

# Real-Time, Integrated Merchandise Visibility and EAS



## RFID-BASED EAS OVERHEAD 2.0

# BRINGING A NEW DIMENSION TO MERCHANDISE VISIBILITY AND LOSS PREVENTION

Apparel retailers have always appreciated and sought innovative ways to differentiate themselves. It has long been true in their selection of fashions to sell, in how they merchandise their goods and in how they design and present their stores. And now it's true in how they improve their operations by using RFID technology to integrate merchandise visibility and loss prevention into a single, synergistic solution.

Specialty apparel retailers and department stores have led the way in adopting RFID to improve inventory management and ensure the availability of merchandise for consumers. Checkpoint Systems has been a leader in this area – first in working with retailers to establish independent standards for RFID solutions, and then in developing and deploying those solutions for apparel retailers. Now, Checkpoint has raised the bar for operational excellence by introducing the next generation in integrated merchandise visibility and loss prevention: the RFID-Based EAS Overhead 2.0 Solution.

This new solution delivers a new dimension – literally – in RFID-based merchandise availability with an integrated solution that is smaller, more flexible, easier to deploy and able to deliver better performance than previous overhead solutions. Overhead 2.0 serves as an EAS system that alarms and identifies stolen merchandise, improving operations at the point-of-exit while enhancing the customer shopping experience by helping to ensure merchandise availability, giving retailers unprecedented confidence and flexibility in optimizing their stores for intelligent merchandise availability.

Overhead 2.0 supports all of the previous solution's capabilities, including Checkpoint's unique OneTag™ approach, leveraging a single RFID tag for inventory visibility and loss prevention; support for differentiated alarms based on the quantity and/or value of the merchandise leaving the store; the ability to either blend the hardware into the store's aesthetic design or fully conceal it, and support for Checkpoint's patented Wirama Radar™ for vastly superior tag-read accuracy, directionality and location.

Building on this strong foundation, Overhead 2.0 delivers apparel retailers a number of essential business benefits, including:

- Coverage of wider and higher exit doorways than the original Overhead solution, making it an even better fit for mall-based specialty retailers and department stores.
- A smaller, more modular design for improved flexibility in overhead deployment.
- Improved RFID electronics for greater read accuracy and fewer false alarms.
- Improved aesthetics for a more natural fit into store designs.
- The ability to detect greater number of tagged units, in a smaller "active zone," resulting in improved front-of-store merchandising.



## ABOUT THE SOLUTION

Overhead 2.0 builds upon the success of Checkpoint's initial, industry-first overhead solution and extends its capabilities to offer apparel retailers improved functionality, more flexible deployment, greater economic benefits and better performance than competitive solutions. Checkpoint – an industry leader in the development and deployment of standards-based RFID solutions – offers retailers a full hardware/software/services configuration to integrate merchandise visibility and loss prevention into a single, flexible design.

### ■ Hardware:

Overhead RFID reader and antenna

The hardware consists of a primary RFID reader enclosure containing Checkpoint's unique UHF RFID reader, specifically designed and optimized for retail applications. The box is mounted above the exit door, and reads RFID tags that pass through the door. In addition, two satellite antennas are installed adjacent to the reader box, and an alarm box is installed near the exit door to provide audible and visible alerts.

The reader box can be installed in two configurations:

1. Concealed configuration: Installed above ceiling drywall, making it completely invisible.
2. Visible configuration: Flush-mounted to the ceiling and typically hung just inside the exit door. Retailers can opt to paint or apply decals to the enclosure in order to match the store's decor.



### ■ Software:

On-board filtering

On-board filtering software ensures alarm integrity by effectively identifying tags that are moving through the coverage area, rather than alarming on tagged items that are located nearby. This dramatically increases read accuracy, virtually eliminating false alarms caused by unwanted (also known as "stray" or "bleed") reads. In addition, this can easily be combined with Checkpoint's Merchandise Visibility Software to provide real-time, accurate inventory visibility, enabling retailers to reduce out-of-stocks and increase sales.

### ■ RFID Tags:

Incorporated into hard tags, labels, and apparel swing tickets



Overhead 2.0 is available with hard tags, labels, and swing tickets, each certified by Checkpoint for use with the solution to ensure read accuracy and data integrity.

## **RFID-BASED EAS OVERHEAD 2.0**

# KEY PRODUCT FEATURES AND BENEFITS FOR APPAREL RETAILERS



### Supports wide and high entrances

Entrances up to 20 feet wide and 12 feet high are covered by the solution, surpassing the exit door coverage dimensions of competitive solutions, representing more than a 50 percent improvement in exit door width and 20 percent increase in height over the original design.

### Small, modular design

The main console unit is significantly smaller than the previous design, allowing the unit to be installed in tight spaces for maximum deployment flexibility.

### Improved performance

Advanced electronics design significantly improves the solution's tag-reading accuracy and performance.

### Better aesthetics

The solution's primary console is finished with black mesh, giving it a familiar appearance similar to an audio speaker and offering better aesthetic integration within the apparel retail environment.

### Enhanced front-of-store merchandising

The new Overhead solution can accommodate a large number of tagged items in the active zone closer to the exit door than ever before, improving use of the valuable front-of-store real estate while still ensuring the merchandise is protected.



#### Supports the newest, most functional RFID tags on the market

The solution is certified to operate with Checkpoint's newest and most sophisticated apparel tags: the Champion soft tag and the G5 hard tags. This allows the system to operate at extremely high performance and accuracy levels.

#### Easier to deploy

Because of the main console's smaller dimensions and modular design, Overhead 2.0 can be installed by a single technician, speeding deployment and time to value.

## **RFID-BASED EAS OVERHEAD 2.0**

# PATHWAYS TO RFID ADOPTION

Optimized for use by specialty apparel and fashion retailers using RFID for inventory management, Overhead 2.0 is engineered as a standalone exit door solution in new and remodeled stores, or with traditional EAS systems in existing stores as part of a retailer's RFID adoption strategy.

For retailers who have already implemented RFID-based Merchandise Visibility, the Overhead 2.0 solution provides the additional benefit of knowing what is leaving the store, leveraging the same tag that the retailer is already using, and cost-effectively obtaining loss prevention benefits.

### Source Tagging

Apparel retailers may start their RFID implementation by applying tags to merchandise in the store. From this point, they can work with Checkpoint to quickly move to at-source tagging, which reduces tagging costs and increases compliance of the retailer's tagging program.

Source tagging can be done with RFID-only tags, or with Checkpoint's combination AM/RFID or RF/RFID dual tags. By dual-tagging at the source, apparel retailers are prepared with loss prevention both for RFID-equipped stores as well as traditional EAS-equipped stores. As stores are remodeled and systems upgraded, the retailer can change these stores over to RFID if desired, to minimize the long-term costs of ownership and consumables.



### Merchandise Visibility

Retailers with RFID source tagging in place for loss prevention can expand from the exit door to a full Merchandise Visibility implementation, including receiving, front store/back store transitions, cycle counting and inventory counts, and point-of-sale, enabling them to obtain the benefits of reducing out-of-stocks, reducing working capital requirements, and increasing sales.

Checkpoint enables apparel retailers to obtain the dual benefits of visibility and loss prevention – efficiently and cost-effectively – with a single RFID tag, without being locked into a single provider.

## RFID-BASED EAS OVERHEAD 2.0 CHARACTERISTICS

### Overhead 2.0 Specifications

Dimensions:

Center Console (L x W x D): 559 x 432 x 117 mm  
22 x 17 x 4.6 in.

Satellite Antennas (L x W x D): 406 x 229 x 25.4 mm  
16 x 9 x 1 in.

Alarm Box (L x W x D): 184 x 102 x 50.8 mm  
7.25 x 4 x 2 in.

Exit coverage:

Width: up to 6.1 m (20 ft.)

Height: 3.7 m (12 ft.)

Input Power: 100 to 240 FAC, 50 to 60 Hz, 1.5 A max

Consumption: 30 W max

Certifications: , , FCC, EU

Regulatory Compliance: , IC,  (ETSI)

RFID Protocol: EPC Class 1 Gen2 (ISO18000-06C)



Checkpoint Systems is a global leader in merchandise availability solutions for the retail industry, encompassing loss prevention and merchandise visibility. Checkpoint provides end-to-end solutions enabling retailers to achieve accurate real-time inventory, accelerate the replenishment cycle, prevent out-of-stocks and reduce theft, thus improving merchandise availability and the shopper's experience.

Checkpoint's solutions are built upon 45 years of radio frequency technology expertise, innovative high-theft and loss-prevention solutions, market-leading RFID hardware, software, and comprehensive labeling capabilities to brand, secure and track merchandise from source to shelf.

**SHRINK MANAGEMENT SOLUTIONS**



**MERCHANDISE VISIBILITY SOLUTIONS**



**APPAREL LABELING SOLUTIONS**

