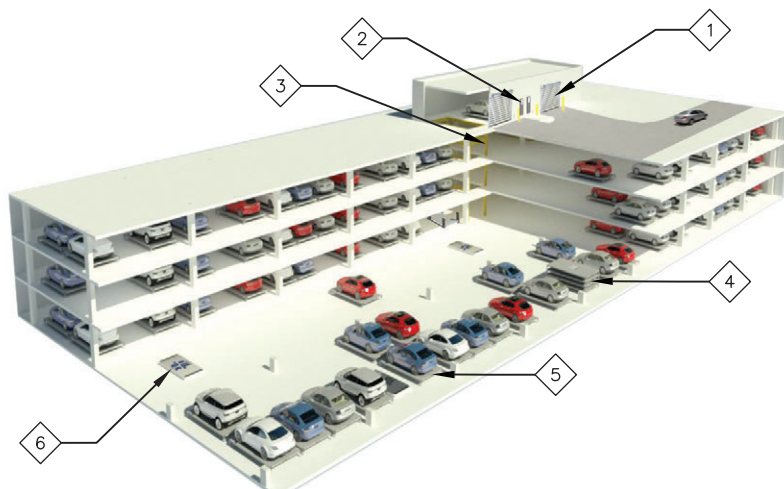


# DATA SHEET

Version 2022.07

# PARKPLUS AGV AUTOMATED GUIDED VEHICLE



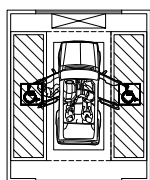
The **PARKPLUS** Fully Automated Guided Vehicle (AGV) Parking System consists of free-roaming, battery-operated, omni-directional robots using traffic management software, markers, vision systems and lasers for self-guidance to manage the automated storage and retrieval of vehicles.

The **PARKPLUS** AGV Parking System is designed to be installed in an enclosed parking vault. In addition to the parking superstructure and storage area, the AGV system includes 6 main components:

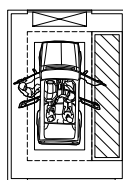
- 1. Loading Zone:** Entry/exit area where users leave/retrieve vehicle.
- 2. Control System:** Manages automated storage and retrieval of vehicle.
- 3. Vertical Reciprocating Conveyor (VRC):** Car lift to transport vehicle between floors/levels.
- 4. Tray Accumulator:** Stacks Trays to maximize storage.
- 5. Vehicle Storage Tray:** Platform vehicles park on. Handled by AGV to transfer vehicle to/from storage vault.
- 6. Automated Guided Vehicle (AGV):** Battery-operated robotic device.

## Components

### 1 Loading Zone

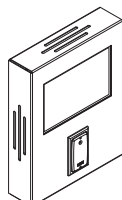


ADA VAN ACCESSIBLE  
LOADING ZONE



STANDARD  
LOADING ZONE

### 2 Control System PARKPLUS Maestro Traffic Management Platform

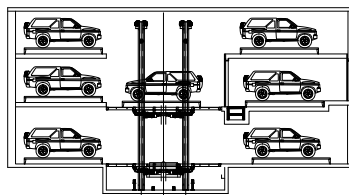


PARKPLUS KIOSK

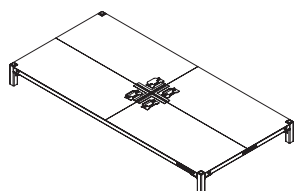


PARKPLUS MOBILE APP

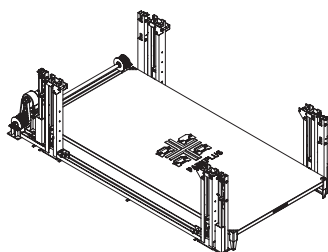
### 3 Vertical Reciprocating Conveyor (VRC)



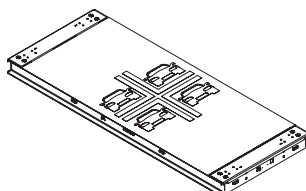
### 5 Vehicle Storage Tray



### 4 Tray Accumulator



### 6 Automated Guided Vehicle (AGV)



System can be installed in multiple regular and irregular configurations on multiple levels above, on and below grade to maximize parking efficiencies. Basic system design and components are determined by peak demand throughout requirements of the parking system.

ADA requirements can be accommodated. Owner/Architect should review with local planning and building departments.

**MEP coordination with project team must meet code requirements and satisfy equipment clearances.**

## Suitable for

- Standard passenger vehicles
- SUVs
- Vans

*\*Custom Solutions Available*

## Specifications

Maximum Vehicle Load:	6,000 lbs.
Maximum Vehicle Length:	18'
Maximum Vehicle Width:	7'-3"
Maximum Vehicle Height:	6'-8"

Control: Touchscreen Kiosk  
Mobile App (Optional)  
Key Fob (Optional)  
Remote Control (Optional)  
Maestro™ Traffic Management Software

## Power & Electrical

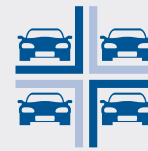
208 Volt, 3 Phase Power

Approx. 300-1,000 Amps depending on system size and components.

Contact **PARKPLUS** for project-specific requirements.

- In-house Design, Manufacturing, Installation & Service
- Intelligent Traffic Management Software
- Flexible Floor Plan Configuration
- 24/7 Video Monitoring & Remote Access

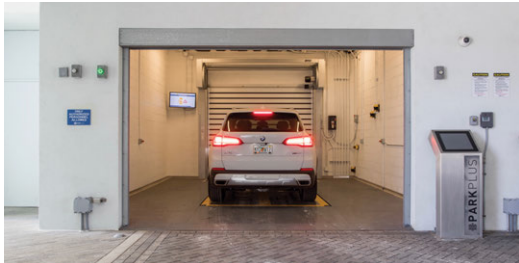
PARKPLUS AGV Automated Parking System | Data Sheet V2022.07



**PARKPLUS**  
HIGH DENSITY PARKING SYSTEMS

## Operation

Vehicle is always parked on a tray. AGV transfers tray containing vehicle to and from storage area, or may transfer it to a VRC for storage on another level. User will always park & retrieve car from Loading Zone/s.



**ENTRY:** User parks and exits vehicle in Loading Zone



**STORAGE:** Vehicle is automatically parked by AGV

## Applications

AGV System can be installed in self-park applications:

- Multi-Family Residential Buildings
- Indoor Installations
- Low & High Rise Buildings
- Commercial Buildings



**OPERATION:** System is activated by Touchscreen Kiosk/Mobile App



**RETRIEVAL:** Vehicle is presented to Loading Zone when requested

## Additional Information

### Safety

System may be equipped with Visual and Audible alarms and Emergency Stops. Sensors for vehicle size and positioning ensure system will not initiate unless physical parameters are met. Motion detectors and lasers detect obstructions within system and stop operation in emergency. System requires operator reset to check safety and obstruction removal. Sensor signals, door signals and PLC program protection for sequence operation ensure function as programmed. System includes manual operation methods for system override. System is equipped with limit switches which limit motions to correct system levels and positions. System can be equipped with a secondary safety gate system. System is equipped with 24/7 Video Monitoring.

### Fire Protection

In most metropolitan areas, multi-level automated stacker systems are reviewed as similar to high piled storage. Fire rating of structural racking components is not required. Sprinklers may be required per following section. Each city may have fire department guidelines.

### Fire Sprinklers

1. Installation shall be in a sprinklered garage. Additional in-rack sprinkler requirements may apply. 2. Sprinkler Plans filed and approved by local municipality. 3. Sprinkler system designed as required by NFPA 13 and local building codes. 4. Clear building height within parking area must accommodate height of equipment plus additional requirements for adequate coverage of fire sprinklers.

### Temperature

This system is designed to operate between 50° and 105° F.

### Humidity

This system is designed to operate in humidity no higher than 50%.

### Loading

Structural design and loading is provided on a project by project basis and is dependant on seismic zones, soil conditions and other environmental conditions.

### Warranty & Service

12-month Standard Manufacturer's Warranty.

Extended Warranty and Service Maintenance Agreement is available at time of purchase.

### Approvals

- OTCR Compliant, City of New York
- Los Angeles County Approved
- ISO Compliant
- California Seismic Code Compliant
- Miami Dade County Compliant
- Approved in Multiple U.S. Cities



**PARKPLUS**  
HIGH DENSITY PARKING SYSTEMS

**PARKPLUS, INC. HEADQUARTERS**  
83 BROAD AVENUE  
FAIRVIEW, NJ 07022

**PARKPLUS CALIFORNIA**  
8640 TAMARACK AVENUE  
LOS ANGELES, CA 91352  
CSLB# 1018794

**PARKPLUS FLORIDA, INC.**  
1111 OLD GRIFFIN ROAD  
DANIA BEACH, FL 33004



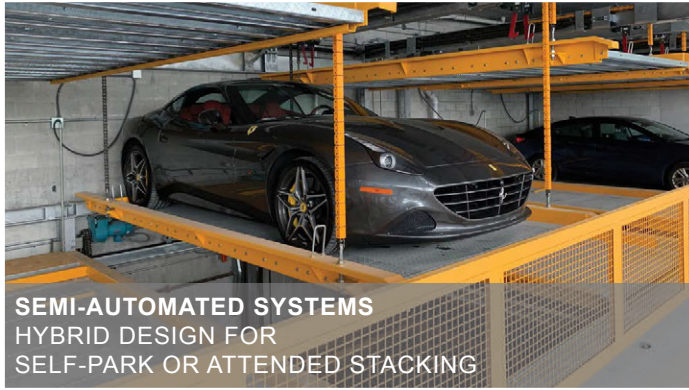
# HIGH DENSITY PARKING SYSTEMS FOR OVER 50 YEARS



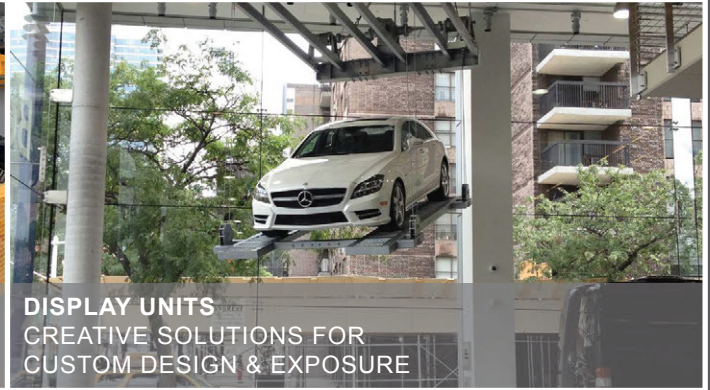
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ATTENDED SYSTEMS FOR  
MULTI-LEVEL BASIC STACKING



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ADVANCED TECHNOLOGIES FOR  
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