



## **A new RFID technology, RespectRFID, can greatly reduce shoplifting and employee theft.**

### **Existing RFID systems are not only ineffective for stopping shoplifting, they can actually increase the amount of shoplifting**

Losses from shoplifting and employee theft reduce retail profit by an average of 28% (Canada 2003).

A new patent-pending RFID system called RespectRFID can greatly reduce or eliminate losses from shoplifting and employee theft. The RespectRFID system uses a small active cost-effective RFID tag attached to most items in a store and antennas mounted on the ceiling which frequently monitor the status and location of every RFID tag. The RespectRFID system instantly knows when any tag is removed, any package opened, or when any tag ceases to communicate. The shoplifter will not be able to easily determine which items have been tagged, as the tags are tiny and multiple tags can be attached to the same item.

It appears to be cost-effective to tag every item costing more than \$20. Additionally, tags can be randomly attached to additional items in the store. The system can monitor a million tagged items in a store.

The RespectRFID system also uses video cameras. Many types of suspicious activity are automatically recorded. Priority recordings are immediately sent to loss-prevention people on the floor.

In addition to preventing loss by shoplifting and theft the RespectRFID system respects privacy and personal health. It does not record personal data, and subjects people to less than 1/1000 the RF radiation as from a cellphone, microwave oven, or current RFID readers (UHF).

RespectRFID has benefits in many areas. This paper highlighted the benefits in just shoplifting and employee theft. Please contact us for additional information.

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Shoplifters are used to stealing items 'protected' with Electronic Article Surveillance tags.

Both EAS and current RFID tags can be disabled by:

- 1) Removing tag from package
- 2) Removing merchandise from package
- 3) Breaking tag
- 4) Putting tagged item in shopping bag lined with aluminum foil ('booster bag')
- 5) Placing tag near body, liquid, or metal – so that it can not communicate
- 6) Leaving store rapidly when alarm sounds
  - alarm is often ignored by the clerks
  - employees are told to not physically restrain anyone
- 7) Leaving store at the same time as someone else – who will tend to stop when alarm sounds.

Current RFID systems actually increase the number of methods available to shoplifter.

With current RFID systems shoplifters can:

- 8) Replace a tag of a high-price item with that from a low price item
- 9) Use a tag killer
- 10) Use a tag jammer
- 11) Hiding an item/tag is easier at the self-checkout lines being tried in RFID tagged stores.

## **Employee theft will also be eliminated**

All known forms of employee theft will also be detected by RespectRFID, such as:

- 1) Theft after the store closes
- 2) Theft by hiding items for later removal
- 3) Employee places low cost RFID tag on low cost item
- 4) Collusion: cashier 'forgets' to charge for an item, or undercharges
- 5) Employee does not tag an item
- 6) Cashier voids item sale after customer leaves and then pockets the transaction.

## **Privacy is respected**

RespectRFID *respects* privacy. RespectRFID tags:

- 1) Will not be readable after the item is sold
- 2) Will not contain information to identify the individual, product, store, or date of purchase
- 3) Will not track a customer
- 4) Will not enable a store to identify customers who are paying with cash
- 5) Will not keep photos of shoppers – it archives images only of shoplifters.

## References

**S(h)elf Help Guide** – The Smart Lifter’s Handbook – Everything you every wanted to know about the art,  
by Gabriel Caime and Ghome, 267 pages, 1996 <http://www.shelfhelpguide.com/attitude/resource.htm>

**101+ Ways to Steal – by a Cashier** – How to Analyze, Entrap, and Eject a Thief  
by Barry Bryant 108 pages, March 2000

**Positive Loss Prevention** by Bob Tilley 234 pages, 1999

**Shoplifters vs. Retailers: the rights of both** by Charles Sennewald 2000

**Shoplifting, a social history** by Kerry Segrave 182 pages, 2001

### **Shoplifting/loss prevention highlights from above**

1 in every 20 customers coming into a store will shoplift – estimate by security personnel

1 in every 10 people have shoplifted during the past 12 months – result of survey

1 in every 2 people have shoplifted sometime in their life – result of survey

40% of retailer’s revenue comes from impulse shopping. Gabriel

“It is quite obvious that present technologies (for loss prevention) are less than perfect. Well, less than good. In fact they are less than adequate. Actually, they are crap” Gabriel

“Even though smart shoplifters cause more damage than amateurs do, the stores suspect that measures taken against them usually prove to be ineffectual” Gabriel

Shrinkage (shoplifting + employee theft + vendor theft + paperwork errors) account for 1% to 10% of sales

622,222 people were apprehended while shoplifting

For every dollar recovered another \$27.95 was lost to retail theft.

Dishonest employees steal more than shoplifting customers.

3X more theft \$ by employees than shoplifters

**Outsiders, insiders and theft** *Security Magazine*; Jul/Aug 2002 - from 30 large US retail companies

2001 only 3.45 percent of losses from shoplifting and employee theft were recovered,

One in every 27 employees was apprehended for theft from their employer.

Dishonest employees steal approximately 7.9 times the amount stolen by shoplifters.

15% of the shoplifters thought it likely that they would be caught if they shoplifted.

33 % of the shoplifters thought that they would be arrested for committing a crime.

85 % of the shoplifters viewed retail security as ineffective.

81 % of the shoplifters agreed that shoplifting is a low-risk crime.

### **National Retail Security Survey for 2002**

**1.7% average shrinkage** across 120 surveyed stores.

Shrinkage: 49% from employee theft, 32% shoplifting, 15% administrative error, 5% vendor fraud.

Incidents of shoplifting outnumber employee theft in frequency – but not in value of goods taken. Loss

prevention systems employed by the companies surveyed: 95% burglar alarm, 73% live visible TV, Digital Video recording 51%, EAS tags 43%, simulated CCTV 30%, RF tagging 10%, RFID security tags only 2%

A summary of 2002: [http://retailindustry.about.com/od/statistics\\_loss\\_prevention//aa021126a.htm](http://retailindustry.about.com/od/statistics_loss_prevention//aa021126a.htm)

2004 survey report is available at <http://web.crim.ufl.edu/research/srp/srp.htm>

**Canadian Retail Security Survey 2003** (highlights only – survey is only available to members)

<http://www.retailcouncil.org/media/press/pr20030923.asp>

**Boosting is a high reward career with very little consequential risk.** "Take three or four bad guys, and they do a burglary, They have to take that to their fence and get 10 cents on the dollar because the merchandise is used and traceable. If they go to a retail store and take it to a fence, they get 25 to 30 cents because it's new and not traceable." In every state, burglary is a felony whereas shoplifting is a misdemeanor, so the penalty for getting caught is much harsher for a burglary. Nov 2003, by a member of Wal-Mart Stores' national Investigative Task Force.

**Some new books listed on Amazon which may be interesting**

**Loss Prevention in the Retail Business**, by Chris Thomas, due out Dec 2005

**Retail Security: 150 Things You Should Know**, by Louis A. Tyska 2002

**Biting the Hand That Feeds: The Employee Theft Epidemic**, by T. D. Shulman, Aug 2005