
The Anti-shoplifting Solution TamperSeal by Secure Logistics Sweden AB

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Tamper Seal



TAMPERSEAL
Intelligent Seal with Real-Time Alarm System

 **TamperSeal protects the commercial value of retail merchandise**

TamperSeal system is activated by attempts to product tampering and shoplifting.

In addition to a real-time notification to your e-reader, with information about the incident and a picture of the current retail zone, sound and light alarms will lead you to the zone of the store where the event takes place.

In this way, product tampering or theft can be interrupted and the product remains intact in the store.



Most of the shoplifted products have been alarmed

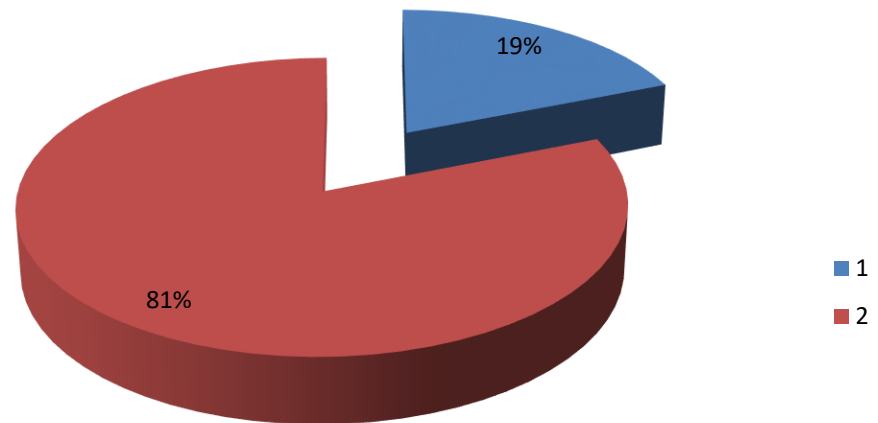
- The value of shoplifting in general are measured to approximately 0,5-1.5% of retail sales. Profit could typically be improved by 20% if theft is eliminated
- Most of the high value products that are stolen have been alarmed with EAS tags and gates together with additional protection such as "spiders" and "safer"
- Theft methods includes tampering with the EAS system by separating the EAS tag from the product and usage of bags lined with several layers of aluminum foil ("Booster bags") that blocks the signals to and from the EAS gates.
- Despite the usage of product alarms, the high value of shoplifting are forcing retailers to placing high value goods in cabinets and behind the counter, which in turn considerably reduces the sales.
- 20 % of shoplifted goods in units represents approximately 80 % of the value of all shoplifted goods



Shoplifting

- Data
- Implications
- Strategy
- Challenges

**Theoretical EBIT Loss
Dixon + MediaMarkt**



Shoplifting

Challenges

- > Internet
- > ORC
- > Strategy
- > Pro Active
- > Revenues vs Earnings

[Alpha S3 handkey **spider** tag detacher Magnetic **Security** Display ...](#)

[www.aliexpress.com](#) › Store Home › Products ▾ Översätt den här sidan

★★★★★ Betyg: 4,8 - 15 recensioner - 14:90 US\$

Product ID: 628297328 Alpha S3 handkey **spider** tag detacher Magnetic Security Display Hook hanger ... Suitable for alpha eas **safer** and **security** display hook

[remove **spider** wrap with magnets - YouTube](#)



[www.youtube.com/watch?v=gbUpufZRrF8](#) ▾

31 dec 2009 - Överfört av SALEXTWENTY5

basically you can **remove** any **security** device with strong enough magnets.you can get magnets like these ...

[How to unlock **disable spider** wire anti theft - YouTube](#)



[www.youtube.com/watch?v=fBn2wT9Ta78](#) ▾

2 jul 2011 - Överfört av steveoh29

How to unlock **disable spider** wire anti theft ... vid-2-alarm-mini-spider-wrap_x264 alpha **alarm** alpha s3 key ...



The Future

Intelligent & Integrated
Systems





Intelligent & Integrated Product Alarm System

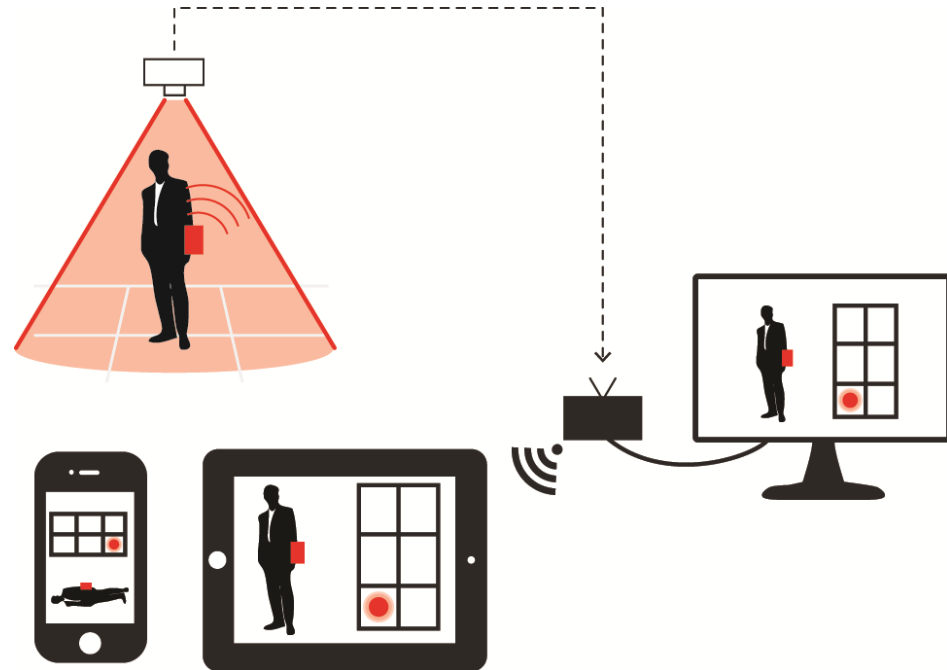


Tamper Seal



A Novel Approach to Prevent and Detect shoplifting in Real-Time and Analyze Customer Behavior

- TamperSeal, an intelligent seal with real-time alarm
- TamperSeal system is activated by any movement of the product. Sensor data is analyzed to access event.
- Alarm is sent when attempts to product tampering or shoplifting.
- Data is gathered, which together with video surveillance can be used for analyzing both customer and shoplifter behavior.
- Sales representatives can be alerted to customers that are examining the product
- Real-time notification to your e-reader or smart phone, with pictures of the thief, type of product and place in the store
- Sound and light alarms will deter the thief lead you to the zone of the store where the event takes place.
- TamperSeal preserves the function of EAS by detecting tampering as well as "booster-bags".
- Product tampering and theft can be interrupted and the product remains intact in the store and, thus the commercial value of retail merchandise.



Tamper Seal - System Principle and Key Modules

TS Sensor Unit

The sensor unit contains 8 different sensors, 2 CPUs, memories, NFC and a 100 m radio. It sends current sensor data via radio to ceiling readers. ID and data about the product is transferred to the sensor unit at the sealing and activation station via NFC.



TS Ceiling Reader

Readers are fixed in the ceiling and receive and transferring the sensor data to TS Control Center. The ceiling reader has an integrated light- and sound alarm. They are powered and connected to the central control unit with ethernet and use standard protocols for video systems. (We used Axis cameras and video system)

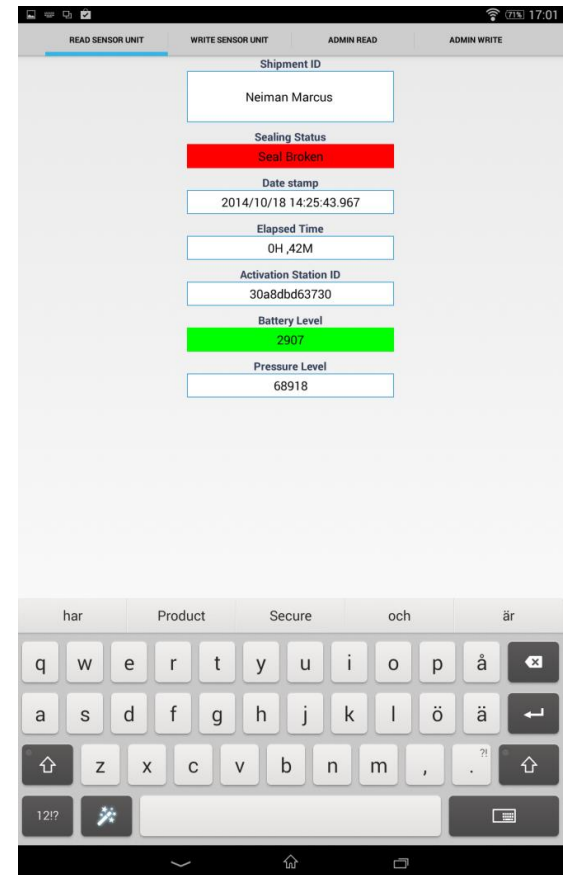
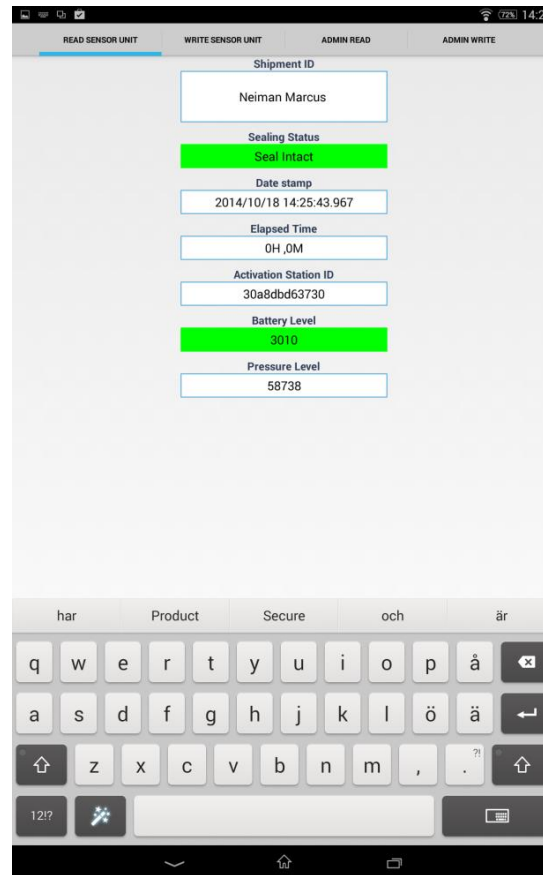
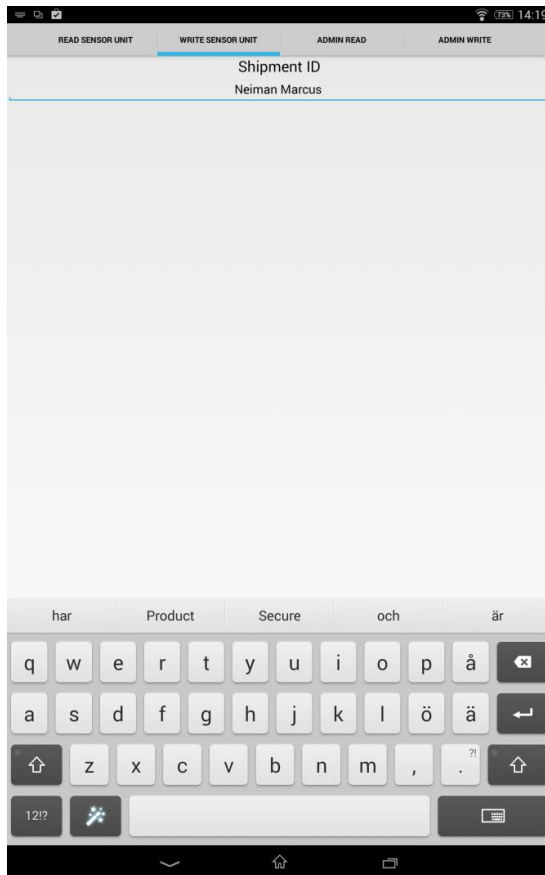




System Activation



User Interface



Tamper Seal - System Principle and Key Modules

Vacuum sealing

The sensor unit and the object are vacuum sealed with a plastic film covering the entire package. As the plastic film is transparent the seal does not interfere with the graphic design, bar codes or the intended appearance of the product .



Product Display



The overhang from the plastic bag can easily be eliminated by using gas tight shrink film

Product Display



The only store in Sweden where tablets were displayed for self-service and not locked up in cabinets. That increased sales

Tamper Seal - System Principle and Key Modules

Tamper Seal Control Center TSCC] Software

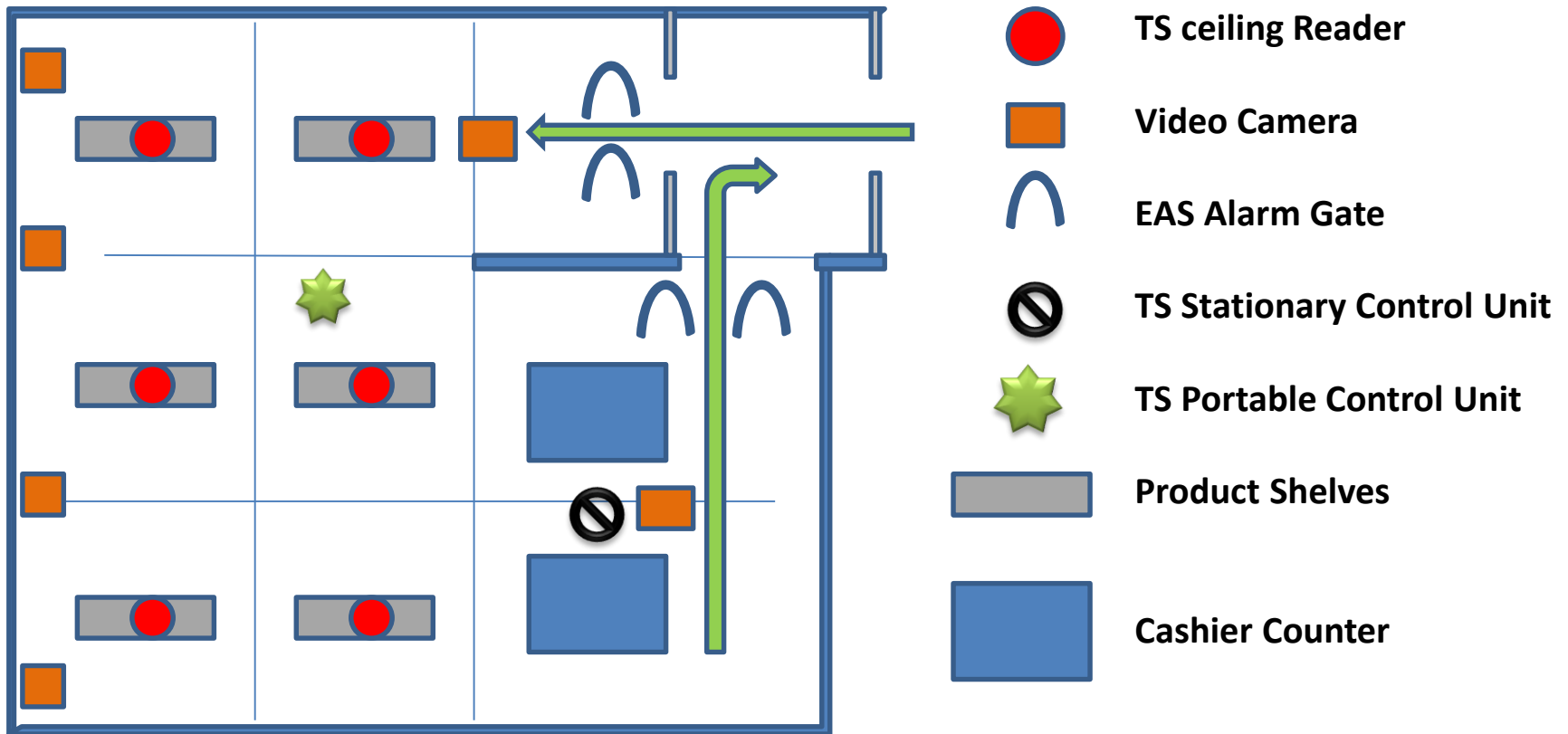
TSCC collects and analyzes the information from sensor units. Besides defining in which zone the sensor unit are sending from, it interprets the current sensor data in real-time. If the values deviates from pre defined tresholds, TSCC will immediately activate alarm in the actual zone and transmitt an incident report to e-readers available to the staff. The collected sensordata can preferably also be used for analyzing customer behavior to improve merchandising and increase salaes.

Camera or Video Surveillance

A camera or video system is connected to TamperSeal system using standard protocolls. TSCC can control and trigger cameras related to specifik zones and ceiling readers and download pictures and videos related to the incident.



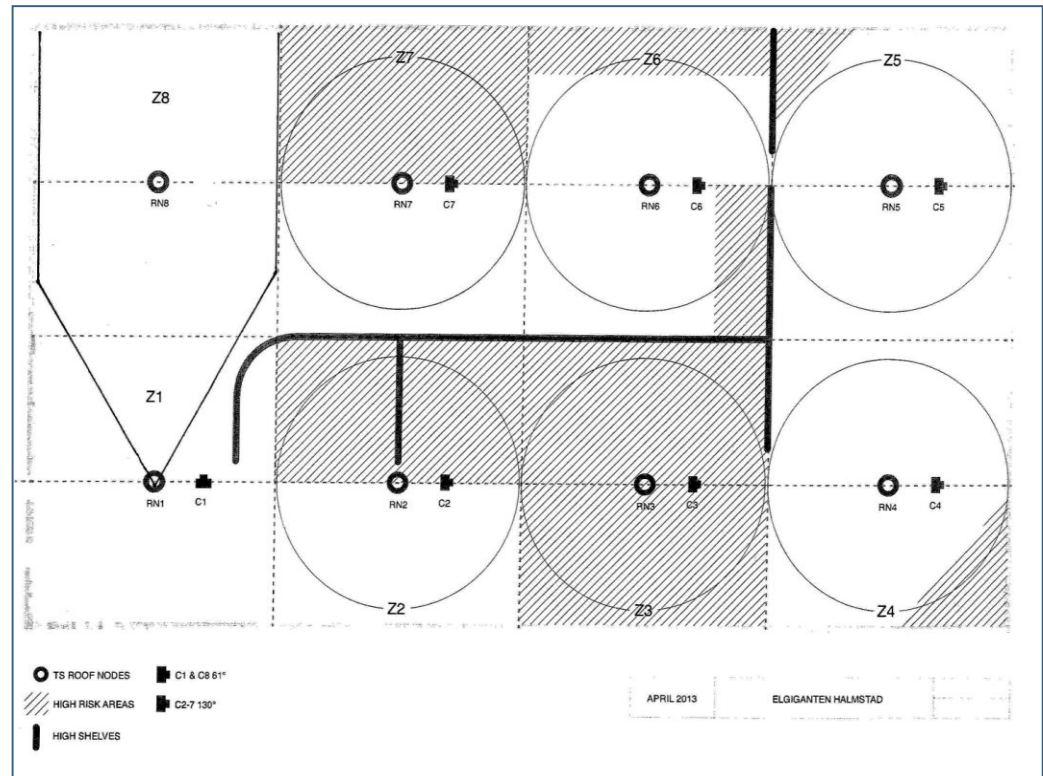
Principle Retail Security System



Pilot Store Configuration, 1200 sqm

Configuration principle

- Sensor Units x (50-100)
- Reading Units x 8
- Activation unit x 1
- Deactivation Unit x 1
- TS Software
- Video Camera x 8-10
- Reader tablets x (1-5)
- Computer x 2
- Switch + Router
- Vacuum Sealing Machine



Present Products to Protect Packed Merchandizes



Standard alarm tag
SD 0,01



Spider-Wrap
USD 12,0



Plastic Box
USD 5,0-12,0



Plastics Strap



Spider-Web



Peg Board



Present Products

| Product Theft & Loss | 100 products stolen | In store % | SpiderSafer | Pin/Loop | Cabinet |
|----------------------|---------------------|------------|--------------|-------------|-------------|
| Transport | 20 | | 0 | 0 | 0 |
| "Booster" | 40 | 50 | 0 | 0 | 1 |
| Deactivation EAS | 25 | 31 | 1 | 1 | 1 |
| Employees | 10 | 13 | 0 | 0 | 0 |
| "Grab & Run" | 2,5 | 3 | 0 | 0 | 1 |
| "Sweet hearthening" | 2,5 | 3 | 0 | 0 | 0 |
| | 100 | 80 | 0/25 | 0/25 | 0/84 |
| | | | Tot/In store | 1=Yes | 0=No |



Product Versatility/Segmentation

| Product Theft & Loss | 100 products | Total % | In store % | TS System | Spider/Safer | Pin/Loop | Cabinet |
|----------------------|--------------|---------|------------|-----------|--------------|----------|---------|
| Transport | 20 | 20 | | 1 | 0 | 0 | 0 |
| "Booster" | 40 | 40 | 50 | 1 | 0 | 0 | 1 |
| Deactivation EAS | 25 | 25 | 31 | 1 | 1 | 1 | 1 |
| Employees | 10 | 10 | 13 | 1 | 0 | 0 | 0 |
| "Grab & Run" | 2,5 | 2,5 | 3 | 0 | 0 | 0 | 1 |
| "Sweet hearthening" | 2,5 | 2,5 | 3 | 1 | 0 | 0 | 0 |
| | | 100 | 80 | 97/97 | 0/25 | 0/25 | 0/84 |
| | | | | | Tot/In store | 1=Yes | 0=No |

TamperSeal detects and prevents all shoplifter's modus operandi but "Grab & Run", while present anti-shoplifting devices only detect or prevent "Deactivation of the EAS tag"



Product Display



TamperSeal protected products (to the right) need much less shelf space compared to Spiders (to the left) and safers/keepers (to the right)

Value Proposition

- Prevents shoplifting conducted by tampering with EAS and "Booster bags"
- About 50% of the value of thefts is by "Booster bags"
- ROI < 1 Year in a typical home electronic store
- Retail stores free to expose or display products anywhere and thus optimizing sales potential
- 30-50 % potential sales increase of products previously hidden in cabinets.
- System is activated when product is moved. Data from the 8 sensors together with video recordings can be used to analyse customer behavior that improves merchandizing and sales as well as shoplifter's behaviour and provide evidence in court.



**Column in Loss Prevention Magazine, May-June 2013 by
Professor Richard C. Hollinger,**
chair of the Department of Sociology and Criminology & Law
University of Florida, Gainesville

“Is This a Game Changer?”

While I am not an engineer and this column is not designed to endorse any specific products, my personal review of this paradigm shift suggests that products like this hold real promise to be a “game changer.” It would appear that TamperShield radically improves loss prevention by getting the most out of existing EAS and by making the video system much more proactive in real time by means of its intelligent and integrated radio infrastructure.

It simultaneously has the potential to deliver considerable value for both merchandisers and logisticians. Since its sensor device immediately sends an alarm when the package is opened, the alarm device is separated from the product, or the package is placed in a foil-clad bag, pocket, or coat, it is expected to deter the criminals enough for retailers to allow displaying more theft-prone merchandise for self-service, and thereby considerably increase sales.”



Examples of applications protected by Secure Logistics' patents

- **Retail Theft Alarm**
- **Packages** from envelopes to sea containers. Detection of intrusion into packages for theft, counterfeiting, sabotage etc.
 - Pharmaceuticals
 - Medical Devices
 - Food & Beverages
 - Classified & Confidential Documents
 - Electronics, Printer Inc,
 - Evidence at crime scenes
 - Drug tests of athletes
 - Hazardous material – Explosives & Chemicals
- **Fixed installations**
 - Telecom infrastructure with high risk for sabotage. Double layered shell around
 - Safes



Thanks!

