

# UNIVERSE Fuel Cell



# Imagining a UNIVERSE with Fuel Cell.

UNIVERSE Fuel Cell is created with Hyundai's class-leading hydrogen mobility technology.

The fuel cell system in the bus not only provides clean energy but also filters the air as it operates.

It is a modern-day solution revolutionizing the bus experience by providing benefits not only for the driver and passengers but for the community where it runs.



# Ideal Design for a Hydrogen-Powered Bus.

The configuration is straightforward and minimalist, embodying the ideals of clean mobility. The magnificent and sophisticated style of UNIVERSE Fuel Cell was completed with the harmony of horizontal and vertical edges.





## Stylish and Functional.

UNIVERSE Fuel Cell's blue color represents the hydrogen-power, an eco-friendly signature of Hyundai. Crossing it over the majestic black surface completes a dynamic and well organized exterior design. The spoiler-integrated roof cover and semi-flush side glasses not only optimize its aerodynamic performance but also contribute to its distinctive style.



LED Headlamps and Daytime Running Lamps



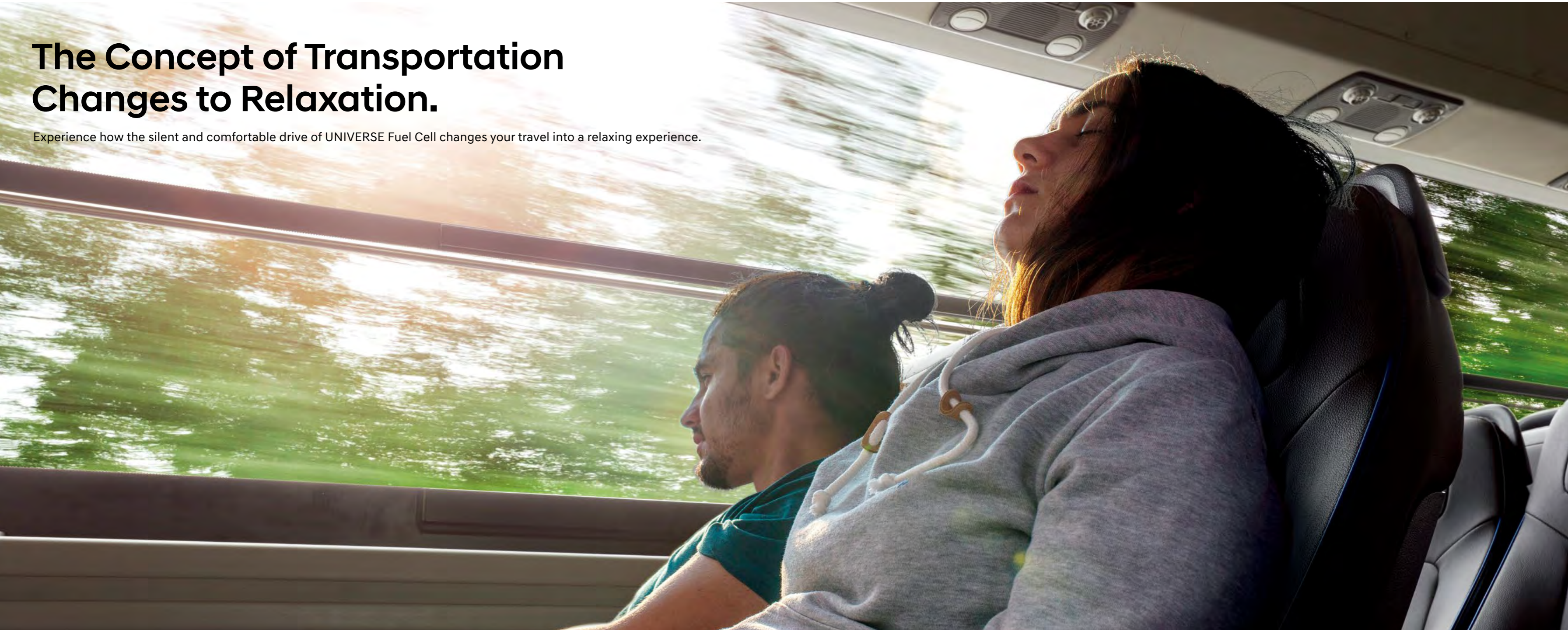
Flush Glasses



Rear Spoiler-Integrated Roof Cover

# The Concept of Transportation Changes to Relaxation.

Experience how the silent and comfortable drive of UNIVERSE Fuel Cell changes your travel into a relaxing experience.





# Easy Driving.

You might be new to a fuel cell electric vehicle, but the driving doesn't have to be new and difficult. The cockpit is just as you are used to, only better with larger color LCD clusters and various convenience features.



Detailed Ergonomic Space Design for Driver's Comfort



Large-Screen TFT Cluster



M800B Audio



Wireless Mobile Charger



Fully Automatic Temperature Control

# Chic Minimalistic Interior.

UNIVERSE Fuel Cell has sleek minimalistic seats that are great to look at and easy to maintain. The slim S-shaped profile is comfortable to sit in while it also creates a spacious cabin. The subtle lighting and high-performance air purifiers create a new resting place.



Pleasant and Stylish Interior for Passenger Convenience and Safety



Large-capacity Air Purifier for Fine Dust Care



Overhead Luggage Tray and Lighting System



Passenger Seats with Slim Design



Large Assist Grip





# Safety Comes First.

Safety must always come first for buses that carry many people for longer distances. UNIVERSE Fuel Cell's safety system not only prevents accidents that can be avoided, but also minimizes any potential damage.





# Safer and Easier.

UNIVERSE Fuel Cell has various sensors that detect driving conditions and support safer and easier driving. Sophisticated warning systems installed in the bus help the driver be more attentive when operating the vehicle.



## Smart Cruise Control

Smart cruise control automatically maintains vehicle speed and safe distance from the vehicle in front without requiring the driver to step on the pedals.

## Forward Collision Avoidance Assist

If the driver does not evade or brake in a collision course with the front vehicle, safety features automatically brake the bus after warning to prevent accidents and minimize damage.



## Lane Departure Warning

A camera mounted in front of the bus recognizes lanes and issues warnings if the bus leaves lanes without a turn signal on when moving above a certain speed.



## Driver Attention Warning

Warning sound and pop-up message signals the driver when their level of caution decreases by analyzing their conditions.

## Steering Wheel Vibration Warning

The aforementioned safety features are linked to steering wheel vibration to effectively warn the driver.

\* The advanced driver-assistance system (ADAS) only assists drivers and bears no responsibility for vehicle operation. Always operate and drive the vehicle with caution.  
\* Depending on the environment, surrounding conditions, and driving and operating conditions, the ADAS may be stopped, not operated, or subjected to unnecessary operation. Please refer to the Owner's Manual for more information and limitations.  
\* Specifications are applied differently depending on the trim and optional specifications. If the option is not selected, the corresponding function is not provided.

# Caring for Nature and Us.

UNIVERSE Fuel Cell is a stepping stone for cleaner urban transportation of the future. The bus purifies the surrounding air as it operates. Refueling time can be almost as short and the range can be as long as your traditional bus\*. All this with zero harmful carbon emission.

\* Variables dependent on charging infrastructure and external factors such as weather and climate.





# Uncompromising Performance.

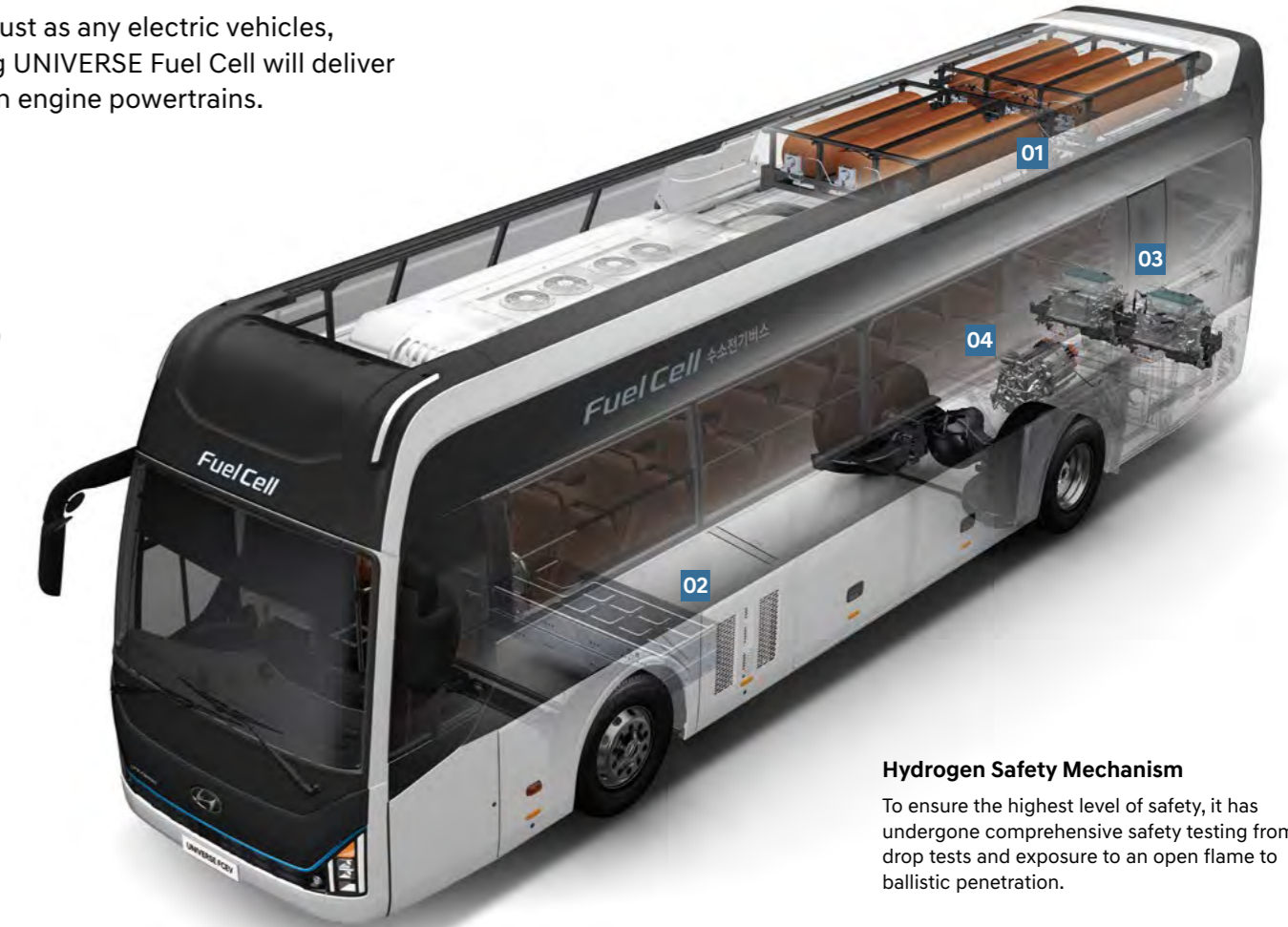
UNIVERSE Fuel Cell drives with powerful torque just as any electric vehicles, but with less weight of the batteries. Thus, driving UNIVERSE Fuel Cell will deliver superior acceleration beyond internal combustion engine powertrains.

Hydrogen Tanks <sup>01</sup>  
**41 / 34 kgH<sub>2</sub>** (700 bar, 6 each / 5 each)

Batteries <sup>02</sup>  
**48 kWh** (2 x 24 kWh each)

Fuel Cell System <sup>03</sup>  
**180 kW** (2 x 90 kW each)

Motor <sup>04</sup>  
**335 kW / 1,200 Nm**



**Hydrogen Safety Mechanism**  
 To ensure the highest level of safety, it has undergone comprehensive safety testing from drop tests and exposure to an open flame to ballistic penetration.

## Water

**Emission of Only H<sub>2</sub>O**  
 Fuel cell systems combine oxygen and hydrogen to produce pollutant-free energy and emit pure water only.

## 635 km

**No Shortage of Range on a Single Charge**  
 The UNIVERSE Fuel Cell can travel up to 635 km\* on a single charge based on inter-city model.

## Quick Recharge

**Suitable for Any Day-to-Day Operation**  
 Charging a UNIVERSE Fuel Cell is quick and easy. A shorter charging time enables efficient operation.

## Reliable

**Safety and Performance Proven in Korea**  
 UNIVERSE Fuel Cell has been in operation in Korea since 2019, and more orders have been made every year since its launch.

\* AER is measured based on a specific driving environment and a representative driving route according to Hyundai's test standards and may vary depending on the temperature, road conditions, number of passengers, driving habits, charging infrastructure, and charging pressure.  
 \* The charging performance can differ based on various factors such as the types of chargers, outside temperature, and the battery charge status.



# A Better Journey.

The change begins with you and your choice.  
Let UNIVERSE Fuel Cell propel the sustainable journey for your customers and the environment.

# Features

Enjoy the carefully considered collection of convenience and safety features on board the UNIVERSE Fuel Cell.



Driver's Seat Window



Multi-functional Automatic Transmission Lever



24 V Dual Power Outlets



Gradual Parking Brake



Automatic Middle Door



Automatic Front Door



Luggage Compartment



Passenger Seat Luggage Compartment



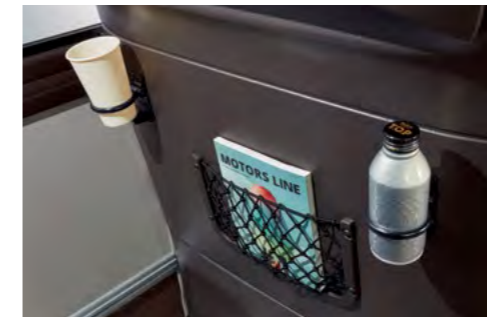
Fully Automatic Temperature Control for Passenger Space



Wi-fi Standard Type Digital Tachograph



Internal Announcement System



Driver's Seat Partition Board (Luggage Net, 2 x Cup Holders)



Gate Partition Board



USB Charging Port on the Seat Back



Emergency Escape Hatch and Flashlight



Middle Door Manual Opening / Closing Device



Emergency Exit Door



Roof LED Panorama Lighting & Room Lamps



Passenger Seat Reading Light and Air Conditioner Louver

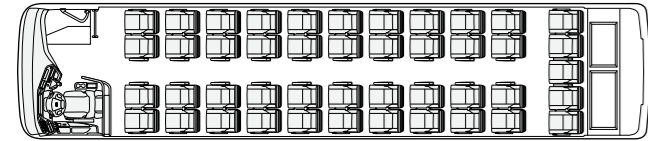


Passenger Seat Curtain Liners

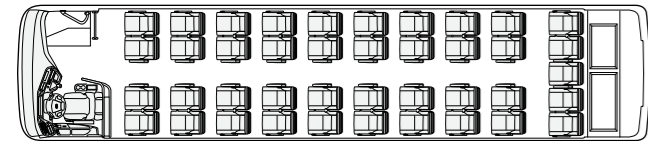
## Seat Layout



Front Door Variant



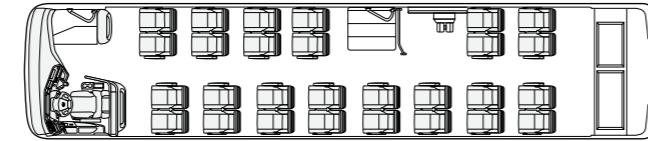
46 (45+1) Seater



42 (41+1) Seater



Front and Middle Door Variant



29 (28+1) Seater

The number of seats can be changed and provided according to your order.  
If you wish to change the materials and specifications of the interior, please consult with your dealer.

## Interior Trim



46 (45+1) Seater / 42 (41+1) Seater



29 (28+1) Seater



Easy to clean and durable floor material

## Specifications

Category		Front Door	Front and Middle Door
Dimension (mm)			
Seat Capacity	Passenger + Driver	46 (45+1) Seater, 42 (41+1) Seater	29 (28+1) Seater
Floor		Flat	Flat
Door		Front Door (Flap)	Front and Middle Door (Swing)
Overall Length		11,750	11,750
Overall Width		2,495	2,495
Overall Height		3,740	3,740
Overhang (Bumper)	Front / Rear	2,660 / 3,240	2,660 / 3,240
Wheelbase		5,850	5,850
Luggage Compartment Volume	m <sup>3</sup>	4.8	3.2
Performance			
Motor	Max. Power (kW)	335	
	Max. Torque (Nm)	1,200	
Transmission		Automatic Transmission (4 Forward Speeds / 1 Reverse)	
Fuel Cell System (Gross / Net)	kW	180 / 160	
HV Batteries (Lithium-ion Battery)	kWh	48	
Hydrogen Tanks	kg / L	34 / 875	41 / 1,050
Fuel Efficiency		18.54 km / kg	-

\* The values above are based on internal testing results and are subject to change after final validation.  
\* Some of the equipment illustrated or described in this catalog may not be standard.  
\* Hyundai Motor Company reserves the right to change specifications and equipment without prior notice.  
\* The color may vary slightly from the actual colors due to differences in print quality.  
\* Please consult sales consultants for full and accurate information.  
\* Fuel efficiency may vary depending on route profile, temperature conditions, and driver behavior.

