

Freevision Gateway Reader

Product Datasheet



Product Overview

The Freevision Gateway Reader is a next-generation access control reader designed to modernize legacy 125kHz Prox card systems — enabling smooth migration not only to smartphone-based access via NFC, but also to the most secure 125kHz 3DES-Encrypted Prox cards, all through simple firmware upgrades.

Reframing Industry Assumptions with Practical Insight

The Reality: Legacy Still Dominates

Today, more than 70% of access control systems still rely on 125kHz technology, with the majority using traditional Wiegand interfaces to connect readers and controllers.

Most organizations are not aiming to overhaul their infrastructure —they simply want stronger security and mobile access, without unnecessary complexity or disruption. Freevision's vision is to help them do just that: preserve what works, while embracing what's next.

The Common Misconception: Payments = Access

Recently, some industry-leading brands have begun promoting 13.56MHz smart-cards and mobile wallets (especially app-free ones) as the future of access control.

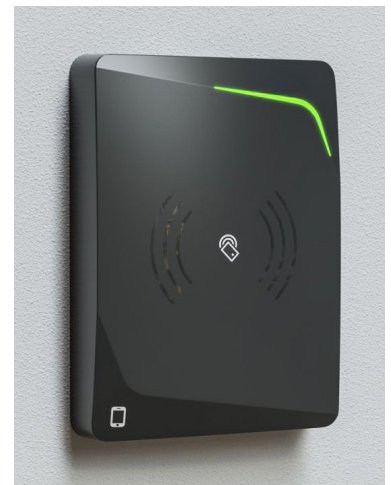
While this direction offers some genuine benefits —particularly in high-security or cross-functional environments — it's important to remember that these technologies were originally engineered for payments, not identity or physical access.

To support secure transactions, 13.56MHz smartcard systems typically require complex and often prohibitively expensive readers and cards, controller upgrades, and ongoing licensing for wallet integration. For many access control use cases, this level of complexity isn't necessary —and often results in higher costs and operational constraints.

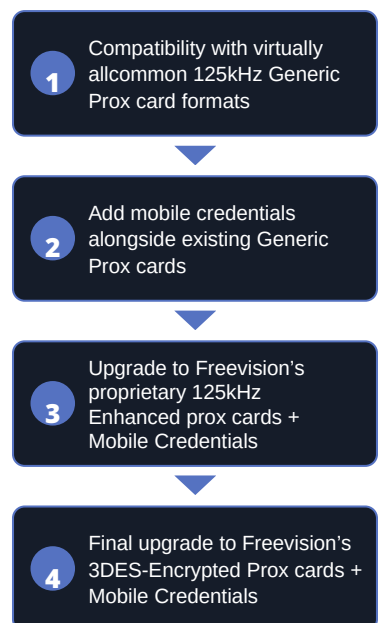
The Freevision Path: Smarter, Simpler

At Freevision, we believe access control deserves its own purpose-built path. One that's simple, secure, mbile-ready, and tailored to the needs of identity-based systems, not payment platforms.

That's why we developed the Gateway Reader: a smarter upgrade approach that enhances existing 125kHz systems step by step —enabling stronger security and mobile access without requiring infrastructure replacement or surrendering control to third-party wallet ecosystems.



Upgrade Roadmap



Key Benefits

- **125kHz Prox Compatibility** — Supports virtually all common 125kHz Generic Prox card formats, including Freevision's proprietary 125kHz Enhanced Prox and our upcoming 125kHz 3DES-Encrypted Prox—all enabled via simple firmware upgrade.
- **Mobile Access via NFC** - Open doors by tapping your own company-branded app, powered by Freevision's customizable platform — simple, secure, and wallet-free.
- **Easy Migration** - Transfer Prox ID to phone app via NFC after reading a physical card
- **QR-based Virtual ID Delivery** - Send visitor IDs remotely via QR code scan
- **Flexible Interface Options** - It supports two communication interfaces: Wiegand and RS-485 (OSDP), and can be adapted to both traditional Wiegand access control controllers and the new OSDP controllers.
- **Install Once. Evolve Endlessly** - From 125kHz Generic Prox to 125kHz 3DES-Encrypted Prox, the Gateway Reader supports a step-by-step upgrade path, with mobile credentials enabled at every stage - delivering a future-ready access platform through simple firmware updates.

Technical Specifications

Feature	Description
Supported Cards	Industry standard 125kHz Prox (no 13.56MHz smartcards)
Mobile Access	Via smartphone NFC; QR code for guest provisioning
NFC Role	Gateway Reader acts as passive tag (not reader)
Prox-to-Phone Transfer	Yes, via NFC channel after card read
Read Distance	3– 8 cm (typical for 125kHz cards)
Output Interfaces	Wiegand, RS-485 (OSDP)
Power Supply	9 – 16V DC, typical 12V
Current Draw	Max 140mA (during reading), standby 93mA(12V)
Installation	Surface mount, single gang box compatible
Operating Temp	–40°C to +65°C
Protection	IP54 (indoor/outdoor light-duty use)
Dimensions	77mm × 115mm × 16mm
Color	Black faceplat
Weight	187g
Cable length	40cm

FCC Caution:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation..

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

FCC ID: 2BQTA-GW125NT