Application Study
City Transport Management

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OWERVIEW

The efficiency of green flow for public transport like bus or trams contributes to a better passenger experience and better pollution control. Automating the information collection and distribution of relevant information to the passengers also improves travel experience.

This application note highlights a few areas where TagMaster RFID will be of assistance for this application:

1. Green Flow / Green Wave Traffic
2. Improving passenger experience
3. Better information flow
4. Better monitoring of bus records

HOW WE HELP

1. Green flow / Green wave traffic control
By controlling the traffic lights so that it turns green when a public vehicle approaches, it negates the need for it to stop fully.

A TagMaster reader will be installed before a traffic junction with sufficient distance to ensure traffic control can adjust the timing as required. Traffic control has the ability to switch the traffic light cycle or automate this process.

2. Improving passenger experience
A vehicle that stops less will have a more deterministic travel time. This ensures that the schedule is more predictable. If a vehicle is detected at a junction before a bus stop, the passengers can be notified via a LED display on the type of vehicle that is approaching and the amount of time before it is predicted to arrive.

Vehicles equipped with a TagMaster RFID tag that arrives at the the terminal can be told exactly which bay to park at. Passengers can also be notified of arrivals and gate information as well. This helps improves the cycle time through the terminal.

3. Better information flow
Traffic control will have better visibility of vehicles movements down to junction level. This complements GPS in high density build up areas.

The ability to detect a vehicle will also give traffic control a better say in whether it needs to stop based on traffic condition at specific junctions.

TagMaster RFID has long range RFID products which can be used to read across multiple lanes if required and will give better vehicle identification ability in high density traffic.

4. More in depth data monitoring of buses
Once a vehicle is equipped with a TagMaster RFID tag, the whole vehicle life cycle of the can be fully monitored. For example, how many times has it been washed, how many hours it spent on the road before returning to the depot. This can also be applied to fuel dispensing systems so that users can also monitor the amount of fuel taken and the reporting dashboard can provide users with a history of the fuel consumption and highlight any anomaly if required. Number of services, or tyre changes can also be monitored easily.

PRODUCTS USED

XT-series of readers and passive ID-tag/cards

LR-series of readers and ID-tags.

TagMaster   CitySync