Automated Parking Facility for Ultra-compact Electric Vehicles

GRIN Base™ EVEP

Specifications

Mechanism		Elevator (Rotating)
Capacity		40 Vehicles (Standard Spec.)
Operation Method		IC cards, IC tags
Average Vehicle Delivery Time		19.7 Sec.
Vehicle Measurement Requirements	Total Width	Max. 1300 mm
	Total Width + Side Mirrors	Max. 1550 mm
	Total Height	Max. 1600 mm
	Total Length	Max. 2500 mm
	Weight	Max. 750 kg

*Product specifications may change without notice.

*“EV ECO Park” is a registered trademark of GIKEN LTD. in Japan

GIKEN Construction Solutions Company

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GIKEN

Automated Parking Facility
for Ultra-compact Electric Vehicles

GRIN Base™ EVEP

Culture Aboveground, Function Underground

GRIN Base EVEP is designed to address two major issues faced by ultra-compact EV owners - lack of parking space and charging facilities. With its space-saving, high-capacity and speedy delivery features, this system is an ideal solution for those who need to charge their vehicles on the go. By offering such a convenient and eco-friendly service, the system is also contributing to the cause of carbon neutrality.

You can watch a video
of the GRIN Base.

Sustainability

Innovative approach to achieving carbon neutrality and sustainable community

As Smart Cities, Super City, and SDGs initiatives gain more attention for resolving social and urban issues, GIKEN Group strives to offer more than just the “GRIN Base” hardware product. We also provide a comprehensive package that includes post-installation operations and services such as car sharing, delivery, and pick-up services. By tailoring the services to address the specific challenges of each community, GIKEN aims to create comfortable and secure communities while also contributing to carbon neutrality.

Speed

Creation of Comfortable User Environments

With speedy retrieval with an average time of 19.7 seconds (a shortest time of 17.2 seconds), it conveniently charges vehicles while parked, which solves the issues of limited parking space and charging facilities. This creates a more comfortable and user-friendly experience, particularly for ultra-compact EVs.

Highly efficient parking/retrieval operation

Both parking and retrieval can be handled without the hassle of backing up. In addition, vehicles are stored in a radial pattern to improve transfer efficiency and realise amazingly rapid parking and retrieval.

Parking

Move the vehicle forward into the parking and retrieval booth and place or insert the parking card at the operation panel outside the booth to commence storage.

1 The machine detects the vehicle and the door opens.

2 Check for safety and start the parking operation.

3 The vehicle will be stored automatically.

Retrieval

Place or insert the parking card and start the retrieval operation. Move the vehicle forward to exit the booth.

1 Place or insert the parking card and start the retrieval operation.

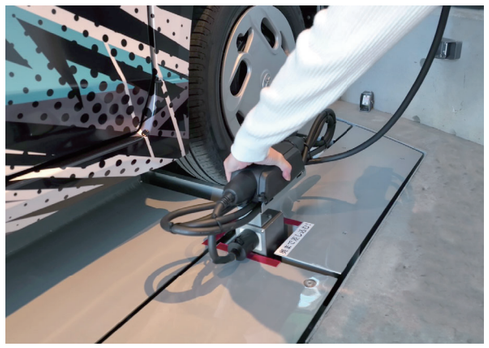
2 The vehicle will be retrieved automatically.

3 Move the vehicle forward and complete the retrieval.

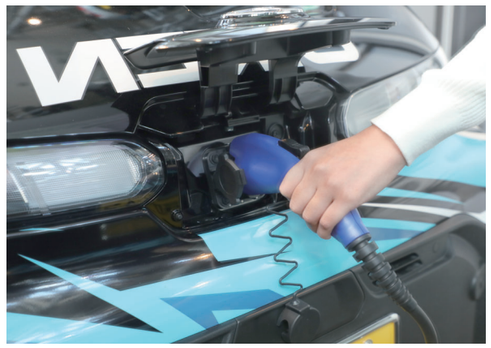
Charging function

When parking the vehicle, you can easily charge it by performing a simple operation.
The standard specification is 200V, but it can also be changed to 100V.

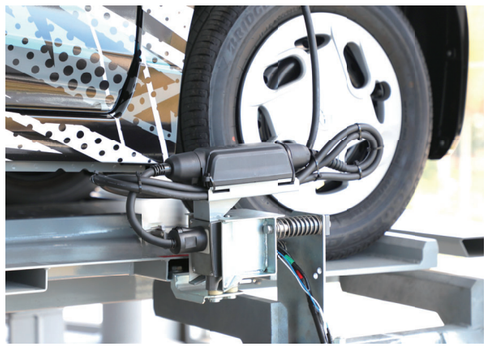
1 Set the connector to the mechanical device.



2 Connect the cable to the vehicle.



3 Automatically connect to the charging connector when the vehicle is entered.

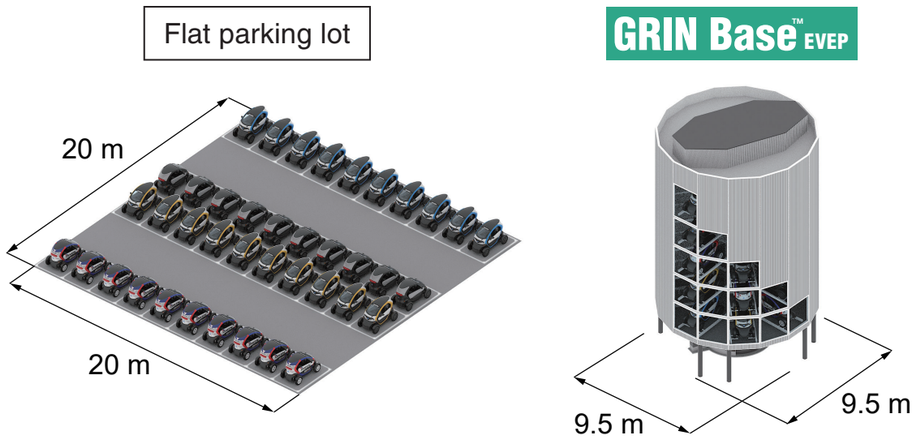


Capacity

Compact and high-capacity design

Five times the capacity of a typical flat parking lot

If to park 40 ultra-compact EVs at a typical flat parking lot, it will require about 400 square meters of land. However, the GRIN Base accounts for only about 80 square meters, which is one-fifth of this. (a cylindrical shape with a diameter of 9.5m and a height of 15m) Therefore, even in locations where it is difficult to secure a large lot of land, a high-capacity parking lot can be installed, and land can be used effectively.



Design

High designability

A parking facility that adds colour to the city with exterior design and lighting

The exterior appearance and number of windows can be freely arranged, making it a stylish and attractive car park. Also, depending on the location and site conditions, an underground model can be selected that creates more space above the ground by embedding parking space underground.

Safety

High Design Safety

Equipped with a full range of safety systems including various types of sensors and a camera that monitors the inside of the parking and retrieval booth.

Guidance Display
Displays guidance and information to assist the operation.

Entry Detection Sensor
Detects passage of people and vehicles into/out of the booth for proper use.

Motion Dectectors
The operation will be halted until the sensor detects that people have exited the booth.

Earthquake Detection Sensors
An earthquake exceeding 100 gals will trigger an automatic halt to prevent secondary disasters.

Observation

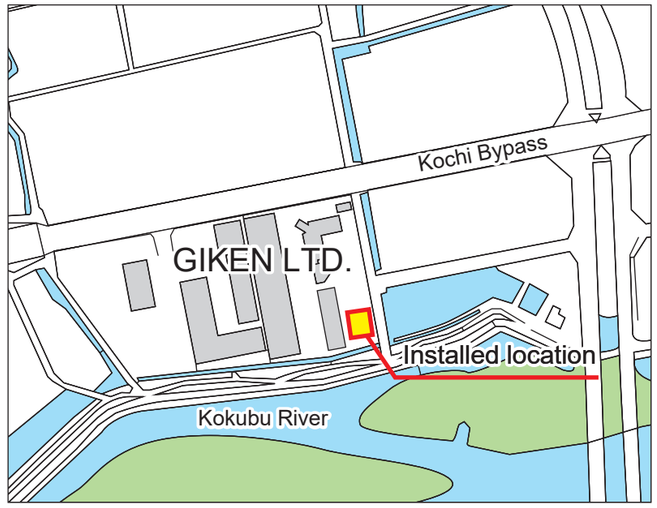
Visit Us

GIKEN LTD. Kochi Head Office

Visit us to see and learn more about the GRIN Base.

3948-1 Nunoshida, Kochi-shi, Kochi

Access: 10 min drive from JR Kochi Station / 20 min drive from Kochi Ryoma Airport.



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(https://fgd.gsi.go.jp/download/menu.php)

For inquiries about visits, please contact us in advance.

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