

# Understanding the Risks of Low-Frequency Cards and Readers

Low-frequency access control systems are incredibly vulnerable. These outdated systems, which operate at 125 kHz, pose significant security risks, primarily due to their susceptibility to cloning. Malicious actors can easily exploit these weaknesses, leading to unauthorized access and potential breaches.

## **Easy Cloning**

Low-frequency cards are notoriously easy to clone. Using inexpensive and readily available tools, hackers can duplicate these cards with minimal effort. This process involves capturing the card's signal and creating a replica that can be used to gain unauthorized access to secure areas. The ease of cloning low-frequency cards makes them a significant liability for any organization relying on them for security.

# **Limited Security Features**

Low-frequency systems often lack essential security features such as encryption and mutual authentication. Without these protections, the data transmitted between the card and reader is vulnerable to interception and manipulation. This lack of robust security measures exposes organizations to various types of attacks, including eavesdropping and replay attacks, where intercepted data is reused to gain access.

## **Compliance Issues**

Many industries have stringent security standards that lowfrequency systems may not meet. As regulatory requirements evolve, organizations using these outdated systems risk non-compliance, which can lead to legal and financial repercussions. Ensuring that your access control systems meet current security standards is crucial for maintaining regulatory compliance and protecting your organization from potential liabilities.





# The Importance of Migrating to High-Frequency Solutions

# **Enhanced Security**

High-frequency cards and readers, operating at 13.56 MHz, employ advanced encryption and mutual authentication methods. These features make it significantly more challenging for attackers to clone or tamper with the cards, providing a robust security foundation for your access control system. The enhanced security of high-frequency solutions helps safeguard sensitive areas and information, reducing the risk of unauthorized access.

# **Future-Proof Technology**

High-frequency solutions are designed to integrate with the latest security protocols and technologies. They support modern standards and can easily adapt to emerging technologies such as biometric authentication and mobile credentials. This future-proof approach ensures that your access control system remains effective and up-to-date, providing long-term security and operational efficiency.

# **Improved Operational Efficiency**

High-frequency readers offer faster read times and reduced latency, resulting in a smoother and more efficient user experience. This is particularly beneficial in high-traffic areas where quick and reliable access is crucial. By upgrading to high-frequency solutions, organizations can enhance productivity and user satisfaction, reducing delays and streamlining operations.

# The Benefits of Upgrading

### **Stronger Authentication**

High-frequency systems support multi-factor authentication, adding an extra layer of security by requiring multiple credentials for access. This reduces the likelihood of unauthorized access, even if a card is cloned or stolen.

#### **Remote Management**

High-frequency readers often support remote management capabilities, allowing administrators to update and configure systems without needing to be on-site. This flexibility saves time and resources, making it easier to maintain and secure the access control system.

#### **Longer Transmission Distances**

High-frequency solutions can transmit data over longer distances than low-frequency systems, reducing the need for additional infrastructure such as door controllers. This capability makes high-frequency systems more scalable and cost-effective.



# **Taking the Next Steps**

The vulnerabilities associated with low-frequency access control systems make upgrading to highfrequency solutions a critical priority. High-frequency cards and readers offer enhanced security, improved operational efficiency, and a future-proof foundation for your access control needs.

Transitioning to high-frequency solutions not only protects your organization from potential breaches but also ensures compliance with evolving security standards.

# Don't wait for a security incident to highlight the weaknesses of your current system.

Proactively upgrade to high-frequency access control solutions to safeguard your premises and assets. Contact us today to learn more about the importance of migrating to high-frequency cards and readers and how to implement this critical upgrade in your organization.

## **READY TO TAKE ACTION?**

TALK WITH OUR TEAM OF EXPERTS TODAY



+1 888.809.8880



sales@identiv.com



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