CAR PARKING

UP system
CONSUMER BENEFITS

- Safe, Secure and Convenient
  - No one enters the car; personal belongings are secure
  - No scratches, dents, or dings
  - Retrieval in less than 2 minutes for all system applications

GROUNDBREAKING ADVANCES

- Maximizes land use and parking revenues
  - 2 to 3 times more spots than the conventional parking equivalent
  - Parking spaces can be created where previously impossible
  - Significantly increases project’s financial performance
- Improves customer parking experience
- System designed to eliminate the possibility of damage to vehicles
- Environmentally friendly
  - Consistent with “Green” building requirements – LEEDS
  - Eliminates harmful emissions – no running engines
- Reduced infrastructure costs
  - Limits underpinning, excavation costs, as well as site preparation
- Reduced labor costs
- Reduced operations costs
- Optional features
  - Fully integrated user interface and cash management system
  - Car wash
  - Remote management
  - Redundant power supply
- Research & Development
  - Bomb detection
  - High security facility

UP Car Parking System

The UP system is our most common solution and accommodates heights up to 65’ (780”). Based on a modular concept that can be built above or below grade, the UP easily adapts to meet the specific requirements of a prospective parking location. The UP’s transfer room can be placed on any level of the parking system. The transfer room can also be located on a level above the parking area and connected to it via elevator. The UP allows for various car heights, and its integrated quick change system allows drivers to retrieve cars rapidly, minimizing wait time. The rotating turntable in the transfer room or on the storage and retrieval unit (SRU) allows the vehicle to be positioned toward the exit, ready for driving.

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The transfer room can be located on any level within the system.

Dimension Z depends on the car height:
- Car height = 63” Z = 74”
- Car height = 78” Z = 89.75”

The UP system allows for many possible car heights.

**Side view: Parking spots within a steel structure**

\[ Z = \text{car height} + 11" \]
\[ Z^* \text{ for structural reasons every third level must be increased by 39"} \]

**Side view: Parking spots within a concrete structure**

The transfer room can be located on any level within the system.

Dimension Z depends on the car height:
- Car height = 63” Z = 74”
- Car height = 78” Z = 89.75”

The UP system allows for many possible car heights.

**Clear height per level = car height + 15”**

By using a lateral car elevator, the transfer room can be located above the car parking system.
Entrance and Exit Alternatives

Transfer room using a rotating unit on a storage retrieval unit (SRU)

Double row and mixed row configurations are possible.

Parking spots in a steel structure require the pallet distance $X$ and $Y$ depend on the height of the entire system: $X$ without wall plates / $Y$ with wall plates $s = 12''$.

- 2 to 4 levels: $X = 7'' / Y = 29''$
- 5 and 6 levels: $X = 8'' / Y = 31''$
- 7 and 8 levels: $X = 8.5'' / Y = 32''$

Dimensions for free-standing systems available upon request.

Dimensions of parking platform 17.1' (205'') x 87''

*Assumes vehicle dimensions of 16.8' (201'') L x 87'' W.

All dimensions refer to these platform dimensions.

Platform dimensions can be customized

Parking spots within a concrete structure require the pallet distance
$X = 4.75''$ without wall plates and $Y = \text{thickness of the wall plate} + 11''$.
Control cabinets must be installed in a room with a minimum surface area of 11.4' (137'') $x$ 71''. The room height must be a minimum of 87''.
Please note that this room should be located close to the transfer room.
Automotion is an innovative parking system that combines a traditional elevator parking system with computerized guidance software. This allows Automotion to maximize the number of cars a location can handle while automating the entire vehicle storage and retrieval process. Automotion Parking Systems employs a comprehensive staff of architects, engineers and automated site planning solution specialists to aid in the development of your project. Automotion Parking Systems is the leader in transient parking systems in The United States.

STOPA is one of the global leaders in automated storage systems with more than 1800 installed systems including car parking systems of more than 3000 fully automated parking spaces.

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<td>■Works best in concrete buildings</td>
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**Carbox System**

Parking solution for a maximum of 20 parking spots

- Suitable for long-term parkers only
- Single or double row configurations
- Installation above or below grade
- Turntable optional