

# PLANET-SMART SYSTEMS

CUSTOMISED SMART BUILDING INFRASTRUCTURE  
SOLUTIONS FOR YOUR REAL ESTATE NEEDS



**Don't wait for the  
future to happen—  
take charge and  
invent the world you  
want to live in**

# CUSTOMISED SMART BUILDING INFRASTRUCTURE SOLUTIONS FOR YOUR REAL ESTATE NEEDS

Welcome to Planet-Smart Systems, your one-stop solution for customized smart building infrastructure solutions. Our cutting-edge hardware and software and expertise in IoT, AI, and RTUs enables us to create tailored solutions that optimize building performance, reduce energy consumption, and enhance occupant comfort and safety.

Our solutions are designed to meet the specific needs of smart cities, smart buildings, and pollution-controlled smart interiors, ensuring that each building's unique requirements are met. Our team of experts will work with you to understand your building's needs and design a solution that fits seamlessly into your existing infrastructure.

With our solutions, you can enjoy increased energy efficiency, lower operating costs, and improved sustainability, all while enhancing the occupant experience. Our range of solutions includes building automation systems, energy management systems, indoor air quality monitoring, smart lighting, security and access control, audiovisual systems, and more.

At Planet-Smart Systems, we are committed to delivering innovative, reliable, and cost-effective solutions that exceed your expectations. Contact us today to learn how we can help you achieve your building's full potential with our customised smart building infrastructure solutions.





# THE PLANET-SMART TEAM

At Planet-Smart Systems, we are proud to have a diverse and highly skilled team of experts with backgrounds in electrical and electronics engineering, biomedical engineering, medical physics, mechanical engineering, data analysis, and professional programming. Our team brings together a wealth of knowledge and experience in a range of disciplines, enabling us to provide customized smart building infrastructure solutions that are tailored to meet the specific needs of each project.

Our electrical and electronics engineers bring expertise in designing and implementing complex control systems, while our biomedical engineers offer insights into human-centered design and the latest advancements in medical technology. Our medical physicists bring a deep understanding of radiation safety and regulations, while our mechanical engineers specialize in HVAC and energy systems. Our data analysts provide insights into building performance and energy usage, while our professional programmers develop the software and automation tools that power our solutions.

Together, our expert team is committed to delivering innovative and sustainable solutions that optimise building performance, reduce energy consumption, and enhance occupant comfort and safety. We work collaboratively with our clients to understand their needs and goals, and we strive to exceed their expectations with our technical excellence and dedication to customer satisfaction.

Contact us today to learn more about our expert team and how we can help you achieve your building's full potential with our customised smart building infrastructure solutions.

# ADVANCED AUTOMATION SYSTEMS: ENABLING SMART BUILDINGS AND CITIES



**Automation will render our future homes and cities smarter, more efficient, and sustainable**

Advanced automation systems play a crucial role in both smart buildings and smart cities by integrating various technologies and functionalities to optimize operations, enhance sustainability, improve efficiency, and provide a better quality of life for occupants. Here are some key roles of advanced automation systems in smart buildings and smart cities:

**Energy Management:** Advanced automation systems monitor and control energy usage within buildings. They optimize lighting, heating, cooling, and ventilation systems based on occupancy, time of day, and environmental conditions. This helps reduce energy waste, lower utility costs, and improve overall energy efficiency.

**Environmental Monitoring:** Automation systems use sensors to monitor environmental conditions such as air quality, temperature, humidity, and occupancy. This data is analyzed to ensure optimal comfort levels, detect potential issues, and enable proactive maintenance.

**Security and Safety:** Automation systems integrate security features like access control, surveillance cameras, and alarm systems. They can detect unauthorized access, monitor activity, and respond to emergencies. In the case of smart cities, these systems extend to public safety measures like intelligent traffic management, video analytics, and emergency response coordination.



# AUTOMATION



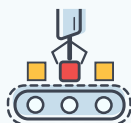
Machine



Process



Innovation



Autonomous



Productivity



Repeatability



Improvement

**Occupant Comfort and Well-being:** Advanced automation systems create personalized and comfortable environments for building occupants. They can adjust lighting, temperature, and other factors based on individual preferences and occupancy patterns. Smart buildings promote well-being by providing healthier indoor environments and optimizing conditions for productivity.

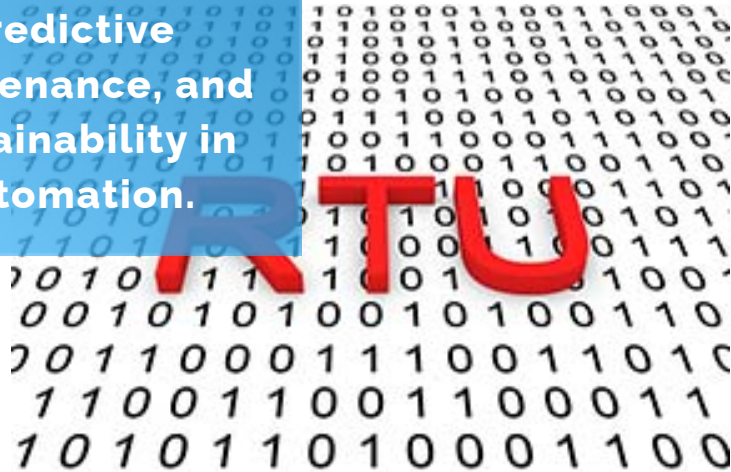
**Data Analytics and Decision Making:** Automation systems collect and analyze vast amounts of data from various sources. Machine learning algorithms can identify patterns, optimize operations, and provide valuable insights for facility managers and city planners. This data-driven approach helps make informed decisions and improves overall performance.

**Integration and Interoperability:** Advanced automation systems facilitate seamless integration of various building systems, such as HVAC, lighting, security, and occupancy sensors. This integration enables centralized control, data sharing, and interoperability, leading to more efficient operations and better coordination within smart buildings and across smart city infrastructures.

**Sustainability and Resource Optimization:** Automation systems play a crucial role in reducing environmental impact and promoting sustainability. They enable energy-efficient practices, optimize resource usage, manage waste, and support renewable energy integration. Smart cities leverage automation to optimize traffic flow, reduce congestion, and minimize carbon emissions.

By harnessing the power of advanced automation systems, both smart buildings and smart cities can achieve energy efficiency, sustainability, enhanced security, improved occupant comfort, and efficient resource management. These systems act as the backbone of smart infrastructures, enabling seamless connectivity, data-driven decision-making, and a more intelligent and livable urban environment.

**Powering Real-time Monitoring, Efficiency, Safety, Cost Savings, Predictive Maintenance, and Sustainability in Automation.**



At Planet-Smart Systems, we are committed to providing customised Smart Building Infrastructure Solutions, leveraging the power of Remote Terminal Units (RTUs) to amplify building performance, lower energy consumption, and augment occupant comfort and safety.

RTUs, which stand as the backbone of our innovative solutions, can be systematically installed across any building, functioning as key data nodes. These units continuously gather real-time data from a variety of sensors and devices distributed throughout the structure. This data is then transmitted to a centralized control system where it's analyzed and acted upon to enhance operational efficiency, thereby reducing energy wastage and improving the building's overall performance.

But the utility of RTUs extends far beyond individual buildings. Our RTUs can be strategically deployed in smart cities as well, to monitor and manage essential city systems. They have the capability to transform urban landscapes by monitoring traffic patterns, managing water supply dynamics, streamlining waste management processes, and controlling energy consumption patterns. All these applications work in unison to significantly improve the overall efficiency of city operations, promoting sustainability, and contributing to a cleaner, greener urban environment.

Envision a city where traffic lights dynamically adapt to real-time road conditions to alleviate congestion, where the water supply system is smart enough to adjust its operations based on anticipated demand, and where waste management and energy consumption are seamlessly optimized to minimize environmental impact. That is the kind of transformative change we at Planet-Smart Systems aim to bring about with our innovative smart city solutions.

We invite you to take a step towards a more efficient and sustainable future with us. Contact us today to learn more about how our RTUs and smart infrastructure solutions can revolutionize your building or city, creating a habitat that is in harmony with the environment while ensuring enhanced living conditions for its inhabitants.

Artificial Intelligence (AI) serves as the cornerstone of our transformative smart building and smart city solutions, driving optimization, energy efficiency, and sustainability to new heights. By harnessing the potential of AI-based tools, we unlock the ability to create intelligent environments that adapt in real-time, prioritizing occupant comfort and productivity for a personalized experience.

Our solutions leverage AI development and integration to enable precise predictions of occupancy levels, equipment utilization, and environmental conditions. Through continuous monitoring and analysis, our AI systems deliver real-time insights that empower efficient control and management of building and city systems. By accurately anticipating demand, we optimize resource allocation, reducing waste and energy consumption while maximizing performance.

AI also plays a vital role in identifying and addressing potential issues. With advanced algorithms and machine learning, our solutions proactively detect anomalies, abnormalities, and equipment failures. By enabling predictive maintenance, we minimize downtime, enhance operational efficiency, and significantly reduce maintenance costs.

Furthermore, AI empowers us to create sustainable environments by intelligently adjusting building systems based on dynamic factors. By analyzing data from sensors, weather forecasts, and user patterns, our AI algorithms optimize energy usage while ensuring optimal occupant comfort. This results in significant energy savings, reduced environmental impact, and enhanced occupant satisfaction.

In conclusion, AI is an indispensable driving force behind our smart building and smart city solutions. By leveraging its capabilities, we achieve unparalleled efficiency, sustainability, and cost savings. Through real-time monitoring, predictive analytics, and adaptive control, we deliver intelligent environments that improve the lives of occupants and pave the way for a smarter, greener future.



At Planet-Smart Systems, we employ the power of the Internet of Things (IoT) as a cornerstone of our intelligent building and city management solutions. IoT, a network of interconnected devices that communicate and share data over the internet, offers unprecedented capabilities for real-time communication and data exchange between an array of sensors and devices within a structure or urban landscape.

In the context of smart buildings, IoT-based solutions enable us to create a fully integrated, intelligent ecosystem within the structure. From HVAC systems to lighting, and from security systems to energy management, every facet of a building's operations can be monitored and controlled in real-time. The data gathered from these IoT-enabled devices facilitates comprehensive analytics, allowing for predictive control and optimization of each system. This holistic approach leads to substantial improvements in energy efficiency and significant reductions in operational costs.

When it comes to smart cities, IoT proves to be a game-changer as well. Through real-time monitoring and control of city systems like traffic flow and environmental monitoring, IoT allows us to implement data-driven, dynamic solutions that can adapt to the needs of a bustling urban environment.

Whether it's adjusting traffic light patterns during rush hour to ease congestion or monitoring air quality for pollution control, the power of IoT makes it possible. By harnessing the capabilities of IoT, we can transform cities into efficient, sustainable, and eco-friendly environments that not only serve their residents better but also do so in a way that's mindful of our planet's finite resources.

In essence, IoT is an instrumental tool in our mission to revolutionize building and city management. Its pivotal role in enabling efficient, effective, and environmentally conscious operations cannot be overstated. Through the power of interconnectedness and real-time data, we are shaping a future where our buildings and cities are not just smarter, but also more sustainable and eco-friendly.



**IoT at the Heart of Sustainability: Driving Real-time Communication, Energy Efficiency, Cost Reduction, and Eco-friendly Innovation in Smart Buildings and Cities.**



# ENGINEERING PRECISION

At Planet-Smart Systems, the motto 'Engineering Precision' isn't just a phrase, it's our team's ethos. Our dedicated engineers put their expertise and passion into every project, striving for nothing short of excellence. From designing smart infrastructure solutions to implementing IoT-driven systems, they ensure every detail is meticulously addressed. Their commitment to precision is what enables us to deliver highly efficient, sustainable and customisable solutions for buildings and cities. By meticulously crafting every aspect of our products and services, they drive our mission forward, transforming spaces into smarter, more sustainable environments. Indeed, their dedication is the keystone of our success in delivering precision-engineered smart solutions.

**Driven by Precision:  
Our Engineers'  
Commitment to  
Excellence in  
Crafting Smart,  
Sustainable  
Solutions.**





**Reliability in Every  
Component,  
Excellence in Every  
Solution – That's  
Planet-Smart  
Systems.**



## **EXCELLENCE ENABLED BY HIGH-GRADE ELECTRONICS**

Planet-Smart Systems prides itself on a steadfast commitment to delivering top-quality and reliable solutions to our customers. Every product we develop integrates high-grade electronic components meticulously sourced from industry giants that are globally recognised for their superior standards and innovative practices. Our trusted partners include the likes of Intel, AMD, Microchip, Texas Instruments, and many others.

By carefully selecting and incorporating these top-tier components into our designs, we are able to ensure that every product leaving our labs is the epitome of optimal performance, robustness, and longevity. These are not just mere devices or solutions, but promises of consistent, reliable service over the years.

This commitment to quality and reliability is a direct reflection of our dedication to you, our valued customer. It's not just about providing a product, it's about offering a comprehensive solution that you can depend on. We want to offer you the peace of mind that comes with knowing your investment in Planet-Smart Systems is designed to withstand the test of time and perform at its best when you need it most.

Your trust in us is something we value deeply and, in return, we strive to exceed your expectations in every aspect. Whether it's the performance of our products, the reliability they offer, or the support you receive from us, every interaction is driven by our commitment to quality.

# PLANET-SMART PRODUCTS

Discover the future of smart living with our suite of AI-developed solutions, designed to revolutionise how we manage and interact with our environments. Introducing the Real-time Monitoring & Control System for Smart City, designed to proactively manage city infrastructure and resources, and the Real-time Monitoring & Control System for Smart Building, providing unprecedented control over your building's safety, comfort, and efficiency. Finally, enrich your living experience with our Pollution-Controlled Human-Friendly Intelligent Interior, a solution designed to foster comfort, health, and well-being in indoor spaces. Each of these innovative solutions is built around our core technology, the RTU (Remote Terminal Unit), and leverages cloud technology for enhanced performance, providing users with the convenience of managing their systems both on-site and remotely over the internet. Dive into a new era of intelligent living and urban management with our cutting-edge solutions.



## ADVANTAGES OF PLANET-SMART PRODUCTS INCLUDE

**Efficiency:** These AI-powered systems provide a new level of efficiency, optimising resource usage, reducing waste and consequently lowering operational costs.

**Proactive Management:** With real-time data collection and predictive analytics, these systems enable users to proactively address issues before they become problematic, saving time and resources.

**Improved Comfort:** The Human-Friendly Intelligent Interior solution ensures optimal comfort, adjusting factors such as temperature, humidity, and air quality to maintain a healthy, comfortable environment.

**Increased Safety:** Real-time monitoring helps detect potential safety hazards early, reducing risk and improving overall safety in cities and buildings.

**Environmentally Friendly:** By optimizing energy usage and controlling pollution, these solutions contribute to environmental sustainability, helping users reduce their carbon footprint.

**Scalability:** With cloud support, these systems can easily scale up to meet increasing demands, making them suitable for a wide range of applications, from individual buildings to entire cities.

**Convenience:** With the option to control these systems remotely over the internet, users can manage their environments from anywhere, anytime, providing unparalleled convenience.

**Better Decision Making:** The comprehensive data provided by these systems support informed decision making, offering insights that can lead to more effective strategies and policies.

**Improved Quality of Life:** By making cities and buildings smarter and interiors more human-friendly, these solutions enhance the quality of life for residents and occupants.

**Resilience:** These systems help cities and buildings become more resilient, by providing the data and control needed to respond effectively to disruptions and changes, ensuring continuity of services and operations.

# REAL-TIME MONITORING & CONTROL SYSTEM FOR SMART CITY



## Welcome to a New Era of Urban Living

Elevate the way cities function, thrive, and grow with our suite of AI-powered solutions. From real-time city-wide management systems to meticulously designed indoor environments, we bring you the best of technology and efficiency. At the heart of our product line is our innovative RTU (Remote Terminal Unit), which, combined with advanced cloud technology, facilitates seamless control and connectivity, whether you're using a console or operating remotely over the internet. Experience the future of urban living and city management with our trailblazing products.

**Real-time Monitoring & Control System for Smart City:** This transformative solution is designed to overhaul urban management and make cities more livable, efficient, and sustainable. Here are some unique features that set this product apart:

**Integrated Management:** Our system oversees a comprehensive range of city sectors, including transportation, power, water, waste management, and public safety, bringing them together on one platform for holistic urban control.

**Predictive Analytics:** Utilizing AI, the system can anticipate potential issues, allowing city administrators to take preventive measures and mitigate the impact of disruptions.

**Real-time Response:** Instant data processing enables real-time responses to urban challenges, ensuring a smooth, uninterrupted city life.

**Resource Optimisation:** The system intelligently manages resource allocation, resulting in reduced operational costs and minimal waste.

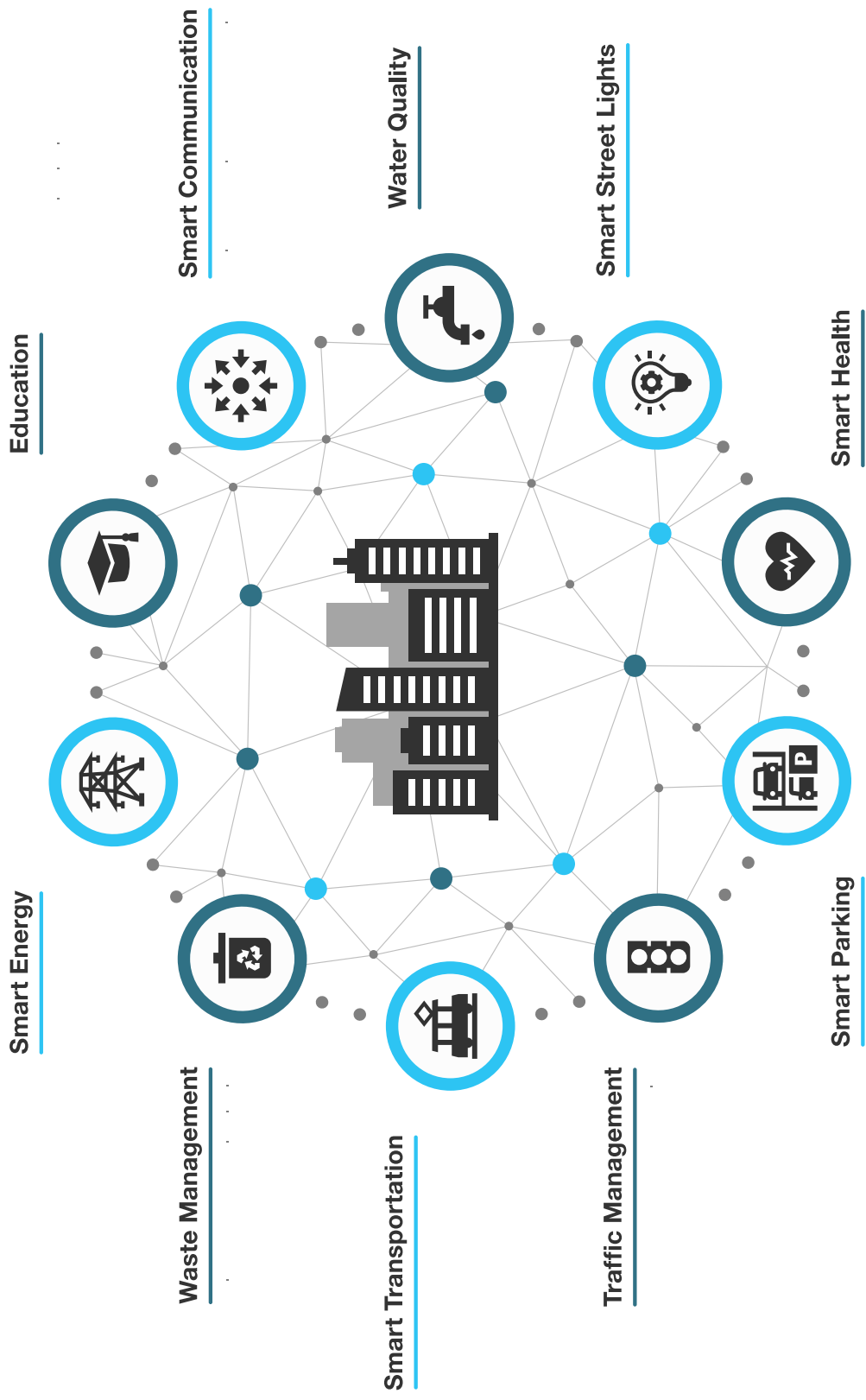
**Public Engagement:** Our system supports real-time communication with residents, increasing transparency, and promoting active community participation in city life.

**Scalable and Flexible:** Cloud support ensures that our system can adapt and grow with your city's needs.

**Secure and Reliable:** Advanced security protocols protect data integrity and ensure the system's reliable performance.

Step into a future where technology and urban living intertwine to create smarter, more sustainable, and more efficient cities.

# Smart City Infrastructure



CITY

# REAL-TIME MONITORING & CONTROL SYSTEM FOR SMART BUILDING



## Revolutionising the Future of Building Management

Explore the possibilities of enhanced building management with our innovative, AI-powered solutions. We offer a diverse range of products that transform urban environments, buildings, and indoor spaces, all anchored by our cutting-edge RTU (Remote Terminal Unit). Enhanced with cloud technology, our products provide you with the flexibility to operate via console or remotely over the internet, ensuring continuous connectivity and control.

Our **Real-time Monitoring & Control System for Smart Building** stands as a testament to our commitment to driving efficiency and promoting smart living. Here are some unique features that distinguish this product:

**Integrated System:** It provides a unified platform for managing all critical building systems, such as HVAC, lighting, security, and energy, facilitating cohesive, efficient building operations.

**Predictive Maintenance:** Leveraging AI, the system identifies potential equipment failures before they occur, enabling timely maintenance and preventing costly repairs or downtime.

**Energy Efficiency:** It optimizes energy use in real-time, automatically adjusting to changes in building occupancy or usage, leading to significant cost and energy savings.

**Smart Security:** Advanced security features, including real-time surveillance and anomaly detection, ensure the safety of building occupants.

**Healthy Environment:** The system maintains optimal indoor air quality and temperature, contributing to the wellbeing and productivity of occupants.

**Data Insights:** Comprehensive data analysis provides actionable insights for better decision-making regarding building operations and maintenance.

**Scalability:** Thanks to cloud support, the system can easily scale up to match the growing needs of your building.

Experience the blend of convenience, efficiency, and modern technology with our Real-time Monitoring & Control System for Smart Building, setting a new standard in building management.

# PURESPACE: SOLUTION FOR POLLUTION-CONTROLLED HUMAN-FRIENDLY INTELLIGENT INTERIOR



## Transforming Indoor Environments for Optimal Comfort and Health

Welcome to the future of living and working spaces with our AI-enhanced solutions. Our products cover an expansive range of applications, from citywide control systems to personalized indoor environments, all powered by our cutting-edge RTU (Remote Terminal Unit). With cloud technology, our systems ensure uninterrupted control whether you're at a console or managing remotely via the internet.

Experience the ultimate blend of comfort, safety, and technology with our **Solution for Pollution-Controlled Human-Friendly Intelligent Interior**. This product is a game-changer in enhancing the quality of indoor environments. Here are some of its unique features:

**Air Quality Management:** Our system constantly monitors and regulates indoor air quality, controlling pollutants and ensuring a healthy indoor environment.

**Intelligent Climate Control:** AI technology enables the system to maintain optimal temperature and humidity levels, adjusting to external weather conditions and interior usage patterns for superior comfort.

**Noise Reduction:** The system intelligently mitigates indoor noise pollution, contributing to a more peaceful and productive indoor atmosphere.

**Energy Efficiency:** It ensures efficient energy use by smartly adjusting lighting and HVAC systems according to the room occupancy and usage, leading to significant energy savings.

**Health-First Approach:** The system prioritizes human health and well-being, ensuring an indoor environment that promotes comfort, productivity, and overall wellness.

**Real-Time Adjustments:** Leveraging real-time data, the system can swiftly adapt to changes in the interior environment, ensuring a consistently comfortable living or working space.

**Easy Management:** Through either a console or remote internet access, users can easily manage and customize their indoor environments to suit their specific needs.

Experience the revolutionary Pollution-Controlled Human-Friendly Intelligent Interior solution, creating indoor spaces that are not only smart and efficient but also meticulously tailored for human comfort and well-being.





CONTACT US



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