

Intelleflex Rolls Out Fob-size BAP Tag

A new battery-assisted passive RFID tag, small enough to fit in a pocket, enables users to track keys to lock boxes, as well as manage small high-value assets.

By Claire Swedberg

April 8, 2008—[Intelleflex](#), a developer of ultrahigh-frequency (UHF) RFID systems that utilize battery-assisted passive (BAP) tags, has released a new, smaller version of its FBT 7400 tag that fits on a key ring. The new tag allows users to track small items such as keys from a distance of up to 75 feet.

Intelleflex developed the original FBT 7400 tag one year ago, for such customers as casinos and law enforcement agencies to track keys used in their operations. Casino staff members often carry keys for storage areas or lock boxes, then return them at the end of their shift. While the keys themselves have little value, they provide access to valuable assets. Law enforcement agencies use the tags for similar applications.

The new tag, known as the FBT 7400 Fob, is designed in the form of a key fob—about 1 inch by 1 inch by a half-inch—so it can be easily attached to keys and other small high-value items, which can then be tracked. The previous tag measured 2.5 by 2.5 inches—too large to fit in a pocket. "Casinos were one big driver," for the smaller form factor, says Sam Liu, Intelleflex's director of marketing.

While the company's earlier version of the tag had a read range of 150 feet, the latest model, small enough to fit in a pocket, offers a range half that distance. The tag contains a battery-assisted passive chip that complies with [EPCglobal's](#) as-yet-unratified Class 3 RFID specification for BAP UHF tags, and remains quiet until interrogated by a reader. The battery life is about five years.

The Intelleflex tags previously used by casinos and law enforcement agencies were too cumbersome, Liu says, which is why it developed the smaller model. Those customers wanted to employ the tags to track keys that may themselves have little value, but that can allow people access to valuable assets. Such keys, often carried by employees on belt loops or in pockets, are occasionally misplaced.

According to Liu, employees of a company such as a casino might inadvertently take the keys home. Not only is this a security concern, but in the case of casinos, it is also a violation of some state gaming regulations. To resolve this issue, casinos wanted a system enabling them to be alerted if keys ever left the premises. Law enforcement agencies also use the system to track keys to evidence rooms, as well as to tag and track the evidence items themselves.

Much of the RFID industry, Liu says "has been going after higher-value assets, but some assets are important and they can be small." None of the end users of the new tag—who are currently receiving the tags—wished to be named for this story.

With the new tag, casinos and other users can set up interrogators at doorways and other areas of concern, to be sure the keys don't enter those locations. When the tag approaches something such as an exit door, Liu says, an Intelleflex I-Beam 500 RFID reader captures the tag's ID number and transmits it to the company's

security database, either via a Wi-Fi or wired LAN network connection.

RELATED_ARTICLES Like its predecessor, the FBT 7400 Fob has a total of 64 kilobits of storage, of which 60 kilobits is user memory, so a history of the tag's movement can be recorded directly on the chip. Users can then access that data using a handheld I-Beam reader, or directly from their own database. The new tag costs the same as the original model, Liu says, though he declines to reveal the exact price.

In November 2006, Genesis Resource, a company specializing in security systems for the casino industry, began selling Axcess International's RFID system that uses active 315 MHz tags to track slot-machine keys (see Axcess Partnering With Casino Technology Provider).

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