

SIEMENS PERSPECTIVE

Dependable detection for physical ATM attacks

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Physical attacks on ATMs are something that no ATM operator can afford to ignore, yet there is a limit to what can be done in terms of making machines stronger and installing them more securely. Another approach to ATM protection is clearly needed, and potentially the most effective option is attack detection.

The best detection systems provide early intervention, forestalling an attack and helping to apprehend criminals before the ATM suffers serious damage – and long before access can be gained to the cash it contains.

But what is the best detection system? Shock detectors have their uses, but their effectiveness is limited to brute force attacks. Their responsiveness to other types of attack, including drilling and cutting, is questionable at best. Furthermore, they have a poor track record of triggering false alarms.

A far better solution is provided by seismic detectors. Those developed by Security Products from Siemens, for example, use patented technology to provide a reliable response to even the most subtle of structure-borne vibrations. They respond to vibrations across a specific frequency range, and incorporate advanced digital signal processing (DSP) techniques that make possible multi-level sensitivity adjustment.

This means that the detectors will ignore vibrations caused by nearby road traffic or trains, but respond rapidly to the vibrations caused not only by brute force attacks, but also by drilling, cutting or even the use of a thermal lance.

Furthermore, programmability allows it to be adjusted to suit individual user and site requirements. Preprogrammed profiles designed to respond effectively to common threats under typical operating conditions can be modified to eliminate the effect of environmental noise, and new threat

profiles can be programmed.

The best results are, of course, obtained when the type of detector is optimally matched to the specific application. To help users achieve this, Siemens provides expert consulting and development services. These experts provide recommendations for detector selection and optimum installation, and for fine-tuning the operating characteristics so that they provide the best possible detection performance combined with the highest possible immunity to false alarms.

Siemens engineers also carry out on-site detector testing, as well as simulated attacks to prove detector sensitivity and reliability. Additionally, they can develop and manufacture custom ATM protection kits for specific applications and supply them fully wired, ready for installation.

While this article has concentrated specifically on the use of seismic detectors to protect ATMs against physical attacks, it is worth noting that these versatile detectors have many other applications in the banking sector. For example, they are equally well suited to protecting vaults, night deposit facilities and strong rooms.

Security Products from Siemens offers a comprehensive range of access control, intrusion protection and video surveillance products for the banking industry. ATM protection based on seismic detectors can therefore be incorporated into fully integrated banking security solutions that cover branches and central offices on multiple sites.

Seismic detection is an invaluable weapon in the war against ATM crime. Correctly implemented, it provides fast and reliable warning of physical attacks of all types, and thereby helps ATM operators to protect their investment and to maximise the uptime of their machines. ■

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