TagMaster

LEARN FROM REALITY

Applications for RFID Long Range Readers

Ideas and examples
for Installers and Integrators

1124-336-02

Inspiration for Smarter Access Solutions

At TagMaster, we believe in making vehicle access smarter, smoother, and more secure. This collection of application examples highlights some of the most popular and appreciated uses of our Long Range RFID readers – proven solutions that deliver real value every day.

From residential communities and hospitals to logistics hubs and airports, our technology is trusted by installers and integrators worldwide to enhance efficiency, safety, and user experience. These real-world cases not only demonstrate the flexibility and performance of TagMaster's RFID solutions, but also **serve as inspiration for your customers** and partners projects.

Use this folder as a tool – to educate, to inspire, and to **show your customers what's possible**. When the right solution meets the right application, everyone benefits.

Let's create smarter access, together!

There is more information on
www.tagmaster.com/rfid-long-range-reader

TagMaster

LEARN FROM REALITY

Gate and Barrier Control

Improving daily convenience

XT-1, XT-5 readers

LR-6 reader

The application

TagMaster's Long Range RFID solution brings secure, automated access to gates and barriers—ensuring only authorized vehicles enter the premises. Ideal for staff, service vehicles, and fleet operations, the system identifies each vehicle automatically, without the need to stop, use access cards, or enter PIN codes.

By placing an RFID tag on the windshield or headlamp, employees and drivers enjoy seamless, hands-free access—improving daily convenience while reducing wait times at entry points. The system ensures efficient movement for company trucks and service vehicles, helping maintain schedules and operational flow.

Designed for staff parking areas, industrial sites and logistics centres, TagMaster's solution enhances security, reduces gate congestion, and eliminates the need for manual checks. With robust, weather-resistant technology and easy integration into existing systems, it's a smart, future-ready choice for modern access control.

Parking

Private and office, garage or surface

XT-1, XT-5 readers

LR-6 reader

The application

TagMaster's Long Range RFID solutions deliver a smart, hands-free access control system for private and office parking garages. Designed for daily convenience and high security, the system ensures only authorized vehicles are granted entry - enhancing safety for both people and property.

As vehicles approach, RFID tags are read from a distance, automatically opening gates or barriers without the need to stop, roll down windows, or scan a badge. This creates smooth traffic flow, reduces congestion during peak hours, and offers a more pleasant arrival experience.

Built-in encryption and secure tag authentication prevent unauthorized access, while each vehicle's movement is logged for auditing and reporting. TagMaster readers are rugged and weather-resistant, ensuring reliable performance in tough environments.

Ideal for office buildings, residential complexes, and private garages, the system integrates easily with existing access control or facility management platforms. TagMaster RFID helps streamline operations, reduce manual handling, and provide a safe, efficient, and future-ready parking solution.

Bus Depot

Smarter Operations with Long Range RFID

XT-1, XT-5 readers

LR-6 reader

The application

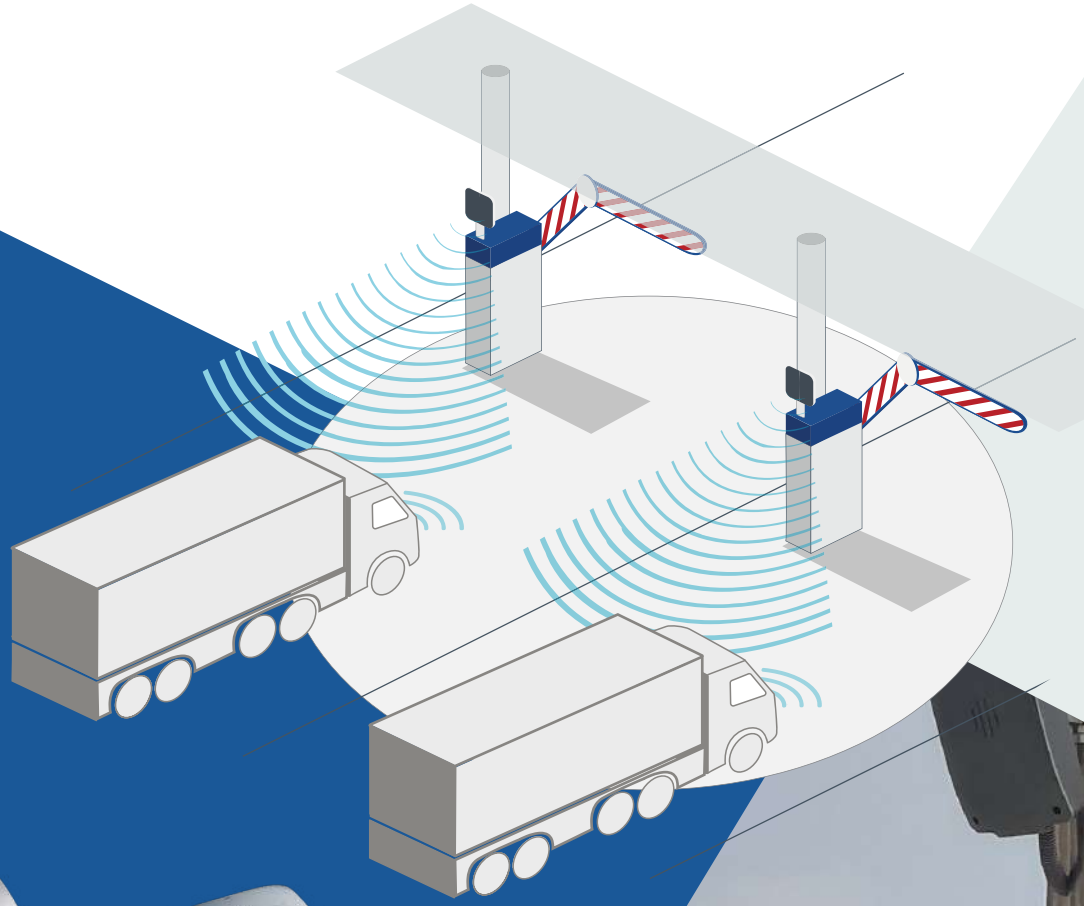
TagMaster's Long Range RFID solution transforms bus depot management by automating vehicle access, tracking, and fleet visibility. As buses enter or exit the depot, RFID readers capture time, date, and vehicle ID—providing hands-free, secure access and automatic logging without driver interaction.

Used in both indoor garages and large outdoor yards, the system enables real-time tracking of fleet movement and status. Vehicles can be assigned to specific zones or parking lanes, making it easy to monitor available buses, manage shift schedules, and streamline dispatch operations.

Ideal for public transport operators, school bus services, and private fleets, the solution reduces operational overhead, minimizes human error, and improves overall depot safety. TagMaster RFID integrates easily with depot and maintenance management systems, supporting better planning, faster turnaround, and full control of daily operations—making it an essential tool for efficient, modern fleet management.

Ports & Terminals

Efficient Truck Processing and Secure Access Control



XT-1, XT-5 readers

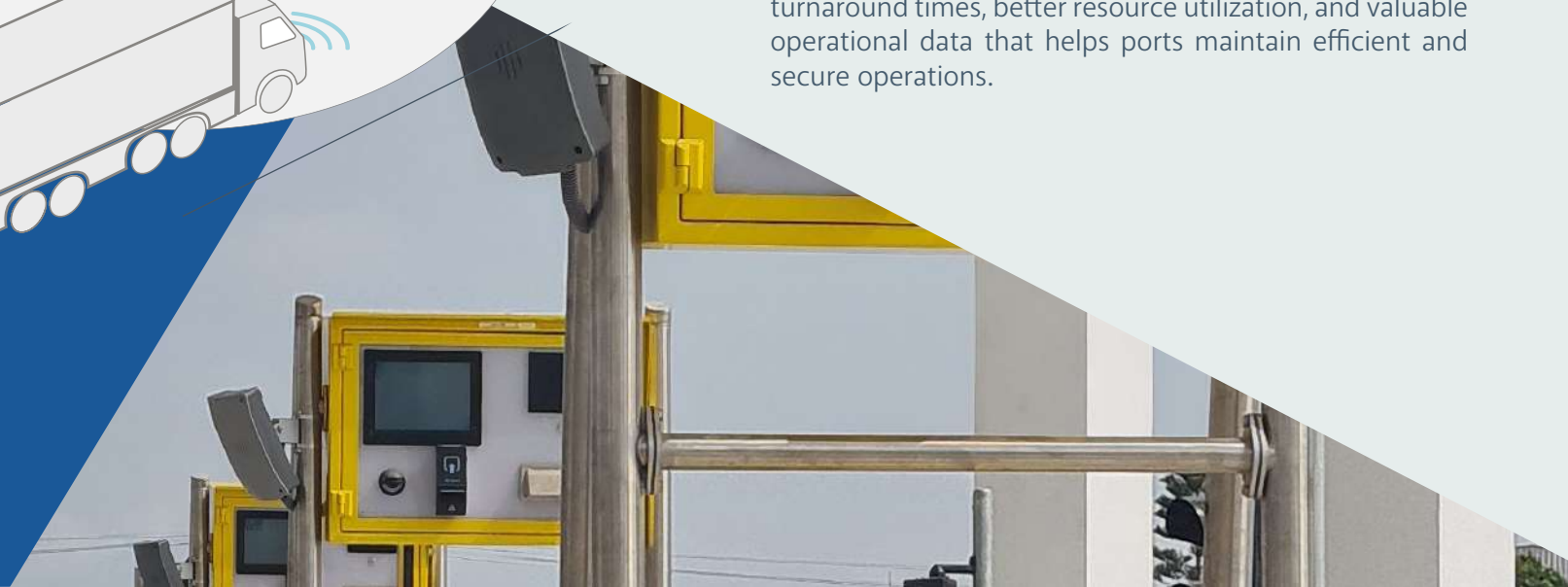
LR-6 reader

The application

TagMaster's Long Range RFID solution helps ports, container terminals, and freight facilities automate vehicle identification and improve operational efficiency. As trucks arrive at entry gates, RFID readers automatically identify authorized vehicles without requiring drivers to stop, present credentials, or interact with gate personnel.

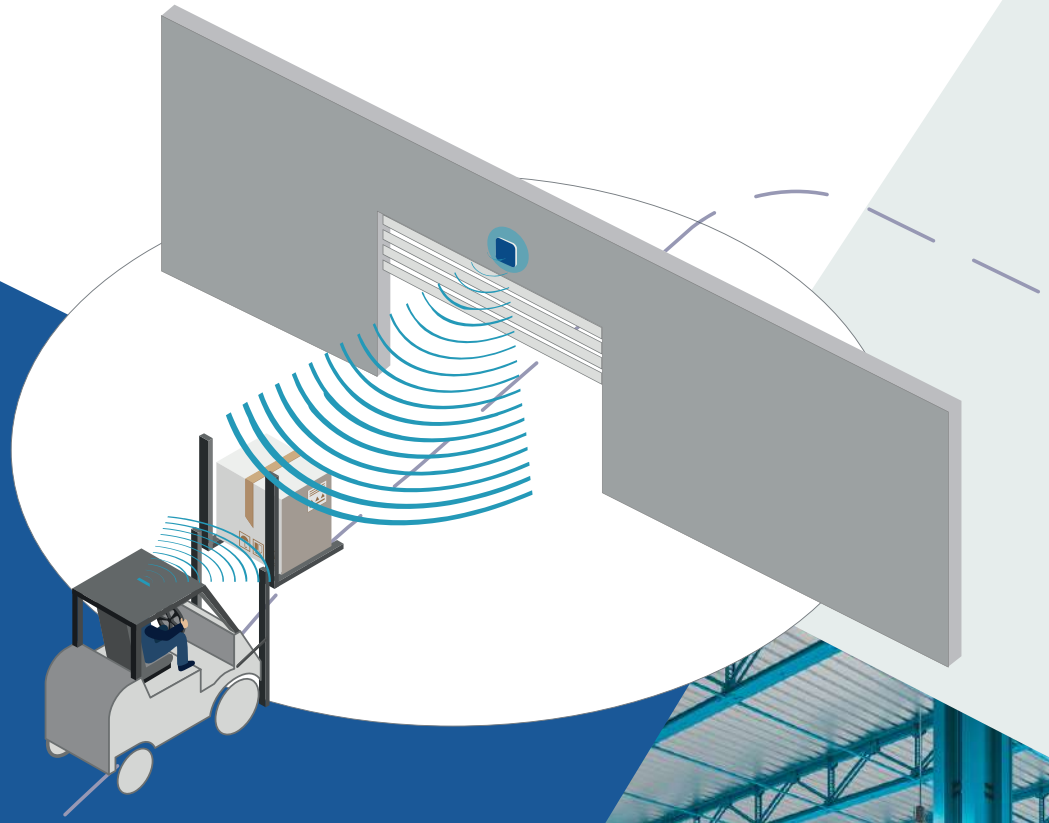
Beyond gate access, RFID readers can be installed throughout the terminal to monitor vehicle movements, record arrival and departure times, and support the allocation of trucks to specific lanes, loading zones, container handling equipment, inspection points, or staging areas. This provides operators with real-time visibility of vehicle activity while reducing congestion and improving throughput.

Built for demanding outdoor environments, TagMaster's RFID technology delivers reliable performance in all weather conditions and integrates easily with terminal operating systems, access control platforms, and logistics applications. The result is improved security, faster truck turnaround times, better resource utilization, and valuable operational data that helps ports maintain efficient and secure operations.



Rolling Doors

Optimized, quick access



XT-1, XT-5 readers

LR-6 reader

The application

TagMaster's Long Range RFID solution is the ideal choice for automating rolling doors in industrial environments such as logistics centers, warehouses, and terminals. By identifying forklifts and other industrial vehicles automatically, the system enables fast, hands-free access between buildings or departments—without interrupting workflow.

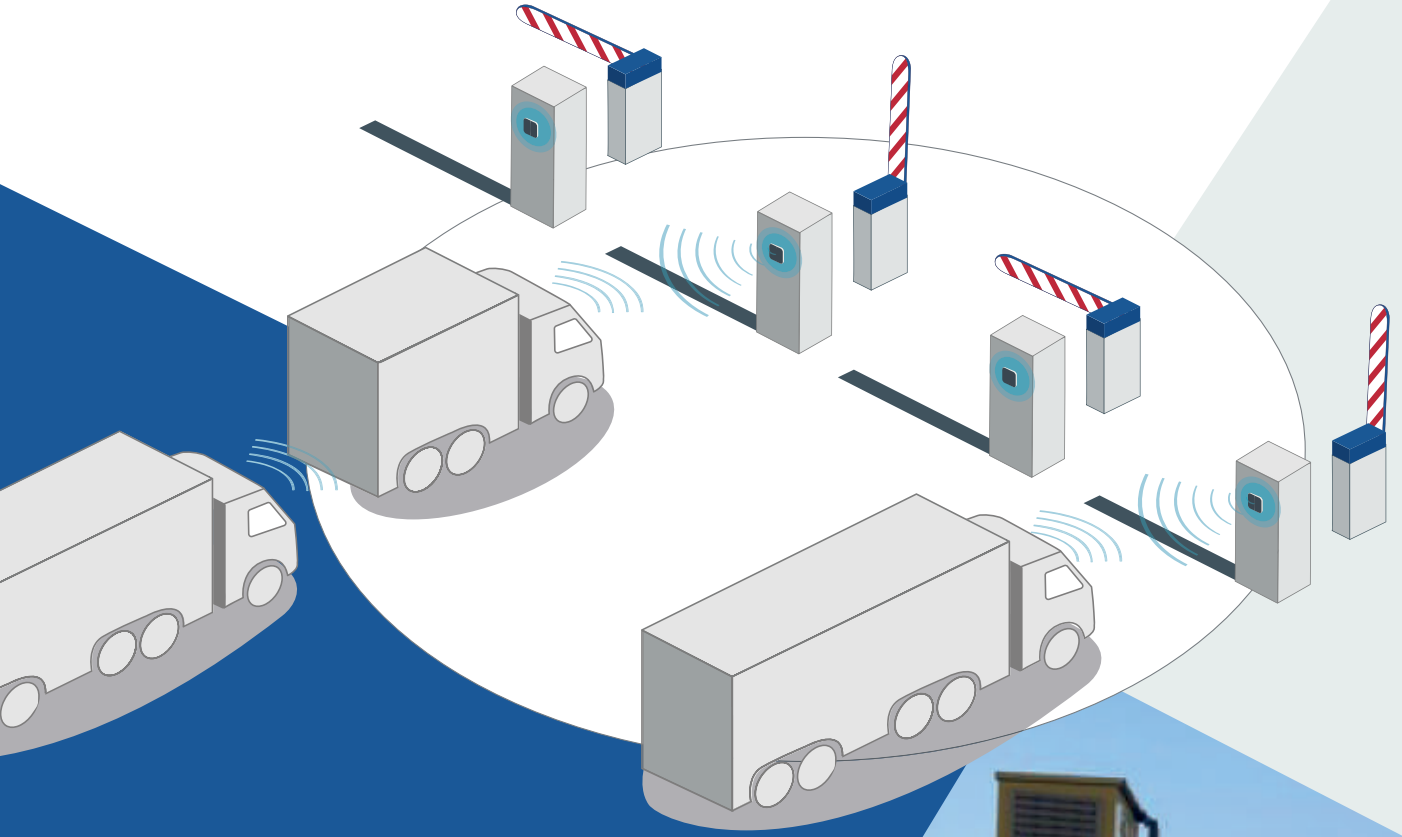
RFID tags mounted on vehicles trigger door openings instantly, eliminating the need for manual input, keypads, or remote controls. This boosts efficiency, increases safety, and supports faster handling of goods.

The TagMaster RFID reader is a perfect choice for demanding environments, it features a robust, all-in-one design with integrated antenna and specific functionality, ensuring reliable performance in tough conditions with radio interference. Access rights can be customized, allowing only approved vehicles into restricted zones.

Easy to install and integrate, the TagMaster RFID solution helps industrial facilities operate smarter, safer, and more efficiently—day in and day out.

Gate Access

Seamless and secure



XT-1, XT-5 readers

LR-6 reader

The application

TagMaster's Long Range RFID solution delivers premium hands-free vehicle access for private, public, and professional users. With reliable tag reading up to 14 meters, vehicles are granted entry without stopping—boosting convenience, safety, and operational efficiency.

Unlike many systems, TagMaster's robust technology is designed for harsh weather and demanding environments, ensuring accurate performance where others fail. The solution reduces wear on barriers and improves throughput by shortening cycle times—ideal for gated communities, logistics hubs, and commercial facilities.

Drivers enjoy a fully automated experience, while operators benefit from increased security, controlled access, and detailed entry logs. Compared to alternatives, TagMaster offers faster integration, lower total cost of ownership, and superior read reliability.

Built for high-volume, real-world use—TagMaster is the smarter choice in RFID vehicle access.

Emergency Access & Hospital Entry

Improves the flow

XT-1, XT-5 readers

LR-6 reader

The application

Fast and secure access is critical in emergency care. TagMaster's Long Range RFID solutions ensure that ambulances and authorized medical staff can enter emergency zones without delay—supporting rapid patient intake and uninterrupted emergency response.

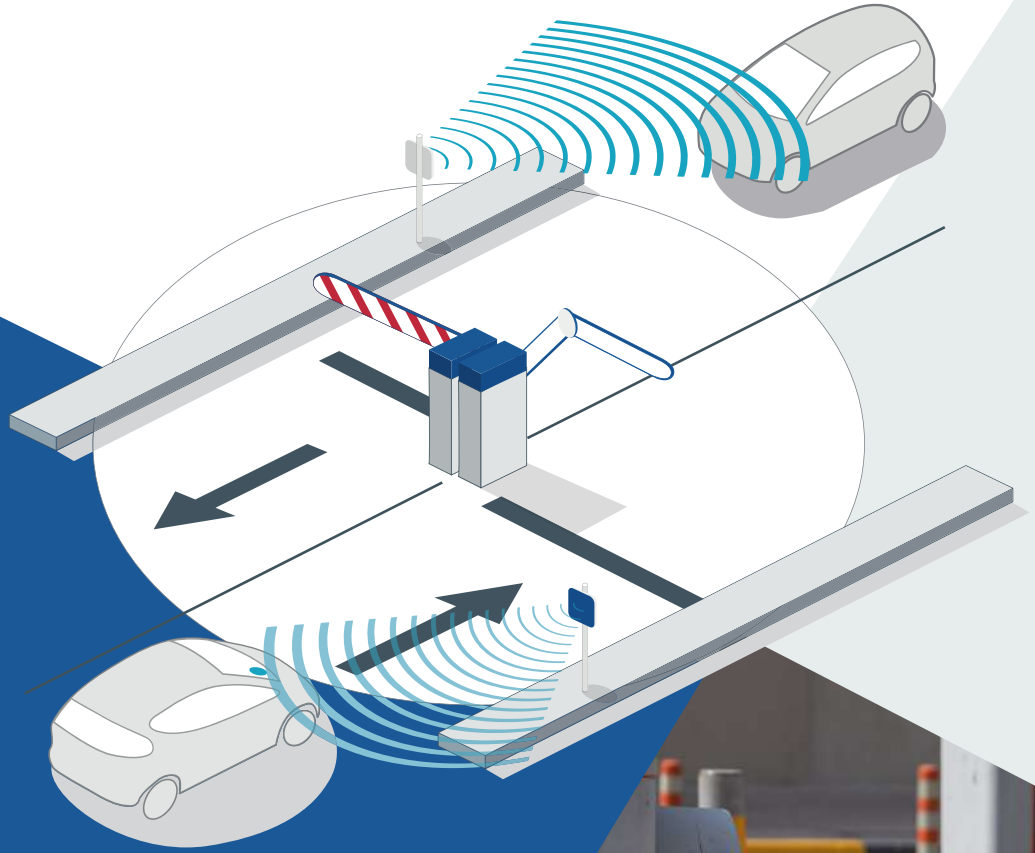
Ambulances equipped with RFID tags are automatically identified by TagMaster readers as they approach entry points. Barriers lift instantly, granting hands-free access to trauma units, ER entrances, and ambulance bays. This eliminates delays and manual checks, helping medical teams focus on what matters most—saving lives.

Medical staff can also be issued RFID tags for priority access to secure hospital areas and emergency parking zones, ensuring they always have access during critical situations or shift changes.

With high read accuracy, 24/7 reliability, and seamless integration into hospital access control systems, TagMaster's RFID technology enhances emergency readiness, improves flow at key entry points, and strengthens overall hospital security and coordination—where every second counts.

Stand Alone Access Control solution

No other control system needed



XT-1, XT-5 readers

LR-6 reader

The application

TagMaster's Long Range RFID readers offer a smart, cost-effective alternative to traditional access control systems—perfect for smaller parking facilities, private gates, or remote access points. With built-in intelligence, these readers eliminate the need for external controllers, licensed software, or PC hardware.

The solution requires only a TagMaster RFID reader and a gate or barrier. Authorized tags are managed through a built-in database, enabling quick, secure, and fully autonomous access based on a whitelist.

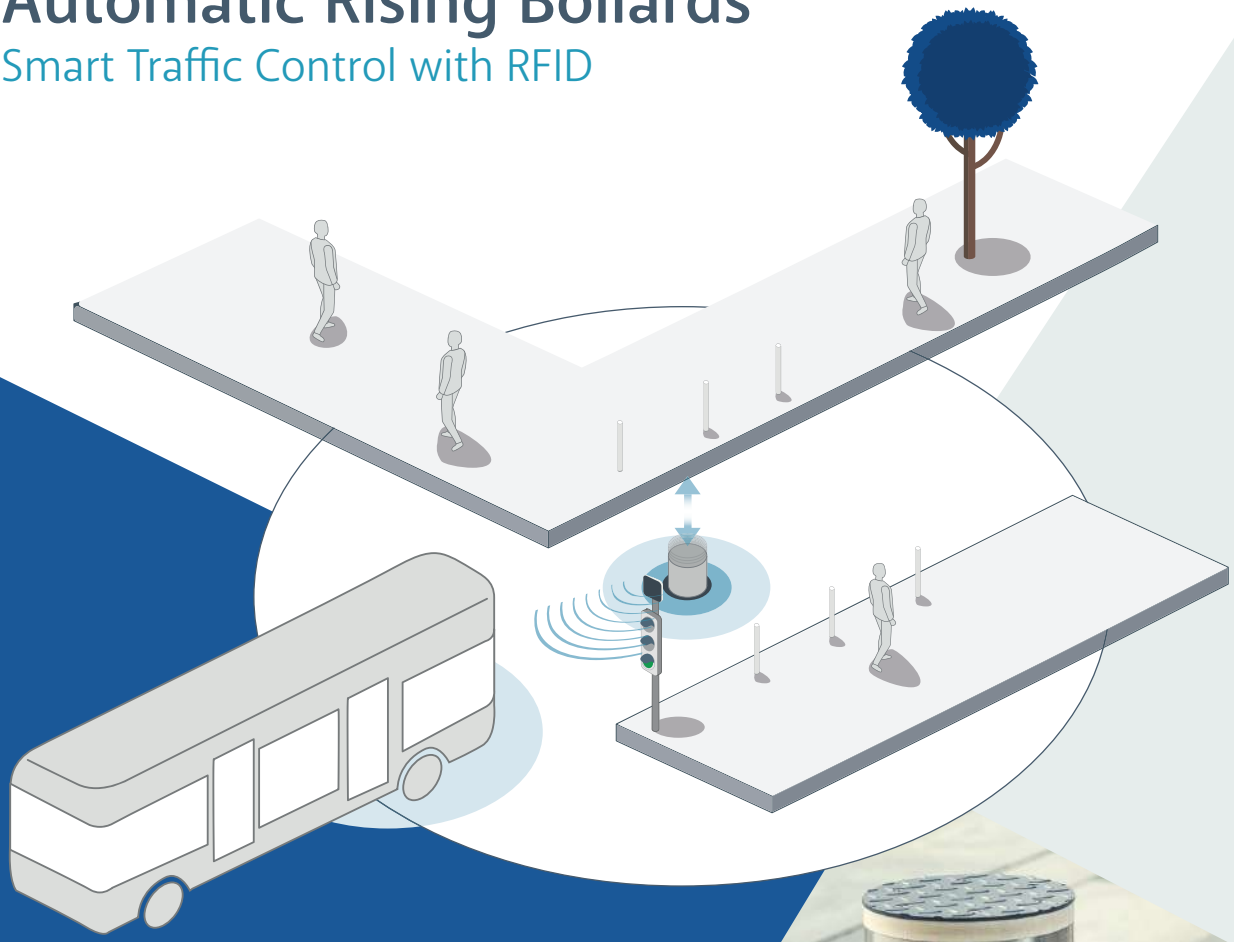
Each reader includes a built-in relay, allowing it to directly control barriers, gates, bollards, or traffic lights without extra hardware. The relay's activation time is configurable to suit various systems. Visual feedback (LED signals) indicates valid or invalid tag reads.

The reader also supports local logging of valid and invalid entries with timestamps, and optional loop detector inputs enable vehicle presence detection.

Easy to install, scalable, and maintenance-free—TagMaster's standalone RFID solution brings reliable, hands-free access with minimal infrastructure.

Automatic Rising Bollards

Smart Traffic Control with RFID



XT-1, XT-5 readers

LR-6 reader

The application

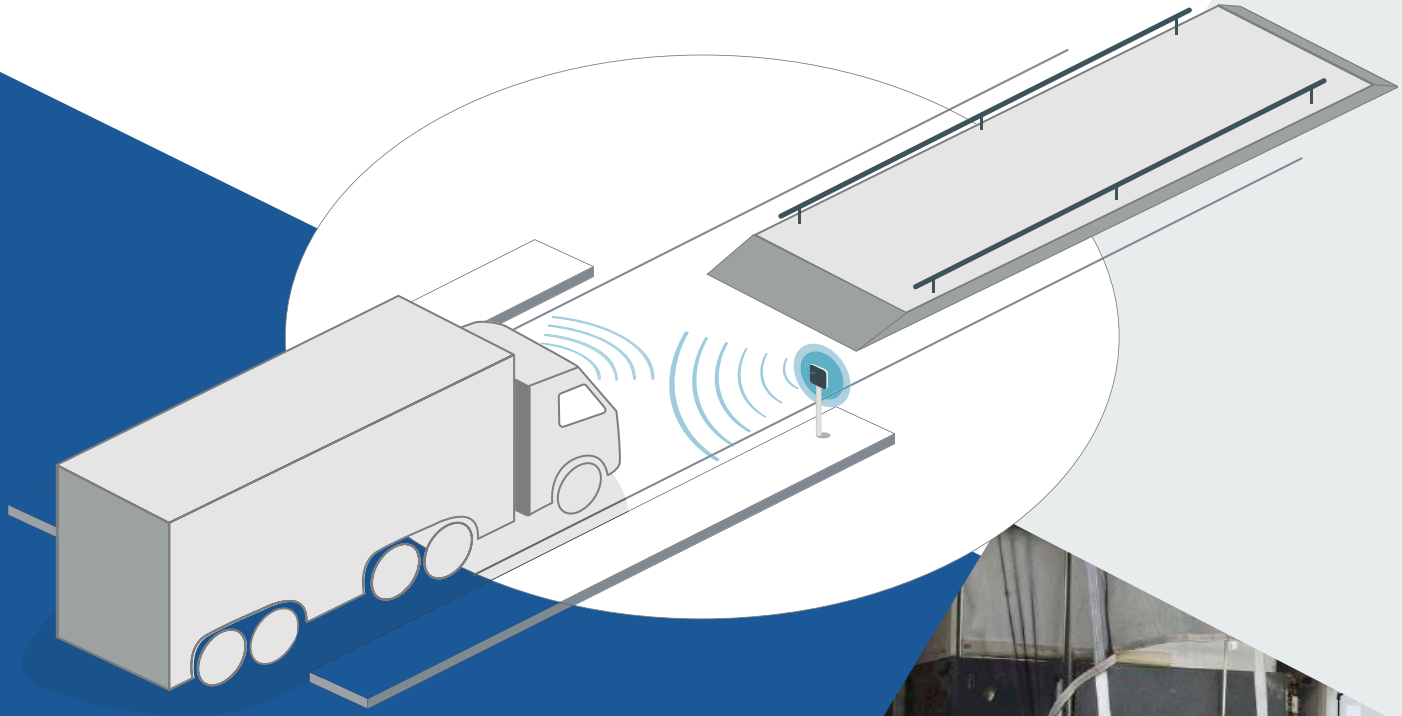
TagMaster's Long Range RFID solution offers secure, automated traffic control by seamlessly integrating with automatic rising bollards. As authorized vehicles approach, the system triggers bollards to lower—providing instant, hands-free access without the need to stop, roll down windows, or enter codes.

Ideal for pedestrian zones, bus lanes, service roads, and restricted areas, the solution enables smooth access for emergency vehicles, public transport, and approved service vehicles. It supports time-based access rules and vehicle-specific permissions, making it perfect for dynamic urban environments.

Compared to traditional gates or fixed posts, RFID-controlled bollards enhance security, reduce congestion, and improve response times for emergency services. The system is weather-resistant, easy to install, and compatible with existing access control platforms—offering a reliable and future-proof traffic management solution that keeps cities moving safely and efficiently.

Vehicle Weighing

Streamline operations



XT-1, XT-5 readers

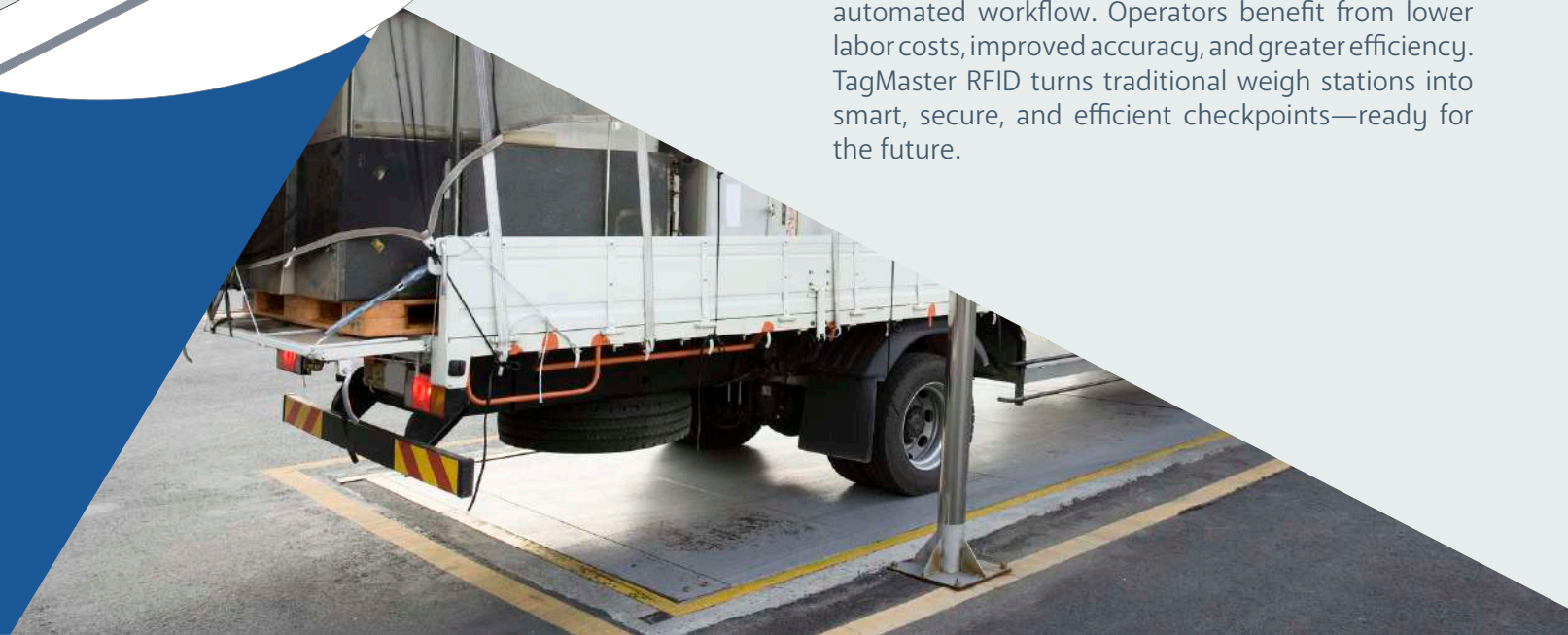
LR-6 reader

The application

TagMaster's Long Range RFID solution automates and streamlines vehicle weighing operations at logistics hubs, recycling centers, construction sites, and depots. Trucks are identified automatically as they approach the weighbridge, eliminating manual check-ins and driver interaction. This ensures accurate tracking of weight, origin, and time—supporting billing, compliance, and traceability.

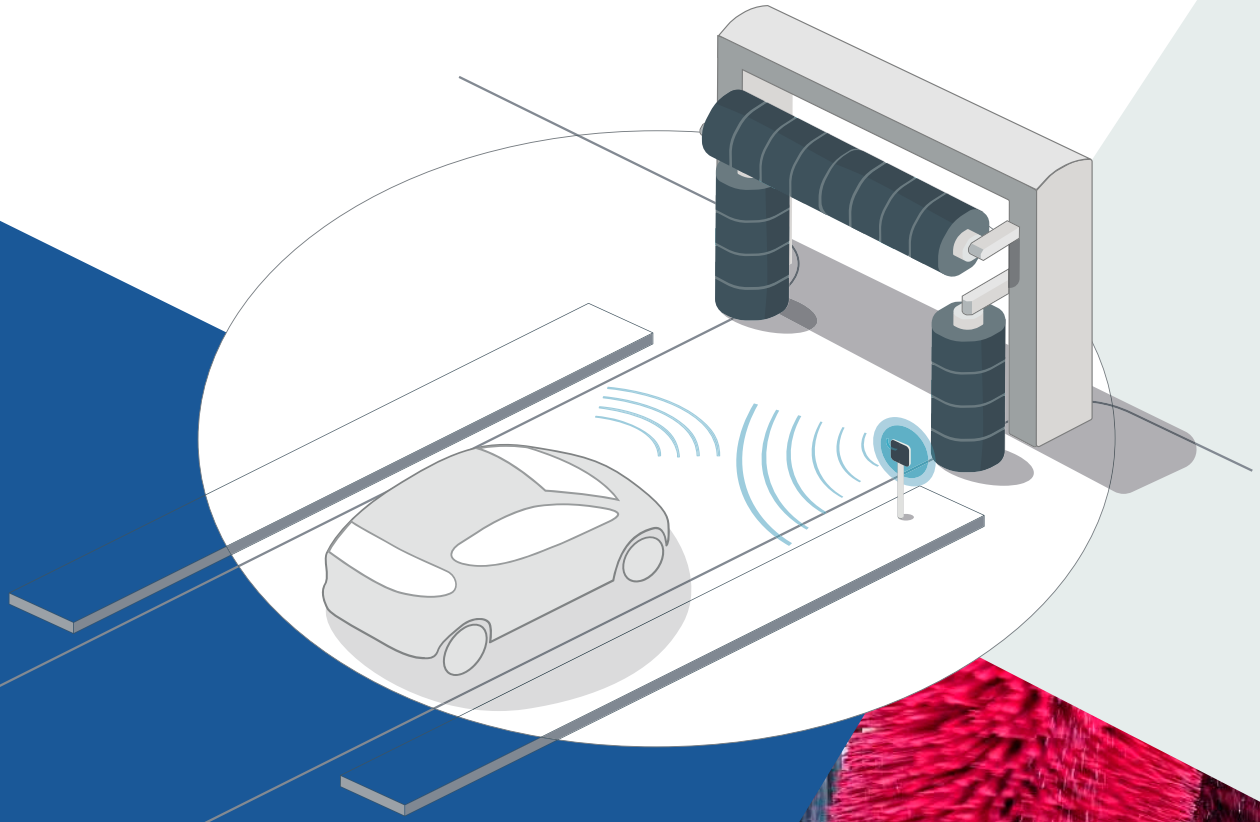
The system speeds up throughput, reduces queues, and allows only authorized vehicles onsite, enhancing safety and traffic flow. Built for harsh outdoor environments, TagMaster's RFID readers perform reliably in dust, dirt, and weather extremes.

Seamless integration with weighbridge software, ERP systems, and access controls creates a fully automated workflow. Operators benefit from lower labor costs, improved accuracy, and greater efficiency. TagMaster RFID turns traditional weigh stations into smart, secure, and efficient checkpoints—ready for the future.



Car Wash

Effortless Access & Smart Control



XT-1, XT-5 readers

LR-6 reader

The application

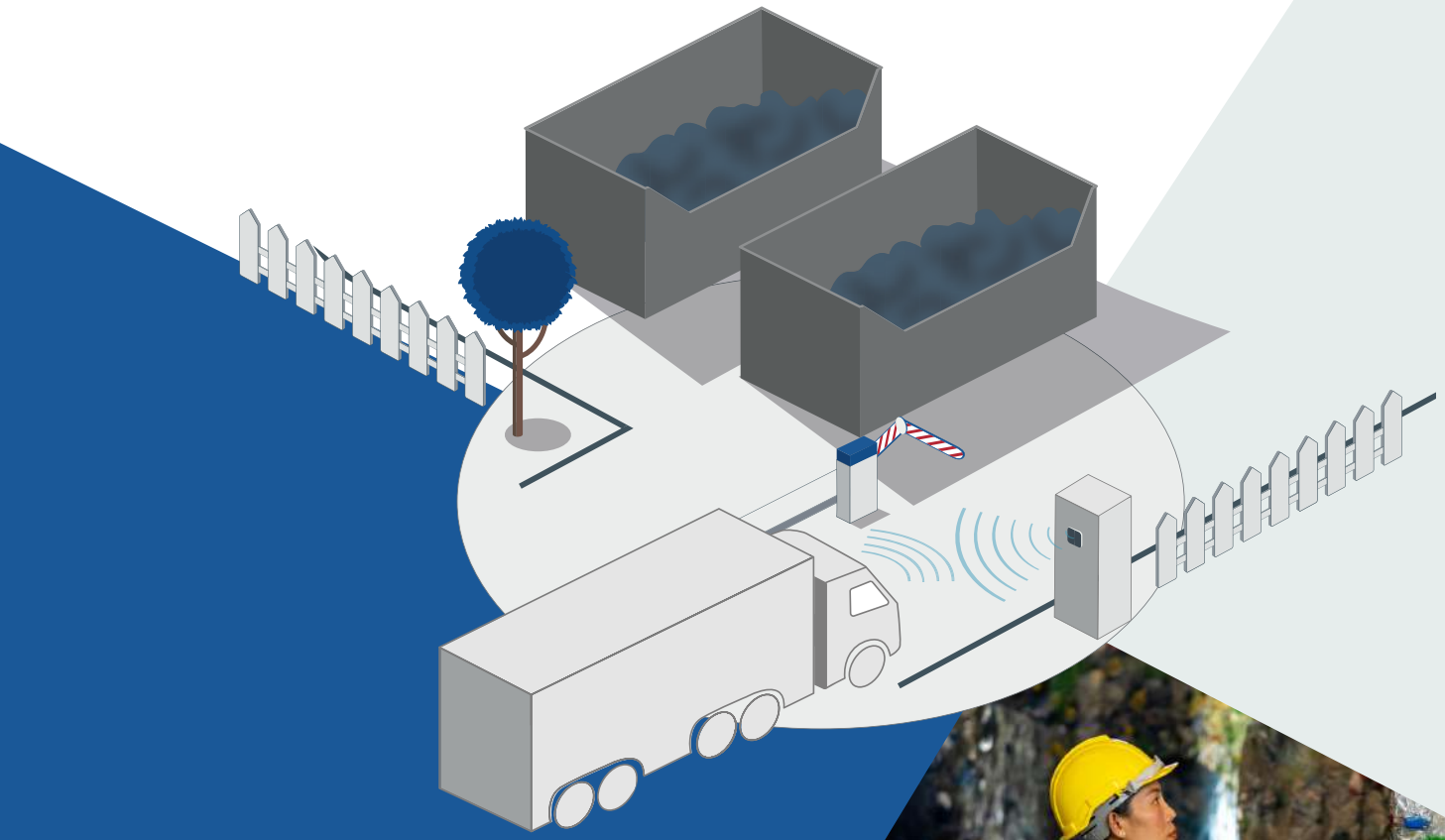
TagMaster's Long Range RFID solution revolutionizes car wash operations by enabling secure, fully automated access control and subscription management. A tamper-evident windshield tag is read instantly as the vehicle approaches, validating the user's subscription and triggering the correct wash program without the driver needing to stop or interact.

Ideal for both private customers and service fleets, the system tracks usage by time, date, and vehicle, supports weekly/monthly billing, and eliminates the risk of unauthorized use. Customers enjoy a seamless, contactless experience—no tickets, no keypads, no hassle.

For car wash operators, the result is higher throughput, reduced staffing needs, stronger customer loyalty, and a stable cash flow from recurring subscriptions. TagMaster's RFID technology delivers convenience, control, and increased profitability—tailored for today's fast-paced, customer-focused car wash environments.

Waste Management

Identification and access management



XT-1, XT-5 readers

LR-6 reader

The application

TagMaster's Long Range RFID solution brings automation and control to waste and recycling facilities by enabling secure, hands-free vehicle identification and access management. Only authorized or paying vehicles are granted access to dump materials or enter restricted areas—ensuring site security and regulatory compliance.

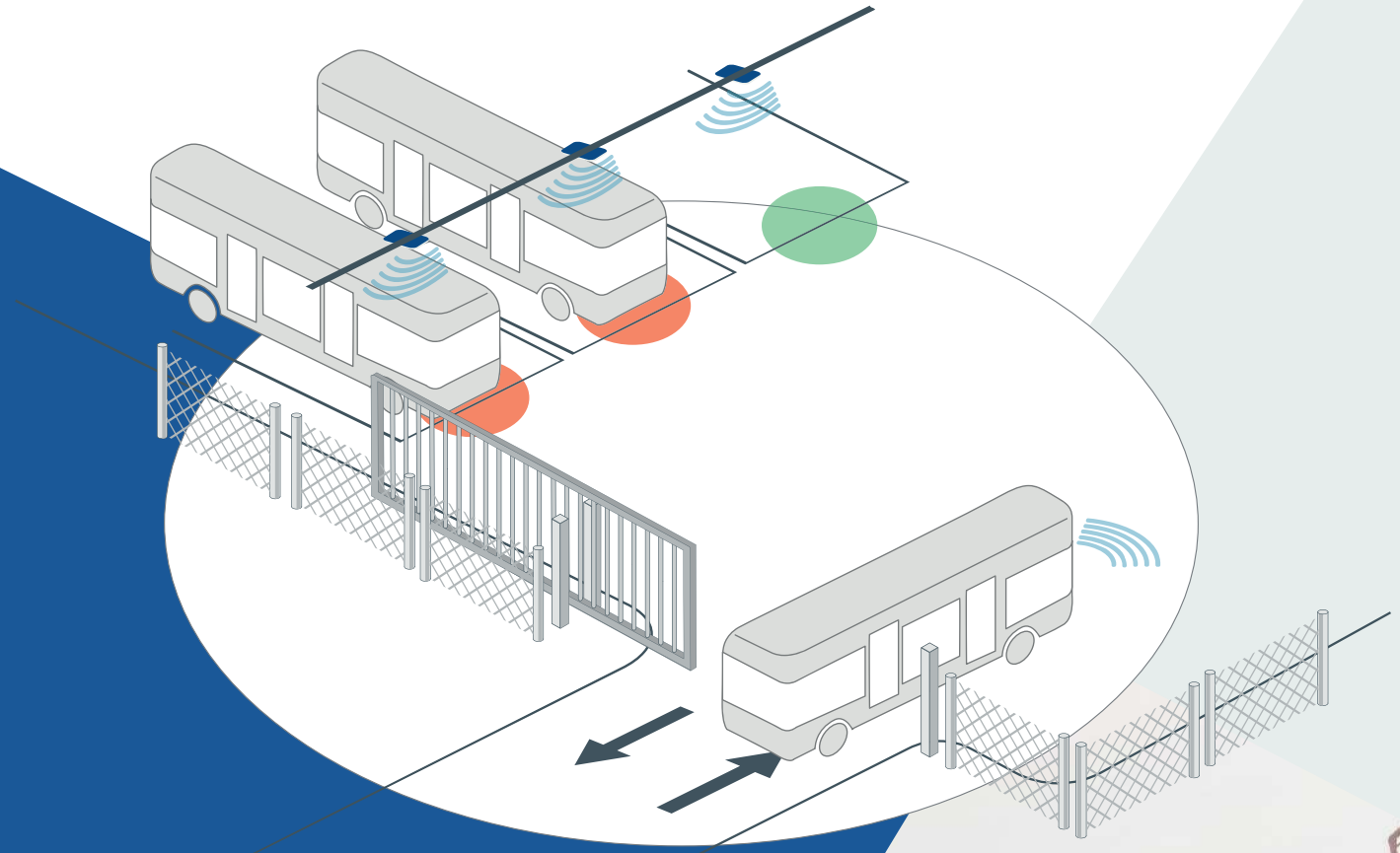
RFID tags mounted on collection trucks or contractor vehicles trigger seamless entry at gates, weighbridges, or drop-off points, eliminating the need for manual check-ins. This reduces bottlenecks, improves traffic flow, and lowers labour costs.

Integrated with existing weighbridge and fleet systems, the solution provides accurate, real-time data on vehicle movements—supporting traceability, billing, and reporting.

Built for demanding environments, TagMaster's RFID technology ensures reliable performance and scalability, helping waste operators maintain clean, efficient, and controlled operations every day.

Parking Bay Monitoring

Real-time occupancy detection



XT-1, XT-5 readers

LR-6 reader

The application

TagMaster's Long Range RFID solution offers an innovative, non-intrusive way to monitor parking bay occupancy—helping operators improve space efficiency, reduce congestion, and enhance the user experience.

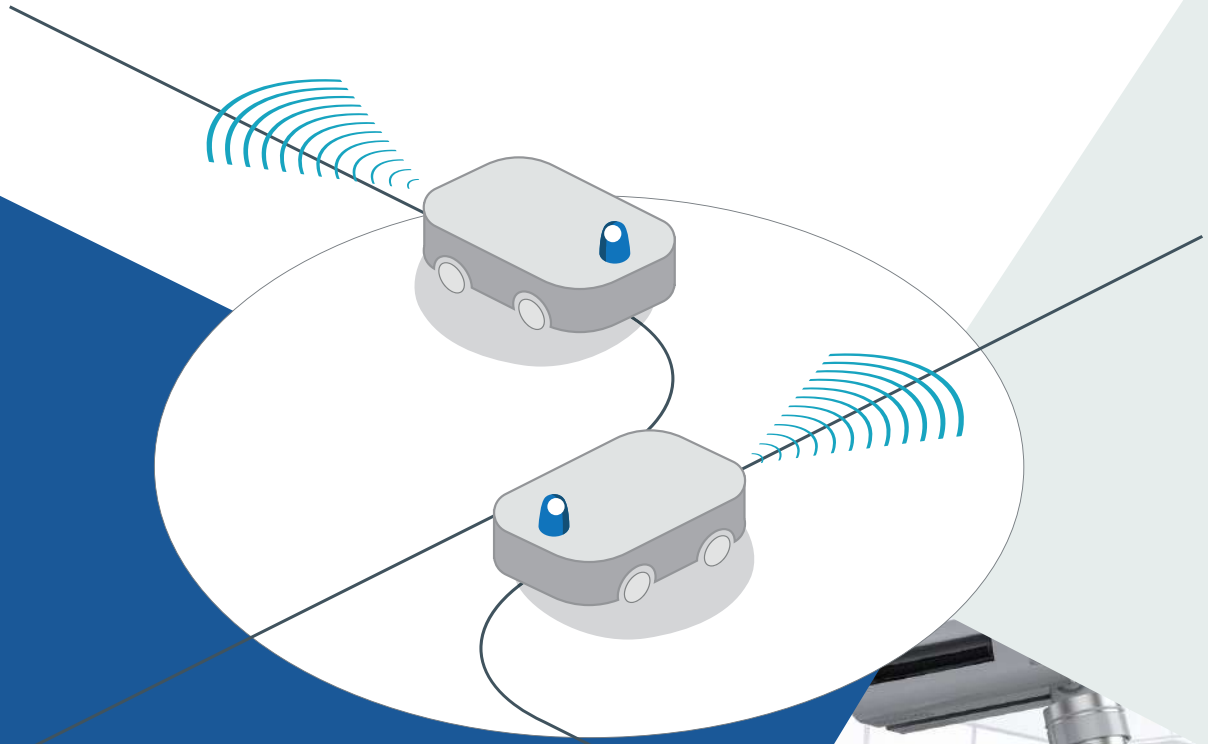
An RFID tag is mounted at the centre of each parking bay, protected in a durable bracket. A TagMaster Long Range Reader is installed overhead—on a pole or in the ceiling. When a vehicle parks in the bay, it blocks communication between the tag and reader, signalling that the bay is occupied. Once the vehicle leaves, the signal resumes, and the bay is marked as vacant.

This simple yet robust method delivers real-time occupancy detection without the need for embedded ground sensors or cameras. With minimal maintenance and a long lifecycle, it's ideal for outdoor environments in fleet depots.

TagMaster's solution easily integrates with parking systems, enabling live availability updates, dynamic signage, and reserved bay management—making parking faster, easier, and more user-friendly. Efficient, scalable, and built to last—TagMaster RFID transforms how you monitor and manage every parking space.

Transportation of goods and supplies

Supporting robots and increasing efficiency and safety



XT-1, XT-5 readers

LR-6 reader

The application

TagMaster's Long Range RFID solutions are ideal for managing autonomous vehicles and robots in industrial and healthcare environments. These intelligent systems transport goods and medical supplies, enhancing efficiency, accuracy, and safety.

By equipping each autonomous unit with an RFID tag, vehicles can be instantly identified by TagMaster readers positioned throughout the facility. Access permissions can be configured, allowing or restricting entry into defined zones such as cleanrooms, production cells, or storage areas—ensuring safe and controlled operations.

TagMaster RFID readers serve as infrastructure support, helping vehicles navigate complex environments safely and efficiently. The system integrates seamlessly with warehouse management, hospital logistics, and production control platforms, forming an automated and traceable operation.

Built for demanding industrial and medical environments, TagMaster's RFID technology is robust, maintenance-free, and highly accurate. It supports advanced data logging and safety compliance while reducing manual intervention. TagMaster empowers the next generation of smart mobility—enhancing autonomous transport with precision, control, and full operational visibility.

Elevator management and Monitoring

Track equipment and resources

XT-1, XT-5 readers

LR-6 reader

The application

In hospitals, logistics hubs, and industrial facilities, managing elevator access for mobile equipment like hospital beds, medical carts, trolleys, or warehouse carts is key to improving efficiency, hygiene, and operational control. TagMaster's Long Range RFID solution automates and monitors these movements—completely hands-free.

Each object is equipped with an RFID tag. As it approaches or enters the elevator, a TagMaster reader automatically detects the tag and triggers predefined actions. This may include calling the elevator, granting access to specific floors, or logging the movement for traceability.

The system ensures fast, contactless operation without the need for scanning or manual input—ideal for time-critical environments like patient transfers or just-in-time logistics.

Access can be tailored by object type, ensuring, for example, that cleaning trolleys only reach service areas, or hospital beds are directed to medical zones. Every interaction is logged, enabling full visibility for audits.

TagMaster RFID enables smarter, safer, and more efficient vertical transport—optimizing internal flow while supporting compliance and operational transparency.

Where RFID Long Range Readers are installed...

High-Security Facilities
- Military bases
- Police stations
- Government buildings (e.g., embassies, intelligence HQs)
- Data centers
- Prisons and detention centers
- Nuclear power plants

Industrial & Infrastructure Sites
- Factories and production plants
- Warehouses and distribution centers
- Power stations and substations
- Water treatment facilities
- Telecom and broadcasting towers
- Logistics hubs and freight terminals

Transport & Mobility
- Infrastructure Airports (airside access, cargo zones, staff parking)
- Seaports and harbors
- Railway yards and depots
- Bus depots
- Highway toll booths
- Bridges with restricted access

Commercial Properties
- Business parks and office campuses Shopping malls (staff/delivery access)
- Car dealerships
- Vehicle rental facilities
- Storage facilities (self-storage)
- Recycling and waste management centers

Residential Areas
- Gated communities
- Private estates Luxury apartment complexes
- Student housing campuses
- Senior living facilities

Parking Areas
- Private parking garages
- Hotel parking lots
- Hospital parking areas
- Stadium/arena event parking
- University parking areas

Construction & Temporary Sites
- Active construction zones
- Temporary event areas (festivals, concerts)
- Film production sets
- Mobile installations or modular offices

For more information :

Visit us at :
www.tagmaster.com

Contact us :

TagMaster AB
Kronborgsgränd 11
S-164 46 Kista, Sweden

+46 8 632 19 50
sales@tagmaster.com

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