

## Best Practice: Using CCTV To Monitor Smart Card Access



**Category:** Access Control

**Location First**

**Observed:** Freeport Container Port,  
Freeport, Bahamas

**Date First**

**Observed:** July, 2005

**Description:** The port installed a CCTV monitor with vandal resistant dome to monitor the identity of persons using a smart card to access their facility offices.

**Discussion:** Smart (electronic) access cards are susceptible to being stolen by or loaned to unauthorized persons. Systems that don't require that a guard verify the photo of the person using the electronic card, or a personal identification code that must be entered into a keypad along with the smart card (as in an ATM) are susceptible to abuse. The port addressed this issue by placing a CCTV camera above the smart card pad that permits access to their building. Every person who uses their smart card to enter the building has their picture taken and stored in the CCTV archive. Investigations involving unauthorized access or abuse of the access card system can be enhanced by using the CCTV recording to identify the person who used the smart card.

**Potential Down-side:** This CCTV camera was mounted directly above the smart card, within reach of a person standing in front of the card reader. It is easy for a person to notice the CCTV camera, and to hold something in front of their face, or over the camera, as they approached the smart card pad. To be more secure, the camera could be mounted out of reach of a person, or the spray range of a can of spray paint that can be used to block the camera's view. Bank ATM machines and other applications hide their cameras behind a mirror or in another covert or inaccessible location so a person won't know how to block the lens. In this case, persons with access to the smart card reader had already been identified and authorized to be in the facility by security guards.

**Conclusion:** Using a CCTV camera to monitor and store images of persons using an electronic access pad can be very useful for investigating unauthorized entries into a facility. It is important to consider the location the CCTV camera is placed to minimize the ability of unauthorized persons to defeat it.

**Cost:** Single Camera: \$100. USD Installation: \$200 USD and up, depending on complexity of installation and distance to CCTV monitor.