



TRIVANTA EDGE

Parking, Perfected

Revolutionizing Urban Parking with Smart, Space-Efficient, and Sustainable Solutions

ADVANCED TECHNOLOGY | MAXIMUM EFFICIENCY | PREMIUM QUALITY

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About Trivanta Edge

Leading Innovation in Automated Parking Solutions

Welcome to the Future of Parking

Trivanta Edge is at the forefront of revolutionizing urban parking infrastructure with cutting-edge automated parking systems. With years of expertise in mechanical engineering and automation technology, we deliver world-class solutions that maximize space utilization while minimizing environmental impact.

Our Mission

To transform urban landscapes by providing intelligent, space-efficient, and eco-friendly automated parking solutions that enhance property value and improve quality of life.

Why Choose Trivanta Edge?

- ✓ Industry-leading technology and engineering excellence
- ✓ Customized solutions tailored to your specific requirements
- ✓ Comprehensive after-sales support and maintenance services

Key Features & Benefits

Advanced Technology for Modern Parking Needs



Space Optimization

Maximize parking capacity by 60-80% compared to conventional parking. Perfect for high-density urban areas where space is at a premium.



Enhanced Security

Fully automated system with no human access to parking areas. Advanced security features protect vehicles from theft, vandalism, and damage.



Rapid Operation

Quick retrieval times averaging 60-90 seconds. High-speed motors and optimized algorithms ensure minimal waiting time for users.



Eco-Friendly

Zero emissions in parking area, reduced carbon footprint with no vehicle circulation. Energy-efficient motors with regenerative systems.

Technical Specifications

Precision Engineering for Optimal Performance

System Specifications

Specification	Details
System Type	Fully Automated Puzzle/Tower/Pit/Stack Based
Vehicle Weight Capacity	2000 - 2500 kg per platform
Platform Dimensions	5500mm (L) x 2000mm (W) x 1800mm (H)
Retrieval Time	60-90 seconds (average)
Operating Speed	Vertical: 15-25 m/min Horizontal: 30-40 m/min
Power Supply	415V, 3 Phase, 50 Hz
Drive System	AC/DC Variable Frequency Drive with regenerative capability
Safety Systems	Multiple sensors, emergency brakes, UPS backup
Control System	PLC-based with HMI touchscreen interface
Material	Hot-dip galvanized steel structure
Noise Level	< 70 dB during operation
Operating Temperature	-10°C to +45°C
Standards Compliance	IS, CE, ISO 9001:2015 certified

Warranty

1 year comprehensive, extendable AMC
available

Puzzle Parking System

Vertical & Horizontal Movement for Maximum Density

Multi-Level Puzzle Parking

The Puzzle Parking System is an innovative solution that combines vertical and horizontal movements to achieve maximum parking density. Ideal for medium to large-scale parking requirements in residential complexes, commercial buildings, and mixed-use developments.

- ✓ 2 to 8 levels parking capacity
- ✓ Modular design for easy expansion
- ✓ Space efficiency up to 2.5x conventional
- ✓ Minimal pit and overhead requirements
- ✓ Semi-automatic to fully automatic operation
- ✓ Simultaneous multi-car retrieval
- ✓ Independent platform movement
- ✓ Quick installation and commissioning

Ideal Applications:

- ✓ Residential apartments and condominiums
- ✓ Commercial office buildings
- ✓ Shopping malls and retail centers
- ✓ Hotels and hospitality projects



Technical Highlights

Capacity: 20-100 cars per system

Parking Height: 1800mm per level

Operation: Card/RFID based access control

Structure: Hot-dip galvanized steel frame

Installation Time: 4-8 weeks depending on capacity

Tower Parking System

Vertical High-Rise Parking Solution

Vertical Tower Parking

The Tower Parking System is a fully automated, high-capacity vertical parking solution designed for premium properties with limited ground space. This system can accommodate 20-80 vehicles in a compact footprint, making it the ultimate space-saving solution.

- ✓ Up to 20 levels of vertical parking
- ✓ Smallest footprint requirement
- ✓ 360-degree vehicle rotation capability
- ✓ Energy-efficient LED lighting
- ✓ Fully automated robotic operation
- ✓ High-speed vertical lifts
- ✓ Weather-proof enclosure options
- ✓ Seismic-resistant structure design

Ideal Applications:

- ✓ Premium residential towers
- ✓ Corporate headquarters
- ✓ High-end commercial complexes
- ✓ Smart city projects



Technical Highlights

Capacity: 20-80 cars per tower

Tower Height: Up to 30 meters

Ground Space: As low as 40 sq.m

Operation: Fully automated with touchscreen

Special Features: Car wash integration available

Bike Stackers System

Efficient Two-Wheeler Parking Solutions

Single & Double Bike Stackers

Our Bike Stacker Systems provide innovative vertical parking solutions for two-wheelers, maximizing space utilization in residential and commercial complexes. Available in both single and double-tier configurations to suit various capacity requirements.

Single Bike Stacker

- ✓ Ground level parking
- ✓ Easy access for all users
- ✓ Capacity: 6-12 bikes per unit
- ✓ Ideal for smaller spaces

Double Bike Stacker

- ✓ Two-tier vertical parking
- ✓ Hydraulic lifting mechanism
- ✓ Capacity: 12-24 bikes per unit
- ✓ 50% space savings
- ✓ Safety locks on upper tier
- ✓ Anti-slip platform design

Key Benefits:

- ✓ Maximize parking capacity in limited space
- ✓ Organized and secure bike parking
- ✓ Reduced vandalism and theft
- ✓ Low maintenance requirements
- ✓ Suitable for all two-wheeler types



Technical Specifications

Material: Heavy-duty galvanized steel

Load Capacity: 200kg per slot

Installation: Modular bolt-down system

Operation: Manual/Semi-automatic options

Warranty: 5 years structural warranty

Car Stack Parking System

Multi-Level Vehicle Stacking Solutions

Hydraulic Car Stacking Systems

Car Stack Parking Systems offer an economical solution for doubling or tripling parking capacity using vertical stacking technology. Perfect for residential buildings, offices, and commercial establishments with space constraints.

- ✓ 2-4 level stacking configurations
- ✓ Hydraulic lifting mechanism
- ✓ Suitable for SUVs and sedans
- ✓ Pit and pit-less options available
- ✓ Independent platform operation
- ✓ Safety sensors and interlocks
- ✓ Emergency manual override
- ✓ CE certified components

System Variants:

2-Post System: Traditional design with front and rear posts

4-Post System: Enhanced stability for heavier vehicles

Dependent System: Lower platform must be empty to access upper

Independent System: Direct access to any car

Ideal Applications:

- ✓ Residential complexes
- ✓ Shopping centers
- ✓ Office buildings
- ✓ Hotels and resorts



✓ Hospitals

✓ Car
showrooms

Technical Details

Capacity: 2-4 cars per stack

Platform Size: 5.5m x 2.4m (customizable)

Load Capacity: 2500kg per platform

Lifting Speed: 4-8 meters/minute

Power: 2.2-3.7 kW per unit

Pit Parking System

Underground Space Optimization

Underground Pit Parking Solutions

Pit Parking Systems utilize underground space to create invisible parking solutions. By excavating below ground level, these systems provide multiple parking levels while maintaining the ground surface for other uses.

- ✓ 2-3 underground parking levels
- ✓ Preserves ground space for gardens/play areas
- ✓ Waterproof pit construction
- ✓ LED lighting in pit area
- ✓ Invisible from ground level
- ✓ Hydraulic platform system
- ✓ Automatic drainage system
- ✓ Safety barriers and sensors

Key Advantages

- Completely hidden parking solution
- Maximum land utilization
- Weather protection for vehicles
- Enhanced security
- Increased property value

Safety Features

- Emergency stop buttons
- Anti-fall protection
- Overload sensors
- Backup power system
- Manual override option

Installation Requirements:

- ✓ Excavation depth: 3-6 meters
- ✓ Waterproofing treatment essential

- ✓ Drainage connection required
- ✓ Ventilation system recommended

Technical Specifications

Pit Depth: 3-6 meters (2-3 levels)

Platform Load: 2500kg per vehicle

Operation Time: 60-90 seconds

Power Supply: 415V, 3-phase

Control: PLC based with HMI

No Post Parking System

Clear Access Vehicle Parking

Post-Free Parking Innovation

The No Post Parking System eliminates front posts for unobstructed vehicle access. Using cantilever technology and side-mounted lifting mechanisms, this system provides hassle-free parking with maximum convenience.

- ✓ No front posts - clear access
- ✓ Side hydraulic lifting mechanism
- ✓ Easy door opening on platform
- ✓ Anti-slip platform surface
- ✓ Cantilever platform design
- ✓ Suitable for wide vehicles
- ✓ 2-3 level configurations
- ✓ Synchronized lifting system

Why Choose No Post System?

User Benefits

- Easier parking and retrieval
- No damage risk from posts
- Comfortable door access
- Suitable for all driver skills

Technical Benefits

- Robust cantilever design
- Lower maintenance needs
- Better weight distribution
- Enhanced stability

Perfect For:

- ✓ Premium residential projects
- ✓ Luxury car parking
- ✓ Valet parking services
- ✓ Showroom display parking
- ✓ Hotel premium parking



System Specifications

Levels: 2-3 parking tiers

Platform Width: 2.5-3.0 meters

Vehicle Weight: Up to 3000kg

Lifting Mechanism: Twin hydraulic cylinders

Safety: Dual safety locks per platform

Benefits & Advantages

Why Automated Parking Makes Business Sense

1

Maximum Space Utilization

Increase parking capacity by 60-80% compared to conventional parking. No need for driving lanes, ramps, or circulation space means more cars in less area.

2

Enhanced Property Value

Premium parking solutions significantly increase property appeal and market value. Attract high-end buyers and tenants with modern amenities.

3

Reduced Construction Costs

Eliminate need for expensive ventilation systems, extensive lighting, and fire safety measures. Lower excavation and structural requirements reduce building costs.

4

Zero Vehicle Emissions Inside

Cars are turned off before entering the system, eliminating exhaust fumes and carbon monoxide in parking areas. Healthier and cleaner environment.

5

Complete Vehicle Security

No human access to parking area eliminates risk of theft, vandalism, or damage. Vehicles are protected in secure, climate-controlled environments.

6

Minimal Operational Costs

Automated systems require minimal staff and maintenance. Energy-efficient motors and regenerative systems reduce electricity consumption significantly.

Installation Process

Seamless Implementation from Concept to Completion

1

Site Assessment

Detailed evaluation of site conditions, space availability, and technical requirements

2

Custom Design

Tailored system design based on capacity needs, building architecture, and budget

3

Installation

On-site installation by certified technicians with minimal disruption

4

Support

24/7 technical support and preventive maintenance services

Safety & Security Features

Multiple Layers of Protection

Safety Systems

- **Emergency Stop Buttons:** Strategically placed at all entry/exit points
- **Overload Sensors:** Prevent operation if weight limits are exceeded
- **Position Sensors:** Ensure accurate platform alignment
- **Safety Interlocks:** Prevent movement when doors are open
- **Anti-Fall Devices:** Multiple redundant catching mechanisms
- **Fire Detection:** Integrated smoke and heat sensors
- **Emergency Lowering:** Manual emergency descent system
- **UPS Backup:** Uninterrupted power for emergency operations

Security Features

- **Access Control:** RFID card/mobile app authentication
- **CCTV Monitoring:** 24/7 video surveillance
- **User Identification:** Personal code/biometric options
- **Audit Trail:** Complete log of all transactions
- **Intrusion Alarms:** Unauthorized access detection
- **Remote Monitoring:** Cloud-based system status tracking
- **Vehicle Tracking:** Real-time location of each vehicle
- **Secure Enclosure:** Climate-controlled, locked environment

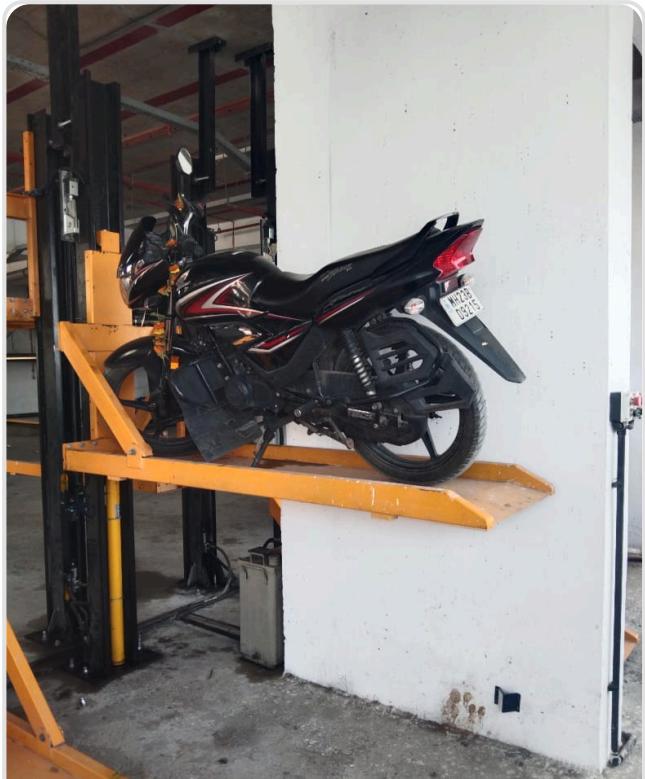
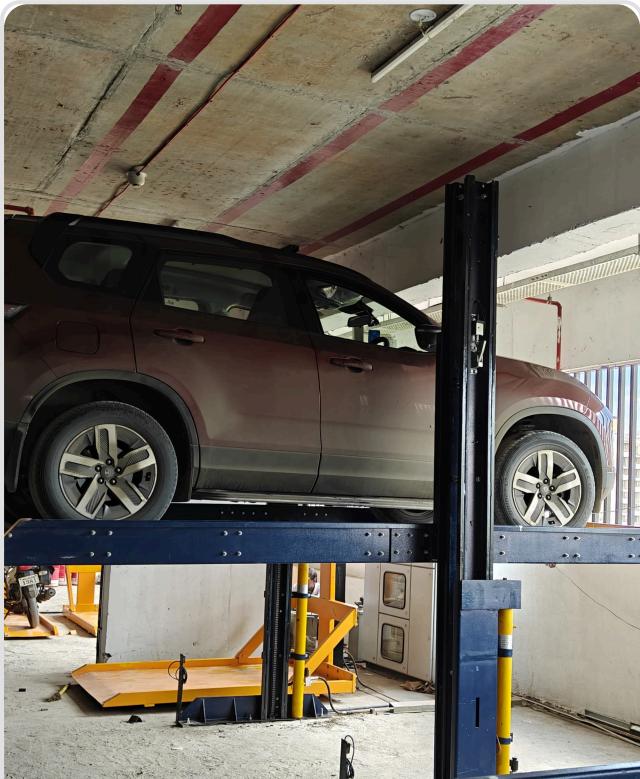
Compliance & Certifications

- ✓ IS Standards for mechanical parking systems
- ✓ CE Marking for European safety standards
- ✓ ISO 9001:2015 Quality Management Certification
- ✓ IGBC Green Building compliance ready
- ✓ Fire safety NOC from local authorities

✓ Structural stability certification

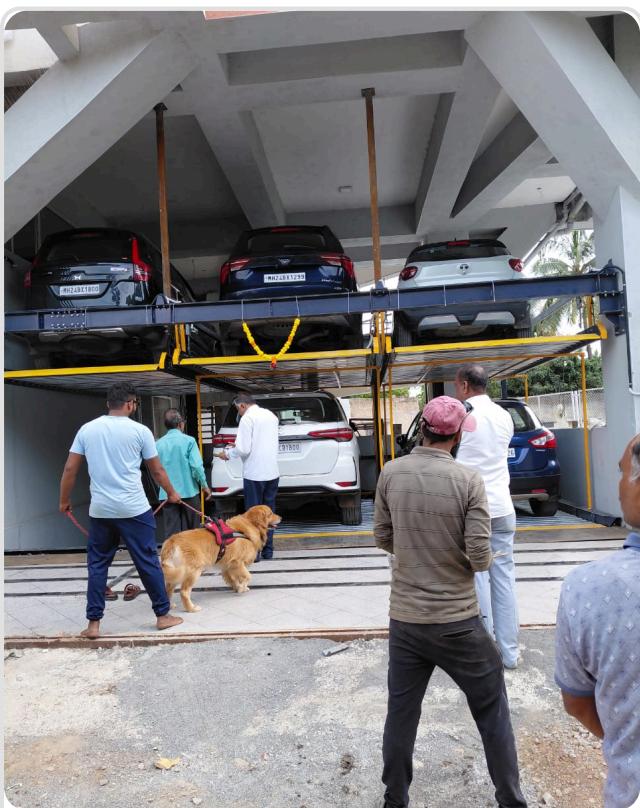
Project Gallery

Our Successful Installations



Project Gallery

More Success Stories





TRIVANTA EDGE
Automated Parking Systems
www.trivantaedge.com

Our Valued Clients

Trusted by leading developers, builders, and facility managers across India



What Our Clients Say

"The automated parking system from Trivanta Edge has transformed our property value. The space efficiency and modern technology appeal greatly to our premium buyers."

- Leading Real Estate Developer, Mumbai

"Excellent engineering quality and professional installation. The system has been running flawlessly for over 2 years with minimal maintenance."

- Facility Manager, Commercial Complex, Bangalore

"The best decision we made for our project. Saved significant construction costs and increased parking capacity by 70%. Highly recommended!"

- Project Head, Luxury Residences, Delhi NCR



TRIVANTA EDGE

Automated Parking Systems

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Maintenance & Support

Comprehensive After-Sales Service

Our Commitment to Service Excellence

At Trivanta Edge, our relationship with clients extends far beyond installation. We provide comprehensive maintenance and support services to ensure optimal system performance and longevity.

Preventive Maintenance

- Scheduled monthly inspections
- Lubrication and cleaning services
- Component wear monitoring
- Software updates and optimization
- Safety system verification
- Performance testing and calibration
- Detailed service reports

Support Services

- 24/7 technical helpline
- Remote diagnostic capabilities
- On-site emergency response
- Spare parts availability
- Annual maintenance contracts (AMC)
- System upgrades and modernization
- Operator training programs

AMC Packages

Silver Package: Bi-annual maintenance with emergency support

Gold Package: Quarterly maintenance with priority support

Platinum Package: Monthly maintenance with 24/7 dedicated support

Warranty Coverage

- ✓ 1 year comprehensive warranty on all equipment
- ✓ 3 years warranty on structural components
- ✓ Extended warranty options available
- ✓ Free replacement of defective parts during warranty period
- ✓ No-questions-asked service commitment

Recent Projects 2024-25

Successful Installations Across India

Suraj Estate Developers Ltd - Dadar

Tower Parking: 1x1 System

Capacity: 46 Cars | 61 Mtrs Height

Status: Ongoing

AYG Realty Pvt Ltd - Dadar

Tower Parking: 0x1 System

Capacity: 25 Cars | 62 Mtrs Height

Status: Ongoing

Avishkar - Arista Platinum Towers - Pune

Puzzle Parking: 30 Nos | **G+1 Hyd:** 12 Nos

Bike Stackers: 212 Nos | **G+1 Stacker:** 40 Nos

Status: Ongoing

IKON Trezza - Pune

G+1 Hyd Stack: 16 Nos

Pit Puzzle G-1+1: 101 Nos

Status: Ongoing

Archit Group - Sope Estate - Nasik

Mech 3L OG Puzzle G+2: 19 Nos

G+1 Hyd Stack: 04 Nos

Status: Ongoing

Sukhwani Skylines - Pune

G-1+1 Stacker: 191 Nos

System Type: Pit & Ground Level

Status: Ongoing

EKA Buildcon LLP - Pune

G+1 Hyd Stack: 136 Nos

System Type: Hydraulic Stack Parking

Status: Ongoing

Gauri Vinayak Builders - Mumbai

G+1 Hyd Stack: 55 Nos

System Type: Hydraulic Stack Parking

Status: Ongoing

ACE Capitol - Noida Delhi

G+1 Stacker: 186 Nos

System Type: Commercial Office Space

Status: Completed ✓

SCON HD Emerald - Pune

G+1 Hyd Stack: 22 Nos | **G-1+1**

Stacker: 02 Nos

Mixed System: Hydraulic & Stack Parking

Status: Completed ✓

Get in Touch

Let's Transform Your Parking Infrastructure Together



Let's discuss how our automated parking solutions can transform your project

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Business Hours

Monday - Saturday: 9:00 AM -

6:00 PM

Sunday: Closed

24/7 Emergency Support

Available

Request a Free Consultation

Our experts are ready to help you design the perfect automated parking solution
for