Atlanta Mercedes Dealership to Adopt RFID at New Location

The real-time location system is designed to reduce labor, help sales and service departments quickly locate specific vehicles and track how many times a particular vehicle has been test-driven.

By Beth Bacheldor

June 15, 2007—Mercedes Benz dealership RBM of Atlanta is implementing an RFID-based real-time locating system (RTLS) at its newest location, opening this fall. The system, provided by MyDealerLot, is designed to help the dealership slash the time required to manage its inventory of at least 600 cars, while enabling sales associates to quickly find specific vehicles.

"For management, MyDealerLot is a great inventory-tracking tool," says Randy Powell, RBM's general manager. The MyDealerLot system, being installed now at the new location (RBM of Atlanta–North), will be integrated with RBM's data management server, from ADP, and a key-management system for storing and controlling car keys, created by KEYper Systems. Powell says the dealership is adding the system "so we can track a vehicle from the time it is released to us by the vehicle manufacturer, its location on our lot, how often it has moved—and, with the integrated key control, who moved it—and, very importantly, if it is not on our lot."

MyDealerLot RTLS leverages AeroScout active T2 tags and other hardware and software, integrated with MyDealerLot's hosted software and database application, which provides inventory management, sales data, reporting and other functions. The tags will be attached to each car, transmitting 2.4 GHz signals that can be received and processed by standard wireless access points (802.11b/g). Built-in motion sensors can detect a car's movement and activate the tags in response, causing them to transmit their ID numbers to AeroScout Location Receivers. The receivers process location measurements, then communicate that data, via 802.11, to the AeroScout Engine software, which performs further location calculations.

The receivers and engine measure tag locations using time distance of arrival (TDOA) technology, says Joshua Slobin, AeroScout's director of marketing, which works better in outdoor environments than a similar location technology called received signal strength indication (RSSI). RSSI, which AeroScout also supports, is better suited for indoor use.

"Basically," Slobin explains, "RSSI measures the strength of a signal over the distance of the tag sending out that signal, and an access point picking up that signal. Because the signal can travel a greater distance and the strength changes over time, it is very hard to measure, in wide-open areas, the differences of strength of signal. Whereas with time distance of arrival, time is linear, and it is measuring the time it takes for a signal to get from point A to point B."

"With so many [automobile] models, colors and options," says Powell, "MyDealerLot allows a sales consultant to quickly drill down—with a few clicks of a mouse—through our inventory, find the vehicle that matches the customer's specifications and know where to find it on our eight-acre site. This not only enhances

the customer's perception of the sales consultant's professionalism, it also enhances the consultant's confidence. It can make a big difference."

For example, Powell notes, MyDealerLot can track the number of times a particular vehicle has been test-driven, providing invaluable sales and customer information. "We will be able to have a real-time inventory picture [around the clock] that will provide vehicle status—both incoming and on our lot—lot configuration information, consumer guide data, and location information," he says. "Additionally, we will be able to perform inventory counting by exception, and have sales information associated with each vehicle. We will also be able to have better visibility and accuracy of the inventory's aging data."

In addition, the dealership's service department will be able to use the RTLS to locate vehicles on the lot that need to be prepped for customer delivery or need service. According to Powell, RBM is installing 13 location receivers throughout its lot—on the corners of the lot, attached to light posts and on the building. Four exciters will be mounted at the lot's entrances and exits, to record when cars move in and out of the dealership.

Encoded with a unique identifier that is then "married" to a specific car's VIN stored in the MyDealerLot software, the tags will be hooked onto the rear-view mirror of its assigned vehicle. For the initial implementation, RBM anticipates tagging 250 cars.

The RTLS is expected to be much easier to use than the bar-code system the dealership currently uses at its flagship location in Atlanta. There, a sticker with a unique bar-code number is applied to each car, and inventory information is downloaded from the dealership's DMS into handheld PDAs equipped with bar-code readers and a custom-developed application. "We walk the lot, which is 11 acres at that site, and scan each vehicle, noting its location," Powell states. "After completing the lot check, we upload the data from the PDAs into an SQL database and run discrepancy reports. It is accurate, but labor intensive."

RELATED_ARTICLES MyDealerLot is headquartered in Roswell, Ga. George Cresto, the company's founder and president, started MyDealerLot approximately 16 months ago. Cresto had been following RFID, and realized the technology's tracking and inventory management functionality could provide real benefits to automobile dealerships. The company provides the MyDealerLot system as a hosted service, working with dealerships to install and set up the system at each site.

On June 8, MyDealerLot announced version 2 of its Web-based, hosted RTLS, which includes off-the-shelf integration with KEYper Systems' key management devices. When a sales associate or service technician pulls a specific key from a kiosk, the kiosk displays the corresponding car's physical lot location on its computer screen.