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Solution Guide

NexusIP™

Complete Guide to Choosing a Remote Access Control Safe Lock

Sourcing a safe lock solution for multiple locations presents unique challenges. While value is always a factor, organizations of all sizes are impacted by secure connectivity and the cost of ongoing maintenance.

Regardless of where you are in the process, our simple framework helps you define requirements and assess critical factors like compatibility, security, and maintenance costs, making it easier for you to select the right product for your needs. In this guide, we'll give you the tools you need to evaluate alternatives so you can make an informed decision about your access control



What is a remote access control safe lock?

A remote access control safe lock solution gives you more control over locks in multiple locations, including centralized, remote access.

With remote access safe locks, you can streamline management and operation from one central location, including the ability to remotely:

- Monitor live lock status
- Manage user codes
- Program lock settings
- Enable/disable locks
- Establish different levels of access
- Create available access windows
- Receive exception reporting
- Perform audits

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1) Define remote access requirements.

To choose the right access solution for multiple safes, start by defining your needs.

Lay Groundwork

- How many safes and locations do you need to secure?
- Do you plan to scale up to more locations over time?
- Do you need a centralized locking system, or prefer each lock to stand alone?
- Do you need remote access and management, or prefer to handle access control at each lock?
- How many people will access each safe? Do those users require different levels of access, such as owner, admin, or specialized functions?
- How would you prefer to receive reporting about access issues?

Survey Locations

- Will you be upgrading existing electronic safe locks, replacing mechanical locks with new electronic units, or adding incremental units for new or expanded locations?
- Is the area already part of an existing IP network?
- Is there Wi-Fi? What security protocols are in place for that network?
- Do you have capacity/capability to perform complex retrofit tasks like drilling and wiring?

Establish Budget Parameters

- Does the scale of your network support adding a separate hub component to network the locks?
- How much maintenance budget can you build in to support the system?
- Is extensive installation/retrofit possible within the budget?
- Will the solutions you consider come with any offset costs? For example, reduced downtime, reduced risk, or longer product life may serve to balance the cost of the initial investment.



2) Set a comprehensive budget.

Franchises and organizations of all sizes need to find scalable, affordable remote access control solutions. But how do you set a budget for a cost-effective remote access control safe lock? Beyond the base cost of each unit, several other factors contribute to the overall cost, both initially and in terms of ongoing maintenance. As you look for the best solution, be sure you've set a budget that includes the full scope of costs.

Cost of peripheral components

- External network hubs.
- Wiring.
- Software.
- Accessories.

Cost of installation

- If you purchase a networked safe lock that doesn't fit your current lock's footprint, you'll need to factor in the costs of drilling when you retrofit.
- The more external components you have, the greater the chance you'll need specialized tools or more time-consuming installation procedures.
- Certain types of wired-in network connections may require additional expertise beyond what your usual internal security team or contract installer can provide.

Cost of frequent maintenance

- Locks and hubs that run on battery power require significant time to maintain, as someone equipped to change the batteries must physically go to each location and perform the task.
- Remember employee time cost.
- Factor in wear-and-tear on company vehicles.
- Build in the risk of increased risk of robbery while the employee is at the unit.
- Frequent maintenance means frequent downtime—and that lost revenue adds up over time.



2) Set a comprehensive budget.

Cost of routine maintenance

- Consider the track record of the lock itself—is it durable, reliable, and rugged enough to withstand daily wear-and-tear?
- Add in the cost of maintenance for any external components as well.
- Again, employee time cost becomes critical. Instead of performing

Cost to scale

- Some networked safe lock products require additional hubs to scale up.
- Looking at the future, if you anticipate growth, be sure to understand what that might mean for your network.
- Does the product limit your ability to control all of your locks through one interface as your organization grows?



3) Establish compatibility.

IP lock installation requirements vary in complexity. In addition to drilling and wiring, some locks require an additional hub component to manage network connectivity and may also require frequent battery changes for operation. Before you purchase new locks, be sure to consider:

Power Options

- Does the lock offer external power, or run from battery power?
- How easy are the batteries to change?
- What back up options exist to prevent the system from going down when batteries run down or power goes out?

Installation Requirements

- Does the lock require drilling to install or retrofit?
- If you're replacing existing locks, will the new locks fit into the old footprint, or will a more complicated retrofit process be required?
- If the system requires peripheral components, how and where will they be installed?
- What additional tools are required to install or retrofit the lock?

Not all IP locks are difficult to install.

For example, S&G's NexusIP lock simplifies installation by using a standard footprint and routing through existing wiring and networks. Watch a simple networked safe lock installation [here](#).



4) Evaluate connection security.

When you use networked safe locks, your security is only as strong as the network supporting your solution. Lock manufacturers support connectivity in two main ways:

Extra Components

In many cases, IP locks route through an external hub component. When considering these models, think about:

- How much the hub will add to the cost of your network.
- How the hub will be installed and powered.
- What backup programs are in place to support the locks if the hub goes down or loses power.
- The security standards of the hub design—particularly if those protocols satisfy your organization's requirements.

Wi-Fi Networking

The latest IP lock breakthroughs include Wi-Fi networking. Using a local Wi-Fi connection, these locks don't require purchasing peripheral components, are simpler to install, and easier to maintain.

But are Wi-Fi safe locks secure?

If you're considering a networked safe lock, here's how to ensure optimum security.

Install firewalls

- Most businesses and organizations already have firewalls in place.
- Check with your IT team to be sure that appropriate firewalls are operational and updated.

Use secure VPN

- A Virtual Private Network (VPN) not only protects your safe access control, but also ensures appropriate data security.
- Cost and coverage may vary, but an investment in VPN makes sense for most organizations.



4) Evaluate connection security. [continued]

Cloak your Wi-Fi safe locks

- For added protection, your IT team may choose to cloak your locks even within the secured network.
- Cloaked locks ensure that only appropriate personnel have access at any time.

Have a backup plan

- Whether you choose a hub-controlled or Wi-Fi safe lock, be sure to have a backup plan in place in case the network or power goes down.
- Most Wi-Fi safe locks are still accessible at the lock even if the network is unavailable, with wireless synchronization after the network is restored.



5) Weigh ongoing maintenance costs.

Part of determining the overall cost of a networked safe lock solution comes down to maintenance. Planning ahead for maintenance ensures that your system functions smoothly, while also staying within your budget. Maintenance costs for networked safe locks generally involve components, power supply, and downtime.

Components

In many cases, IP locks route through an external hub component.

- The more components associated with your system, the more time it takes to keep them in good working order.
- Be sure you factor in peripheral components like network hubs in addition to the locks themselves.

Power Supply

- Relying on battery power means that many IP locks need frequent maintenance time to travel to the lock and change the batteries.
- Battery maintenance should be performed on a regular basis to prevent loss of power.
- Locks that rely on external power with batteries for backup take less time to service.

Downtime

- Each time a lock or component requires service, your network experiences downtime.
- To reduce the costs associated with planned and unplanned downtime, consider lock systems that use external power.
- Locks with an external power source deliver dependable, ongoing operation, without frequent service or downtime.

Look for ways to reduce maintenance and downtime.

When you're running a business, you can't afford for your security solutions to be offline. Remote access safe locks are no exception. To protect your assets and manage complex operations, reducing maintenance requirements and downtime are critical. Here are a few tips for keeping your remote access safe locks online and running smoothly.



5) Weigh ongoing maintenance costs. [continued]

Streamline your network

- The more external components your system requires, the more opportunities for breakdowns and requirements for maintenance.
- To minimize downtime, look for a remote access safe lock solution with minimal peripheral components.

Build from existing connectivity

- Tapping into existing network connectivity and hardwiring reduces the amount of time you'll spend on installation and maintenance.
- Using an existing secure Wi-Fi network means that the routine maintenance you already perform on the network also extends to your remote access safe locks.

Consider your power source

- Factor in the time cost of changing batteries regularly.
- In many cases, battery powered remote access safe locks and peripheral components use a significant amount of energy, making battery changes frequent.
- Each battery change requires a technician to access the component at each site—and those resource costs add up fast regardless of the size of your network.

Choose durable hardware

- All security hardware requires some maintenance.
- Choose a product that's known for longevity and performance.
- While you'll never completely eliminate downtime, choosing a high-quality remote access safe lock helps lower maintenance costs over time.
- Using an existing secure Wi-Fi network means that the routine maintenance you already perform on the network also extends to your remote access safe locks.



6) Consider a unique Digital Platform solution.

Organizations of all sizes often wonder how to reduce complexity in networked access control. When the engineers at S&G worked on that problem, they identified multiple opportunities for streamlining without sacrificing security. In this example, we'll consider S&G's NexusIP lock, but, as with the balance of the framework, these criteria could be applied to other products as well.

Leverage Existing Technology

Hub components are often sold as being necessary for security. Our engineers found that modern security standards fully mitigated the network risks of the past. That's why NexusIP™ simplifies networked safe locks—all you need is NexusIP and your existing secure Wi-Fi.

Streamline Management and Operation

By using your existing Wi-Fi network, NexusIP allows users to easily program networked locks via software interface, so you can establish multiple levels of control, program schedules, and user access, as well as operate the lock and review audit trails and real-time updates from one central, secure point.

Simplify Installation

Built to S&G's Magic Module specifications, NexusIP fits the standard footprint of most safe locks. And because you won't need to wire into ethernet or a peripheral hub, no drilling or additional tools are required.

Make It Scalable

As a scalable solution, NexusIP works for organizations of all sizes. While it presents a dramatic value for large-scale organizations, NexusIP is also ideal for smaller businesses with fewer units—because removing the hub requirement makes a networked locking system more affordable. Regardless of business size, NexusIP™ easily scales as your company grows. Manage up to 100 users and check up to 1,000 audit events at the lock, while viewing and storing unlimited events remotely via our software interface.

Keep It Updated

S&G's Digital Platform integrates the latest technology breakthroughs with the highest standards for security. Designed for future-proof flexibility and advanced data management, our Digital Platform products—including NexusIP™—help your organization and security evolve to meet changing environments.



7) Recap and evaluate.

No matter which networked safe lock you choose, understanding the relevant security, power supply, and maintenance specifications give you confidence that you found the right solution. As you do your research, you might find that these considerations become second nature, but you may find it helpful to keep a copy of the information that supports your choice.



8) Checklist and resources.

Checklist for Choosing a Networked Safe Lock

Scope

- How many safes and locations do you need to secure?
- Do you plan to scale up to more locations over time?
- Do you need a centralized locking system, or prefer each lock to stand alone?
- Do you need remote access and management, or prefer to handle access control at each lock?
- How many people will access each safe? Do those users require different levels of access, such as owner, admin, or specialized functions?
- How would you prefer to receive reporting about access issues?

Connectivity and Security

- Will you be upgrading existing electronic safe locks, replacing mechanical locks with new electronic units, or adding incremental units for new or expanded locations?
- Is the area already part of an existing IP network?
- Is the lock compatible with your company's security protocols?
- Is there Wi-Fi? What security protocols are in place for that network?
- If using Wi-Fi, does your network have installed and updated firewalls, VPN, and cloaking?
- Does the lock include updated encryption?

Hardware and Power

- Is the lock known for durability?
- Is the lock made with good quality materials?
- What sort of warranty comes with the lock and any required components?
- Does the lock offer external power, or run from battery power?
- How easy are the batteries to change?
- What back up options exist to prevent the system from going down when batteries run down or power goes out?



8) Checklist and resources. [continued]

Checklist for Choosing a Networked Safe Lock

Installation and Maintenance

- Do you have capacity/capability to perform complex retrofit tasks like drilling and wiring?
- Does the scale of your network support adding a separate hub component to network the locks?
- Does the lock require drilling to install or retrofit?
- If you're replacing existing locks, will the new locks fit into the old footprint, or will a more complicated retrofit process be required?
- If the system requires peripheral components, how and where will they be installed?
- What additional tools are required to install or retrofit the lock?
- How much maintenance budget can you build in to support the system?
- Is extensive installation/retrofit possible within the budget?
- Will the solutions you consider come with any offset costs? For example, reduced downtime, reduced risk, or longer product life may serve to balance the cost of the initial investment.

Budget

- Lock
- External network hub(s)
- Wiring
- Software
- Accessories
- Installation
- Maintenance
- Employee time
- Wear and tear on company vehicles
- Cost of downtime



8) Checklist and resources. [continued]

Checklist for Choosing a Networked Safe Lock

Resources

NexusIP™ product page:

<https://sargentandgreenleaf.com/product/nexusip/>

About Sargent and Greenleaf

For more than 160 years, S&G has made governments, banks, and businesses more secure. Now a global company headquartered in the U.S., we continue to deliver leading-edge innovation. Our award-winning solutions set industry standards and have earned the trust of customers worldwide. Sargent and Greenleaf balances technological advances with proven security in seamlessly integrated designs.



High Security Locks & Locking Systems

Making the world more secure today and into the future.

