

Retailers Test RFID Smart Tables

Two stores are using the tables, which have built-in UHF EPC RFID interrogators, to display marked-down products and track their movements.

By Claire Swedberg

March 7, 2007—Two retailers, one a book and magazine seller, the other a merchant of general merchandise, are testing a table that automatically reads the passive UHF (902-928 MHz) EPC RFID tags of items placed on it, eliminating the need for a handheld interrogator. The retailers are using these tables to display products for discount sale. Other stores have also shown an interest in testing the system, according to Joe Leone, president and CTO of [RFID Global Solution](#), which makes the SmartTable being tested by the retailers.

The stores are interested in using the tables to track the movement of products on bargain or markdown tables. Such products are traditionally hard to track because customers may pick up items and set them down elsewhere, often leading them to be reshelved incorrectly. With the SmartTable, retailers can know if items are no longer on the table and can use that information either for reshelving, or for tracking the interest customers have in a particular product. The SmartTable, Leone says, is an alternative to more costly and larger shelf reader systems.

RFID Global Solution first began developing the SmartTable STHD2000 in 2005 for the military, and the device has since drawn attention from retailers as well as other industries such as utilities, Leone says. The table, which is 3 feet wide and 6 feet long, comes equipped with a choice of RFID reader models from a range of manufacturers, as well as antennas, a power cord and a wireless or wired connection to allow data to be sent to a server or back-end system. The STHD2000 comes with standard Java or HTTP interfaces such as those used by [Alien Technology](#) readers and [Motorola's Enterprise Mobility Business division](#) (formerly Symbol Technologies).

The system is also designed to isolate the read field within the boundaries of the table. Therefore, there can be no ambient reads of tagged items stacked beside or below the table. A built-in indicator light alerts users if the system is ready (green light), reading tags (yellow light) or not functioning properly (red light).

Designed to be durable for the military, the STHD2000 weighs 97 pounds and is constructed of industrial-strength aluminum, although Leone says his company is in the process of developing a lighter version. It can hold weight up to 1,000 pounds and can be moved by two people.

In May 2005 Leone says, RFID Global Solution learned of [Savi Technology's](#) interest in a passive RFID solution for the military that would allow troops to read tagged items in the field. Typically, Leone says, members of the military receive shipments of products such as spark plugs, belts and hoses in multipack boxes. They unload those boxes on a series of tables and then scan the bar code of the Material Release Order that lists each item and where it is destined. They then use a handheld RFID reader to capture the unique ID number of each product's RFID tag, which prompts the printing of shipping documents for each order. Personnel then place the documents for specific orders on the products to be shipped.

"The entire process can be very labor intensive," Leone says.

With the SmartTable, soldiers simply unpack the boxes, and the table's built-in RFID interrogator automatically captures the RFID number and sends the data either through a wired or wireless connection using Savi Technology's SmartChain Site Manager software, which then prompts the printer to print an order document for each item.

Savi Technology and RFID Global Solution presented a prototype to the military in June 2005 and "they loved it," Leone says.

RELATED_ARTICLES For the past nine months, the Defense Logistics Agency has been using six SmartTables, he says, and Savi has entered into an exclusive agreement with RFID Global Solution to sell the table to certain branches of the military. Savi bundles its software package with the SmartTable hardware.

The retail cost for the table is about \$7,500 for all hardware and software.

Copyright ©2005 RFID Journal, Inc. All Rights Reserved