



WHITE PAPER



# QPOS Link

## Next Generation Digital Retail CCTV

High Definition Images Linked to In-store Data  
Systems Lower Retail Shrinkage



Quadrox Int



[info@quadrox.com](mailto:info@quadrox.com)



+32 0 15 48 02 44

## **Next Generation Digital Retail CCTV High Definition Images Linked to In-store Data Systems**

CCTV systems help fight retail shrinkage and protect inventory. However, traditional CCTV security systems serve more as crime reduction through intimidation rather than as full investigative tools into what really goes around.

Limited resolution of camera images, limited storage and lack of synchronization with onsite data systems like POS prevent managers from quick discovery of incidents and immediate reaction to it.

This paper introduces the next generation of CCTV systems that allows for vastly improved results in lowering retail shrinkage through High Resolution images and real-time linkage of security footage with POS transaction data.

### **The issue of employee fraud**

According to the Global Retail Barometer, employee theft was estimated to be responsible for 29,8% of retail shrinkage in Europe.

The average amount stolen or admitted by employee thieves in Europe was €1.858,39 in 2009, which is 19,8 times greater than the average case of customer theft (€94,12). These figures prove employee theft to be an important target group in the retail shrinkage fight.

Early detection of employee theft will lead to long-term financial savings. Most employee fraud is conducted in the POS area during customer checkout.

Next generation CCTV solutions like QPOS Link provide contextual awareness of the POS area increasing the chance of fraud discovery leading to lower shrinkage.



### **Bringing security to the next level**

Back in 1999 the research conducted by the Scarman Centre for the Study of Public Order at the University of Leicester showed that within six months of the installation of a CCTV system, the shrinkage level went down with 26%. We conducted a similar study with QPOS Link and concluded that within the same period of 6 months shrinkage reduction reached upwards of 35%.

How was this additional 9% variance achieved? Traditional CCTV systems serve as a prevention tool attempting to keep customers and staff honest. They are less likely to commit fraud if they know their actions are recorded. CCTV enables managers to review what happened in the past. However, difficulties in identifying signs of fraud or suspicious behavior drastically reduce the deterrent effect of CCTV. Often by just looking at images it is impossible to detect fraudulent or criminal behavior.

A new generation of digital CCTV systems addresses these issues by increasing the chance of fraud discovery. This becomes possible due to the high definition image resolution, easy monitoring and retrieval of information, longer storage of synchronized video surveillance and POS transaction data.

## Video for detailed evidence

QPOS Link is synchronized with the video footage from a security camera that provides clear and detailed images of the POS area.

When dealing with employee theft it is crucial to have high resolution video that allows for identifying even minor fraud or overlooked items. Direct QPOS Link integration is possible with existing camera infrastructures or with more modern network camera infrastructures as well.



## Longer storage for guaranteed discovery

Traditional Digital Video Recorders record video based on activity detection. Next generation Digital Video Store Recorders record video based on activity but further optimize storage by storing video footage that is linked to POS transactions longer.

On average CCTV footage that is linked to POS transactions is stored six times longer than video footage of which we only know activity took place. This makes that the duration during which a crime of an employee or customer can be exposed is six times longer.

With QPOS Link employees are less likely to steal or cheat as they know that the manager will be easily able to retrieve the required information, even if fraudulent activity is discovered weeks later. Such a system puts constant psychological pressure on a dishonest employee and places the loss prevention back into CCTV where it belongs.

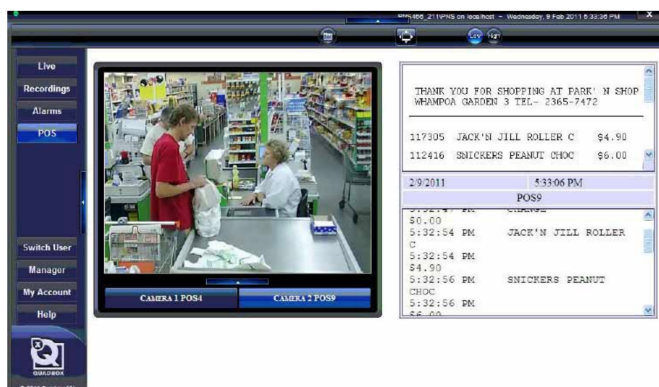
## Easy monitoring and retrieval of information

QPOS Link matches surveillance video of the area around the POS with POS transaction data such as: receipt information, transaction IDs, SKU / UPC numbers, register numbers, employee numbers, location or amounts. Items scanned by the cashier are displayed line-by-line in the QPOS Link window in accordance with what is shown on the customer display.

It allows for detecting suspicious transactions and possible fraudulent scenarios reducing shrinkage by organizing efficient monitoring of the POS area.

QPOS Link is set up to send an alarm in case of a suspicious transaction or behavior. An alarm warning is sent to a specified location with both transaction and video data of the event allowing the manager to verify the incident and to take immediate actions. These synchronized recordings and POS tickets are being recorded constantly and available for remote monitoring and playback by a manager or remote auditor.

With QPOS Link the days fast forwarding through hours of uneventful and unimportant video are gone. A manager can use ticket information as search criteria for the search and retrieval of the transaction of interest together with the corresponding video. It is as easy as searching in Google and makes the discovery process much more efficient.







## Sweethearting

Sweethearting is unauthorised giving-away of merchandise without charge to a “sweetheart” customer (e.g., friend, family, fellow employee) by the fake scan or ring-up of merchandise by the cashier.

It can be easily detected and proven by linking POS transaction information and video footage.



## Advertisement Fraud

Marketers invest a lot of money in in-store advertisement campaigns through the distribution of free product samples, gift items or discounts.

Staff, intentionally keeping these benefits to themselves, destroy the whole purpose of the campaigns.

Quick audit of these promotional product transactions with QPOS Link prevents this type of fraud.



## Quality Assurance

QPOS Link allows for clarifying dubious transactions, such as voids, incorrect change, double scanning, returned items, etc.



## Management Summary

Employee theft comprises 29,8% of retail shrinkage in Europe making it one of the most highly targeted groups in the retail shrinkage fight. Since most employee fraud is conducted in the POS area during the check out of customers, next generation CCTV solutions like QPOS Link provide new levels of contextual awareness, specifically to the POS area.

Compared to traditional CCTV systems, QPOS Link generates an additional 9% shrinkage reduction, by reducing total retail shrinkage by 35% on average. Such high success rates are possible due to High Definition video footage, easy monitoring and retrieval of information, as well as longer storage of synchronized video surveillance and POS transaction data which leads to increased chance of fraud discovery.