

New RFID System Takes Security to Heart

The new security system from Third Eye alerts casinos, banks or convenience stores if an employee's heart begins racing, indicating a possible robbery or theft in progress.

By Claire Swedberg

March 23, 2007—Portable surveillance systems company Third Eye has released a Security Alert Tracking System (SATS) that allows casinos, banks or convenience stores to be alerted if one of their employees' hearts begins racing. The purpose is to add intelligence to security and surveillance, alerting management to the fact that an employee is under stress and could be in an emergency situation, or even planning a theft against the business.

The system, designed and manufactured by biosensor and microprocessor maker SPO Medical, includes a wristband employees wear that measures the pulse rate and can send an RF signal alerting surveillance if that rate changes suddenly.

SATS is commercially available now, says Michael Braunold, SPO Medical's president and CEO, and Third Eye is taking orders. However, he says, the system takes about six months to customize for each user. Since the system is just being introduced, it hasn't yet been deployed.

"There is nothing like this on the market," Braunold says. "We're taking the benefit of what we've learned in the medical industry and making it available for commercial security."

Each wristband comes with a 915 MHz active RFID chip, antenna, battery and a bio-sensor chip to capture the heart rate using reflectance of light on the wearer's wrist. The chip includes a unique ID number that can be associated with a specific employee in a database.

The RFID chip is constantly beaconing its ID number, as well as the heart rate of the wearer, to receivers installed within a facility. The receivers send the data wirelessly to a PC or laptop, which forwards it to the central monitoring system.

The system can be customized as to how security is alerted if an employee's heart begins racing. In the case of a bank or convenience store, in which robbery is a concern, an alert such as a flashing light could be sent directly to security personnel, who could then refer to video images at that specific store or branch and contact law enforcement if necessary.

In the case of a facility such as a large casino, the system's purpose is to monitor the behavior of the employee and prevent theft by the employee. In this case, with multiple employees in a large area, the system can be configured to trigger cameras in the area in which the employee with the fluctuating heart rate is located to pan or zoom in on that individual, and to send an alert to security personnel. Security could then review the video and determine if there is a problem in that area of the casino.

RELATED_ARTICLES Receivers can pick up the signal from the transponder in the wristband from

approximately 300 feet away. The number of receivers varies according to the users, Braunold says. The system can handle 20 wristband units for each reader.

"We have various applications for our technology, but the idea for the casino market came via Third Eye," says Braunold. The system can use a variety of commercially available receivers, he says, with the proprietary software from SPO.

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