**FACT SHEET**

**Construction Site Safety with RFID Alarm System**  
*Model: HKRAT-ZT01*

**Construction safety with RFID system**

Construction sites are challenging environments to manage with the many critical issues in asset management, tool tracking, production safety as well as worker safety. To meet these challenges, more and more construction companies and site contractors are integrating Radio Frequency Identification (RFID) technology in their day-to-day operations in construction sites and projects.

Occupational accident rates in the construction industry are always higher than that in any other industries because of the uncertainty in labor behaviors and working environments. Safety management could not be easily carried out due to the open environment and dynamic events at all times in construction sites. Serious accidents often happen with these complex reasons.

Adapting RFID technology in the construction industry helps to solve these problems.

**Personal Warning System**

Our Active RFID tag is developed based on Active RFID technology that can sense and monitor the workers’ location or working area within the detecting zone. A worker only have to carry an Active RFID tag with buzzer and when they enter into a dangerous area, and alarm would be triggered to inform the operator and supervisor accordingly.

**Special Features:**
- Low Infrastructure cost
- Reading distance of 30m to 50m
- Outdoor-use
- Auto judging / alarm functions
Real-time tracking and locating system

The wireless communication protocol of the Active equipment can satisfy requirement of RFID communication rate in construction sites. Also, the new safety device of active alarming RFID tag provides not only personal protection but also real-time sensing and monitoring for management.

The location identification module of the Active equipment can provide work route tracking. Our active RFID reader can read 3m to 50m radius with some onsite tuning effort. The active tag can help you identify not only the real-time location of worker but also notify whether they are in dangerous areas so that actions could be performed to prevent accidents.

Supervisors can periodically review each worker’s record and analyze their working condition. They can give advice to the workers in order to reduce accident rates.

Wide Applications

The active RFID tag can be used on vehicles or other machines in the construction site as well. When drivers enter dangerous areas, the supervisor would be notified.

With advanced testing of stability and longevity on the Active equipments, RFID technology will bring management in the construction industry more control over safety in sites. Wireless transition integrated with database would make our device more efficient and accurate. This new safety device can monitor safety condition of labors and contractors and provide security and emergency control for dynamic and working environment.