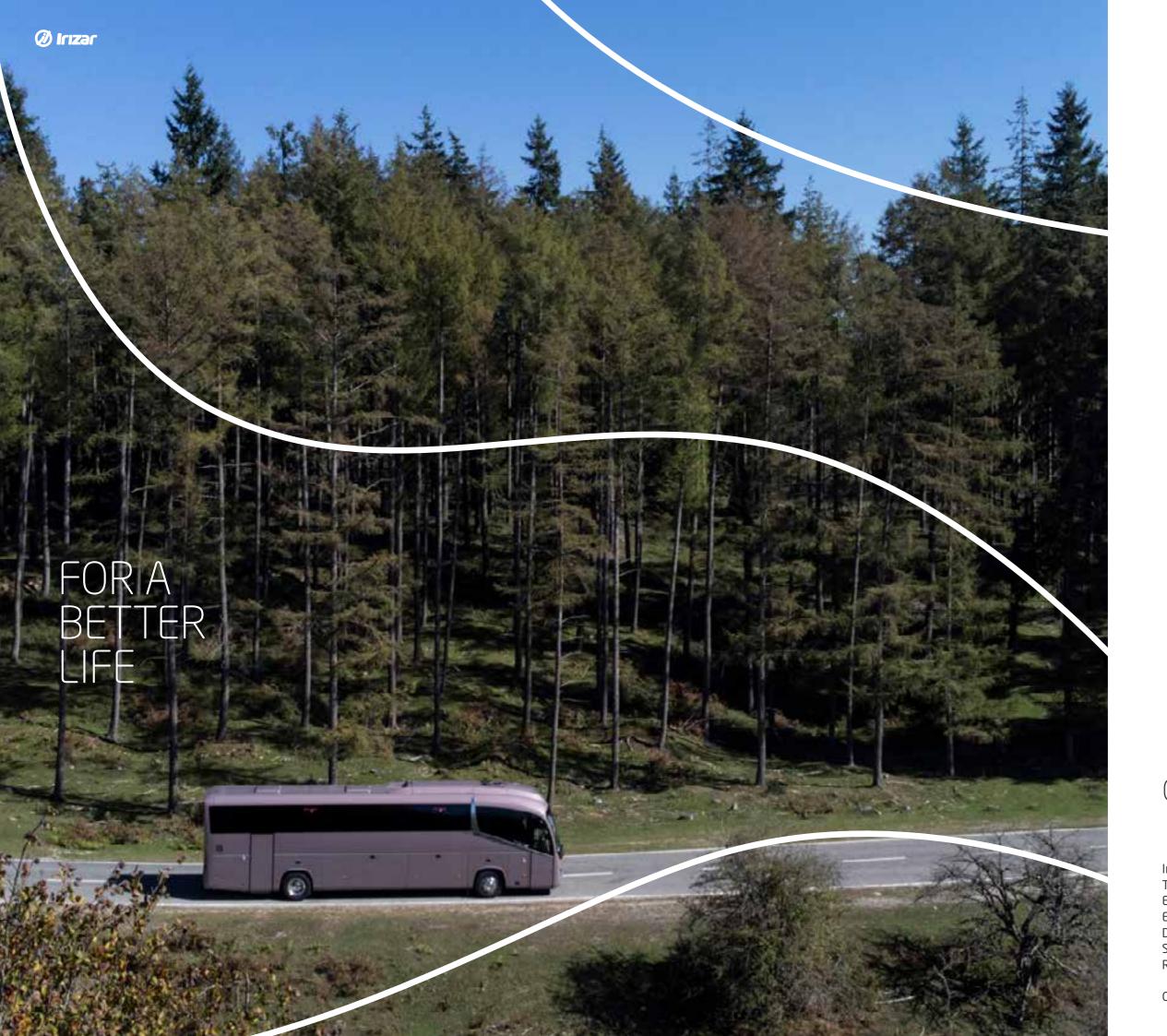
# Technical Specifications

# Irizar i6S

The most efficient coach in the history of Irizar







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# THE MOST EFFICIENT COACH IN THE HISTORY OF IRIZAR

The **Irizar i6S Efficient** is a latest generation vehicle designed to give operators maximum efficiency and the best experience for passengers and that is committed to sustainability. With the new Irizar i6S **consumption and emissions have been reduced by up to 15%**, its weight has been reduced by 950 kg and its aerodynamic coefficient has been reduced by 30%.

In addition to the integral vehicle, it's available in combination with all the chassis available on the market. Diesel, biodiesel, HVO, gas, hydrogen and hybrid engines can be used.



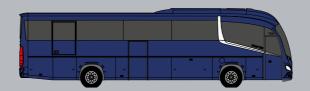
Consumption and emissions can be lowered by 15%, weight can be reduced up to 950 kg and the aerodynamic coefficient can be improved by 30%.

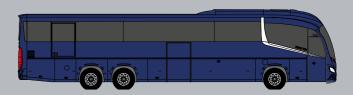
The lower consumption means it has significantly lower emissions and this improvement is achieved, primarily, through reducing the weight and aerodynamic coefficient.

The weight of every component was analysed and reduced. And the weight of the vehicle has been redistributed with the goal of improving weight distribution. High strength steel and lighter composite materials were used instead of traditional structural materials.

A significant process for improving the aerodynamics of the vehicle has been done. To achieve a 30% improvement in the aerodynamic coefficient the outside silhouette of the vehicle has been redesigned including, for example, the front window and the shape of the rear end. In order to improve efficiency and consumption even more, the option to replace the rearview mirrors with digital vision cameras is available. With the redesign of the outside there has also been an improvement in the distribution of the space inside the vehicle.

#### Configure the Irizar i6S to your needs:





\* The configurations may vary depending on the country and chassis manufacturer.

	Dimensions
Length	From 10.8 (2 axles) to 14.9 m (3 axles)
Height	3.5 m - 3.7 m (Total height with climate control equipment 3.7 m - 3.9 m)
Width	2.550 mm





## DRIVER FOCUSED

#### New multi-function screen

The new generation of vehicles has a new HMI design with a multi-function screen on the central console. The new version has an intuitive and attractive user interface designed to make the driver's user experience easier.

The screen has new functions like *on-board* diagnostics, which includes *basic display* functionalities to have a more precise vision of the vehicle, alongside a navigation system for heavy vehicles. The main functions of the coach body can also be controlled with the new console.

The new version also has an integrated multimedia system that can be used to control the radio, video, HDMI or USB, and the driver's mobile phone can even be connected.

#### Improved cockpit

The cockpit has a latest generation dashboard with an updated design and the option to choose night mode for driving. It is designed to maximise comfort and ergonomics for the driver.



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## Greater efficiency and vision

The Irizar i6S Efficient has the option of replacing the rearview mirrors with digital cameras to lower aerodynamic resistance and maximise driver visibility under any climate conditions, even at night or in the rain. The driving position that is further forward also contributes to better visibility and more comfort while driving.

You can choose the option of heated rearview mirrors or to install the new cameras and screens, which automatically adapt the amount of light and provide the best visibility under all climate conditions.

DRIVER AND GUIDE		
Carpet fabric driver and guide seat		
Black leather driver and guide seat	optional	
Camera mirror system	optional	
Driver's seat armrest	optional	
Heated driver seat	optional	
Multifunction leather steering wheel	optional	
Third windscreen wiper	optional	
Driver's seat microphone		
Guide microphone		
Wireless microphone for guide	optional	
Driver flex-lamp	optional	
Guide flex-lamp	optional	
Compartment for the driver and guide on the baggage trays		
Tire pressure and temperature sensor		
Heated windscreen	optional	
Heated mirror		
Safe for driver		
Refrigerator in dashboard		
Driver and guide compartments		
Digital vision cameras	optional	
Predictive cruise control	optional	

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# AND A UNIQUE EXPERIENCE FOR PASSENGERS

The spaciousness and optimal layout of the passenger cabin, the carefully designed ergonomics of the seats, the reduced levels of noise emission and vibrations mean passengers can be given the best travel experience.

The passenger space has also been enlarged at the back and in the aisle width to give passengers exceptional comfort and guarantee an unforgettable experience.

PASSENGER AREA	
Stainless steel handrail	
New I6 plus seats with carpet	
i6 plus seats with leather inserts	optional
All age seat	optional
Extra padded seats	optional
Adjustable header seat	optional
2 handrails at the rear	
Clothing rack	optional
Small table	optional
Magazine rack	optional
Central arm rest	optional
Foot rest	optional
2-point safety belt	
3-point safety belt	optional
Individual air conditioning and LED lighting	
Luggage compartment covers	optional
Carpeting in the aisle, driver's area and foot rest	optional
Imitation wood floor	optional
Waste bin at entrance and central door	
WC in central footboard / rear WC on floor (includes smoke detector)	optional
USB / 220V in every pair of seats	optional
Individual entertainment system	optional







ELECTRICITY AND ELECTRONICS	
19" or 22" front monitor	optional
Multiplexed system	
Integrated Sat Nav (Tele Atlas maps)	
Rain sensor for automatic windscreen wipers	
Bluetooth	
Audio player	
15" second and third monitor	optional
18.5" second and third monitor	optional
19" folding monitor	optional
TV Tuner	optional
Central camera	optiional
Roadway camera	optional
Digital clock	
Parking sensors	optional
Rear camera	
Inside and outside LED lighting	
GPS connected to screens	optional
Front, side and rear destination signs	optional
Wi-Fi	optional
PRM elevators	optional
Electric key for opening + button on front door	optional
Remote control opening and alarm	optional
Contact sensors of covers	optional
Driver Fatigue Detection Systems	optional



HEATING AND VENTILATION SYSTEM		
Air conditioning: Dual zone air conditioning unit		
Heating system		
Artica climate control unit	optional	
Programmable Pre-heater	optional	
Convector in WC	optional	

OTHERS		
Driver's bed (includes smoke detector)	optional	
Vacuum cleaner	optional	
Galley close to the central entrance	optional	
Front headlamps		
Stainless steel structure	optional	
Double glazing		
Extra-stained side windows		
Tinted side windows	optional	
Air purifier	optional	
Additional fuel tanks	optional	
Pre-fitting for trailer hook	optional	
Aluminium wheels		
Alcoa Durabright aluminium wheels	optional	
Ski rack attachment system	optional	
Pneumatic luggage compartment covers		
Under floor KS8b lift	optional	

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## PROPULSION SYSTEMS

## New generation of integral Irizar chassis

Weight reduction of up to 200 kg and 5% of additional consumption

Compatible with diesel, biodiesel, HVO and hydrogen

	MX11 270	MX11 300	MX11 330	MX13 355	MX13 390
Cylinder layout	6 in-line cylinders				
Cylinder capacity	10.81	10.81	10.81	12.91	12.91
Valves	24V	24V	24V	24V	24V
Power supply	Common-Rail	Common-Rail	Common-Rail	Common-Rail	Common-Rail
	Variable geometry turbo				
Maximum power	270 kW	300 kW	330 kW	355 kW	390 kW
	367 Hp	408 Hp	449 Hp	483 Hp	530 Hp
	(1600 rpm)				
Maximum torque	1950 Nm	2150 Nm	2350 Nm	2500 Nm	2700 Nm
	(900-1,125 rpm)				
Emissions compliance	EURO 6-E				









#### **ZF** Ecolife Coachline

Automatic six gear change with torque converter.

Capable of transmitting torques of up to 2,800 Nm.

Built-in ZF retarder with three braking points.

Electronic with advanced software for optimal fuel consumption.

#### ZF TraXon 2

Fully automated 12-speed manual transmission.

Capable of transmitting torques of up to 2,800 Nm.

Inbuilt ZF Power Intarder with 3 brake points.

Electronics with advanced software for optimal fuel consumption.

#### **ZF Axles**

RL82EC front axle and A133 rear axle. In case of three axles, RL82EC third steering axle. Independent front and third axle suspension

Electronically-controlled air suspension (ECAS) to achieve optimum stability and comfort

Braking system equipped with ABS, ASR, ESC and BFD...

electronically controlled by EBS.

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## Let's talk about cybersecurity

We work day in day out to keep ahead of the cybersecurity challenges of our vehicles. We comply with the R155 and R156 European regulations for cybersecurity management systems and vehicle software updates. We can thus guarantee that the systems work as expected, and we can mitigate the security risks that arise.

We are firmly committed to protecting and guaranteeing information confidentiality and integrity and the safety of everyone.

## Front collision warning

Warns of an impending forward collision, giving the driver enough time to react.

#### Safety distance monitoring

Safety distance monitoring warns the driver if they are driving at an unsafe distance from the previous vehicle.

#### Pedestrian collision warning

Daytime warning with visual alerts of an impending collision with a cyclist or pedestrian.

## LEADING THE WAY IN SAFETY

We meet the highest safety standards within the new GSR2 regulatory framework by integrating advanced components, like cameras, radar, etc. for your and your passenger's safety.

#### MOIS

System that detects the presence of pedestrians and cyclists in the vehicle's front blind spot and alerts side opposite the driver. the driver.

#### **BSIS**

beside and behind the coach on the

#### **DDAW**

#### **LDWS**

Lane departure warning system.

#### ReIS

Camera and sensor technology that System for monitoring tyre pressure Advanced emergency braking sysshows the driver if there are objects or people behind the vehicle when it's backing up.

#### **TPMS**

and temperature.

#### **AEBS**

tem that helps minimize the risk of a collision or limit its consequences.

#### ISA

System that uses a speed limit sign recognition camera and speed limit data linked to the GPS to notify the driver about the current speed limit and warn them if they are speeding.

#### **Alcohol Interlock** Installation **Facilitation**

#### **Emergency Braking Signal**

Frontal impact protection system ECE - R29/FIP

Alcohol start-up interlock.

System for activating the emergency lights when emergency braking is detected

Reinforced frontal impact protection system. It provides additional protection for driver - guide and passengers.

## More safety systems

- + EBS (ABS, ASR, ESC, BFD)
- + AHBC
- + ECAS
- + ACC





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# LOWER CONSUMPTION AND EMISSIONS

At Irizar we want to be a key actor in the sustainable mobility of the future. To achieve that, we're focusing all our efforts on decarbonisation, electrifying cities and reducing the consumption and emissions of our vehicles. We're sure the future will be multi-technological and we're ready for it.

Our new Efficient line focuses on improving **efficiency** and the **TCO** based on lowering weight and improved aerodynamics. Furthermore, the **power on demand** technology also contributes to the reduction.

#### Minimum R&M cost

Thanks to smart technology we have increased the life of the components and we have extended the service intervals as much as possible. Easy access to the engine compartment and components also reduces repair and maintenance costs.

We provide original Irizar spares that keep the same level of quality, so your vehicles are still as safe as ever. Only with an optimum selection of parts can you keep the same levels of quality and performance of the engine and fuel consumption. And, all of that comes with fast delivery times, total availability and the Irizar guarantee.

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# ALWAYS BY YOUR SIDE OUR SERVICES

# Guarantee of vehicle reliability and availability

Our coaches undergo rigorous reliability tests before they are marketed. They are currently operating on5 continents in extreme conditions.

They use robust, reliable tried and tested technology and components to reduce down-time and increase availability and use.

They are also designed to facilitate maintenance and make diagnostic capability.



## Close, customised attention and advice.

Integral vehicle



Turnkey projects and services that meet customer needs.



Repair and maintenance contracts.

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We provide a complete range of services that makes it possible to keep the coaches in optimal condition, improve performance, minimise emissions and lower operating costs.

- Wide service network and mobile units with trusted technicians.
- Training courses to ensure that their safety and repair and maintenance performance is always of the highest quality.
- iService platform (catalogue, e-shop Help Desk, order tracking ...) for service management. Information about the repair and maintenance status

- 24/7, 365 days a year. Integral vehicle
- Warranty period extension
- Immediate availability of quality original spare parts at very competitive prices.
- Fleet manager with advanced technology for each client's specific processes This enables comprehensive monitoring of cost and driving efficiency, resulting in constant improvement in safety, performance and profitability.
- Comprehensive electronic management and monitoring solutions for predictive maintenance. The collected operational data is analysed to predict and schedule vehicle maintenance and ensure maximum uptime.
- Eco-driving courses to teach drivers to drive more efficiently and safely, providing significant benefits in terms of increased activity time, improved safety and reduced operating costs.

# THE GOAL ENJOY THE TRIP



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# FOR A BETTER LIFE