Indoor And Outdoor Asset Tracking Solution (ATS)

Solution Applications :

Geo-Fencing

Geo-fencing is a virtual barrier that is created for a real-world geographical area. It provides location-based services, which provide instant alerts to the operators as soon as the asset enters or exits a pre-defined geographical area. The user can easily create a geo-fence for the required location and assign or unassign the assets to that geo-fence. Hence, it offers proper management tactics to handle multiple assets from a single dashboard, which further allows the managers to keep a real-time check on their assets.

Real-Time Location Monitoring

Users can monitor the location of asset in real-time by using our asset monitoring solution. It uses advanced sensor-based functionalities to provide quick and actionable insights for enhanced decision-making. The IoT-based asset management system provides quick filtering even when users are using multiple assets, allowing them to see their current location as well as the historic data.

Utilization Monitoring

Using smart concepts for asset monitoring, users can also monitor asset utilization and get full visibility about the asset. This allows managers to have a big picture view predict and avoid possible bottle necks, hence streamlining the business.

Mishandling Alerts

Our smart asset tags are also equipped with movement/shock detection sensor, which is used to detect sudden shocks to the asset. This feature enables the user to detect mishandling of the asset or unauthorised movement of the asset, it can also be used in asset utilization indications.

Solution Benefits :

Item	Benefits	Potential Problem Causes
1	Anti-Theft	Asset Theft
2	Real-Time Utilization Monitoring	Manual Checking For Used And Idle Devices
3	Mishandling	Unintentional/Intentional Drop Of The Asset
4	Predictive Maintenance	Based On Movement And Utilization Data

OUR SOLUTIONS

AMS
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Designing automated and IOT based devices and solutions are at the heart of our organization.

In AMS, we develop integrated technologies and automated solutions through utilizing the latest automation technologies available.

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Liquid Monitoring And Control Solution (LMCS)

Solution Benefits :

Item	Benefits	Potential Problem Causes
1	Immediate Liquid Supply Disruption Detection	No Liquid Supply
1		Faulty Pump
2	Immediate Water Contamination Detection	Dirty Tank/Pipes
2		Contaminated Liquid Supply
3	Power Consumption Reduction	Off Peak Pump Operation Utilization
4	Elimination Of Draught And Overflow	Supply Issues
4		Dispensing Issues
4		Faulty Pump
5	Early Pump Breakdowns Detection (Predictive Maintenance)	Mechanical Issues
6	Leakage Detection	Pipe Rapture And Corrosion
7	Detect Excessive Or Weak Liquid Pressure	Clogged Pipes
7		Low Liquid Reserve
7		Clogged Filters
8	Reduction Of Man Power	Manpower Required To Monitor Liquid Levels Manually
9	Abnormal Usage Behaviour	Leakage
9		Unintentional Open Tabs/Valves
10	Eliminate Theft And Misuse Of Stored Liquid	Theft Instances
10		Human Error Due To Manual Record Keeping
10		No Real-Time Monitoring

Solution Applications :

Fuel Tank Level Monitoring

Implementable for both mobile as well as fuel and diesel tanks for monitoring purposes to know and monitor the real-time fuel stock level inside tanks remotely. The solution is scalable to cover any fleet size, hence simplifying auditing whilst optimizing inventory levels.

Water Tank Level Monitoring

Provides real-time insights into available water inside tanks hence eliminating excessive low levels as well as overflow of liquid from water tanks. The solution also allows users to set and control their optimum water level for best performance.

Smart Irrigation

Our IoT solution, provides real-time insights into water stock and ensures motors never run without water. If the water level goes below the defined limits, the operators will be notified, and the motors will be switched off automatically.

HVAC Systems Monitoring

The solution is able to monitor the performance of HVAC systems by monitoring chilled water flow and temperature. Additional accessories can also be added to detect leakage, HVAC related devices performance and status. The system will notify and highlight any issues to the operators to avoid operation disruption and down time.

Power Monitoring And Control Solution (PMCS)

Solution Benefits

Item	Benefits	Potential Problem Causes
1	Increase Energy Efficiency	Excessive Expenditure On Energy Due To Wastage
1		Non Utilization Of Off-Peak Hours For Non-Critical Operations
2	Detect Abnormal Patterns	Unauthorised Power Usage
2		Faulty Devices
3	Remote Centralized Management	Centralized Monitoring And Control Of Multiple Sites In Real-Time

Solution Applications :

Building Power Monitoring

Our power monitoring solution can be installed to monitor power parameters of selected floors or selected areas. The solution will provide insight into the power behaviour and consumption during different conditions and time intervals. This information is critical to compute predictions of future power requirements as well as to evaluate different implemented strategies aimed at reducing and optimising power consumption.

Equipment Power Monitoring

As well as overall monitoring, our solution can be deployed to monitor power consumption of individual devices, thus providing valuable information regarding the utilization of the said device as well as its performance. Power consumption is usually one of the main indicators of devices health and status, especially for electromechanical devices. As devices age and wear and tear sets in, the consumption of the power will rise hence indicating the need to maintain the device.

Power Control

As part of using our smart power monitoring solution, we use wirelessly controlled switches and miniature circuit breakers which our clients are able to use by setting complex rules and conditions to control the power distribution in a cost effective and simple manner.

Environmental Monitoring Solution (EMS)

Solution Applications :

Temperature & Humidity Monitoring

With our environment monitoring solution, it is possible to accurately monitor the temperature and humidity data in a particular space such as offices, rooms, museums, and laboratories. The solution also allows the user to set temperature and humidity thresholds to alert the system operators.

Air Quality Measurement

Most people spend the majority of their working time indoors, inside factories and offices hence the presence of air contaminants in the atmosphere can have an effect on their health and productivity. Our solution, accurately detects the presence of pollutants in the air such as aerosol, VOC, CO, CO2 and generates alerts about its concentration and the air quality index overall. The solution goal is to provide favourable working and surviving conditions to keep the surrounding air fresh and healthier to breathe.

Asset Management

Many industrial and healthcare related assets like machines and electrically powered equipment require certain temperature and humidity conditions to function properly. Our smart monitoring solution provides real-time alerts on the temperature and humidity conditions of the ambient environment. The solution also allows users to set the threshold limits to gain real-time alerts regarding the increase or decrease in the temperature and humidity conditions. These alerts allow users to take quick and pre-emptive decisions before the assets are damaged and the production is affected.

Solution Benefits :

Item	Benefits	Potential Problem Causes
1	Real-Time Temperature And Humidity Monitoring	HVAC System Performance Fluctuations
1		External Factors Influence
2	HVAC System Performance Indication And Optimisation	HVAC System Failures
3	Real-Time Air Quality Monitoring And Alerts	Poor Ventilation
4	Immediate Gas Or Smoke Detection	Poor Ventilation
4		Fire Or Other Contamination
4		Crowding