



# RTLS Expands IoT and Business Management Research Capabilities at Auburn University RFID Lab

## SUMMARY

**COMPANY:**  
Auburn University RFID  
Lab

**LOCATION:**  
Auburn, Ala.

**INDUSTRY:**  
Warehousing +  
Distribution, Retail,  
Grocery, Academic

**THE ENVIRONMENT:**  
13,000 square feet of  
simulated environments

**THE CHALLENGE:**  
Enhance location tracking  
and data analytics  
capabilities for research

**THE SOLUTION:**  
PLUS Activate RTLS using  
Ultra-Wideband (UWB) and  
Bluetooth Low Energy (BLE)

The Auburn University RFID Lab is a research institute focusing on the business case and technical implementation of RFID and other emerging technologies in retail, supply chain, and manufacturing. The lab provides the perfect collaborative environment to study the next generation of integrated data acquisition, analysis, and decision-making technologies, tools, and processes. Faculty, students, technology providers, and organizations are brought together to understand how the needs of the market can be better met using technology.

The lab offers:

- 13,000 square feet of simulated retail, grocery, and warehouse/distribution center environments
- Leading-edge personnel, asset, and inventory tracking and analysis technology supporting the Industrial Internet of Things (IIoT)
- Academic expertise from Auburn University's Raymond J. Harbert College of Business, Samuel Ginn College of Engineering, and College of Human Sciences
- Energized students preparing to be the next generation leaders in the IoT and era

## THE CHALLENGE

The RFID Lab wanted to augment its extensive RFID capabilities with other leading-edge automated identification, location tracking, and data analytics capabilities. These added capabilities were needed to





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“The PLUS Activate Real-Time Location System (RTLS) Platform is a key enhancement to the capabilities of the RFID Lab as we research the benefits RTLS and visibility to high accuracy activity data can provide as a subset of the broader Internet of Things (IoT),” said Justin Patton, Auburn University RFID Lab Director.

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support research projects and student education in Business Analytics, Supply Chain Management, Industrial and Systems Engineering, Retail and Hospitality Management, and Computer Science. These capabilities position the lab to be a state of the art resource to the academic and business community focused on defining real business applications within the growing Internet of Things.

### THE SOLUTION

PLUS installed the PLUS Activate RTLS Platform in the Auburn RFID lab to provide high-accuracy tracking throughout the facility. The system includes a variety of hardware and software components, including UWB RTLS tags and BlueCats BLE beacons, which are worn by people or attached to assets, and PLUS Readers, as well as BlueCats Edge Relays, to receive the Ultra-Wideband (UWB) and Bluetooth Low Energy (BLE) tag signals. The tag signals are processed by a suite of software applications to provide accurate, real-time location calculations, analyze the movement and interaction of tags, manage databased storage of activity, and provide access and visibility to the data through a variety of dashboards, reports, APIs, and communication devices.

### THE RESULTS

Faculty at Auburn use the system for research in the areas of Warehousing & Distribution, Manufacturing & Processing, Hospitality, Sports, Emergency & Military, and Workplace & Workforce.

### ABOUT PLUS LOCATION SYSTEMS

PLUS Location Systems enables innovative location solutions with the PLUS Activate Real-Time Location Systems (RTLS) platform that delivers integrated, real-time location and activity data. PLUS empowers organizations to receive reliable location data that is flexible, scalable and is easily integrated.

#### CONTACT US:

256.217.4072

[www.pluslocation.com](http://www.pluslocation.com)

PLUS Location Systems  
6767 Old Madison Pike NW Ste. 310  
Huntsville, AL 35806, USA

