







Introduction

The self-storage industry is in the midst of a technological revolution. Current owners and operators along, with industry novices and prospective investors, are taking notice. Technology is not only attracting a new crop of self-storage consumers, but also streamlining operations to create a more cost-effective business model.



The "why" is clear.

The challenge now isn't about understanding the advantage of technological updates, it's determining whether the investment will yield worthwhile returns. Can you upgrade an existing facility to future proof an existing facility? Once the initial costs are sunk, what will the maintenance fees look like? What's possible at a budget-friendly price point if you can't afford to do it all?



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2023 U.S Consumer Self-Storage Market by Generation *

Top 5 Features Willing to Pay Extra For From Most Important to Least Important

	Gen-Z	Gen-Z Millennials		Boomers
MOST	Unit has its own security alarm	Pest control	Pest control	Pest control
	Anytime access to unit	Anytime access to unit	Anytime access to unit	Humidity of unit is controlled
	Pest control	Electronic gates at entrance	Electronic gates at entrance	Electronic gates at entrance
LEAST	Close to place of residence	Humidity of unit is controlled	Unit has its own security alarm	Fire sprinklers in unit
	Electronic gates at entrance	Unit is air conditioned	Humidity of unit is controlled	Unit is air conditioned

*Source: 2023 Self Storage Demand Study: Self Storage Association

Today's Self-Storage Industry

Post-COVID, the self-storage industry is more competitive than ever, with unprecedented growth. Since 2017, the industry's compound annual growth rate (CAGR) has been projected to be between 4.6% and 4.9%, according to Market Research Update. From 2019 to 2023, the top four REIT's (Real Estate Investment Trusts) increased their square footage by approximately 123 million square feet, with a 4% growth in owned properties and a 13% increase in third-party managed properties.



This surge has brought in many new owners and operators who needed to quickly get up to speed on access control options. Additionally, new tenants have higher expectations for their self-storage facilities than before. A recent study by the Self-Storage Association (SSA), involving over 11,000 households and businesses, highlighted this shift. The results showed that 78% of respondents considered 24/7 access important, with 37% willing to pay more for it. In addition, 42% placed high importance on electronic locks, and 21% would pay extra for facilities equipped with them.* This data underscores the industry's rapid move toward enhanced experiences through advanced and smart technology.



Tenants consider 24/7 access important



Tenants willing to pay extra for 24/7 access



Tenants place high importance on electronic locks



Tenants will pay extra for facilities with electronic locks

Clearly, door and unit access control are becoming differentiating factor for tenants. Until recently, however, smart technology had not moved from the perimeter to individual units. Operators had the ability to provide a high degree of automation and smart technology at property exteriors. But once inside, self-storage owners' security options were limited to the antiquated locks and latches that have dominated the industry for decades.

Today's tenants are looking for more than just a storage facility. They demand greater access and convenience that can only be obtained through increasingly connected smart technology from gate to unit and the convenience of automation along the way. With self-storage facilities needing to differentiate themselves in an increasingly crowded market, technology might be the key to attracting and retaining tenants, keeping vacancy rates low and rental rates increasing.

While operators may find it difficult to calculate the cost of not adopting smart technology, the benefits of enhancing the tenant experience become clear when evaluated from multiple perspectives.



Get (Unit) Smart



To increase automation and provide tenants with the ability to rent and assign units remotely, facilities need smart, electronic locks and latches, like the PTI ProEdge. By combining next-generation Bluetooth with a wire mesh network, owners and operators can offer an enhanced tenant experience without sacrificing access control and security. In fact, it will increase both.

Operators need to consider several cost factors, including the build status of their facility, installation and maintenance, additional hardware, in-unit monitoring options, benefits to tenants, and potential insurance savings. For instance, when choosing a PTI unit security solution, operators can opt for traditional wired or wireless door alarms or upgrade to a smart solution. Based on budget, location, competition, clientele, and facility status, one option will likely stand out as the best choice. These considerations apply to both new and existing construction when migrating to smart door technology.









New Build vs Retrofit

Determining the true cost of a door security solution depends on whether the facility is new construction or an existing structure. While new builds offer more flexibility and options, both scenarios require careful consideration of maintenance, scalability, automation, and cost.

New Construction



Owners building new facilities have the advantage of working with contractors and installers to design the layout and infrastructure for optimal revenue and security. Running wires during construction is cost-effective, allowing for more wired devices and alarms. However, this includes the cost of wiring, the installer's time, and the hardware itself. If the facility is operational, there's the additional cost of disruption to tenants and operations.

Existing Facilities

In existing facilities, running new wires can be prohibitively expensive. Wireless solutions, like wireless door alarms, are typically preferred as they are easier to install and require minimal disruption to operations.

VS



Whether choosing wired or wireless solutions, each unit will require a latch and lock to secure each unit, which adds to the installation costs for new construction. These expenses should be considered when calculating the total cost of door security.

Smarter & Simpler Door Security

Today's smart latches, such as the PTI ProEdge, offer an all-inclusive solution for both new and existing facilities. These wireless, mesh network-based latches are as easy to install as traditional wireless alarms. Smart latches provide immediate notifications to tenants and owners when breached, unlike padlocks or traditional latches that cannot alert. This single smart solution replaces the need for separate door alarms, padlocks, and latches, reducing overall costs while enhancing security.



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Key-less Access for Tenants



Tenant Mobile App





Next-Generation Bluetooth

Comparing Hardware Requirements for Door Security Solutions

Whether operators are installing a security solution at a new or existing facility, all systems require additional hardware components. These have additional, upfront costs and are essential components for transferring information from the door security solution to the access control system, enabling operators to monitor tenant activity and detect potential tampering. The type and quantity of hardware needed will depend on the number of units and the facility layout.

The number of additional hardware components and their associated costs may concern some operators, but it is important to note that maintenance for all these unit security solutions is relatively low. Maintenance for both smart latches and wireless door alarms mainly consist of changing a battery once every several years. These batteries are inexpensive, and operators can typically easily purchase and change the batteries themselves. Wired door alarms are highly reliable but require a specialist to evaluate any issues, and if the solution requires rewiring, additional costs will be incurred.

Smart Door Security

The ProEdge Smart Latch, the latest technology innovation from PTI Security Systems, is an advanced unit security option. ProEdge replaces both the door latch and lock, helping simplify unit security for both operators and tenants with its next-generation Bluetooth technology that provides key-less access, over-locking functionality, and real-time tampering alerts. Functionality is controlled through connection with PTI's StorID mobile app, providing tenants unit access with just a swipe on their smartphone.

Operators who choose a smart latch unit security solution will need to purchase the same two additional hardware components for both new and existing builds – gateways and repeaters. Signals from the smart latch are passed to the access control system via a gateway, and repeaters act as nodes to assist in the transfer of this data. However, because a smart latch is an all-inone door solution, operators choosing a smart solution do not need to factor in a door latch and lock at an additional cost.



Traditional Door Security

For operators looking for a more inexpensive individual unit security solution, PTI Security System offers two door alarm options: wired and wireless. Both options are highly reliable and cost-effective solutions with the main differences being installation and scalability. Whether an operator chooses wired or wireless, door alarms ensure that unit access is monitored

Wired Door Alarms

Wired door alarms are typically only an option for new builds since the solution is wired throughout the entire facility. As a result, operators should factor in the cost of labor and wiring in addition to the required front-end hardware – channel multiplexers (muxes). The channel muxes receive signals from the door alarm and pass this data to the access control system via direct wiring. Muxes have a limited number of channels they can support, so the type of mux the operator needs to purchase depends on the number of units in the facility and will vary in cost. Since wired door alarms are an additional security measure and not an all-in-one door solution, operators will still have to purchase both a door latch and lock.



Wireless Door Alarms

In contrast, wireless door alarms are an option for both new and existing builds but require several additional hardware components – a head-end, a network coordinator and repeaters. The network coordinator initially receives signals from the alarm and passes this data down to the head-end with the aid of repeaters. The head-end then interprets this data and communicates it to the access control system. Like wired alarms, wireless door alarms are an additional security measure, so operators still need to purchase door latches and locks as well.

Incremental Costs

When choosing between unit security solutions, operators must consider the incremental cost of upgrading to a smart solution, not just the quoted market retail price. The incremental cost includes all expenses incurred by adding a new solution over a baseline wired or wireless system, assuming a new complete setup is needed.

To calculate the incremental cost of upgrading to smart technology, operators should know the market retail price of each solution and the cost of all additional hardware. Using PTI unit security options as an example, the table below breaks down the costs for PTI's ProEdge Smart Latch, wired door alarms, and wireless door alarms for an average 500-unit facility.

Estimated List Prices of Smart and Traditional Door Security Solutions

500 Wired Door Alarms - New Construction								
Components	Quantity	Co	st		Total			
96 Channel Mux	5	\$	2,390.06	\$	11,950.30			
32 Channel Mux	1	\$	1,307.53	\$	1,307.53			
Quick Switch Roll Up Door Contact (Alarms)	500	\$	18.43	\$	9,215.00			
18 AWG four conductor shield sable (Wiring)	*13,068	\$	3.21/ft	\$	41,948.00			
		Total Cost		\$	64,420.83			

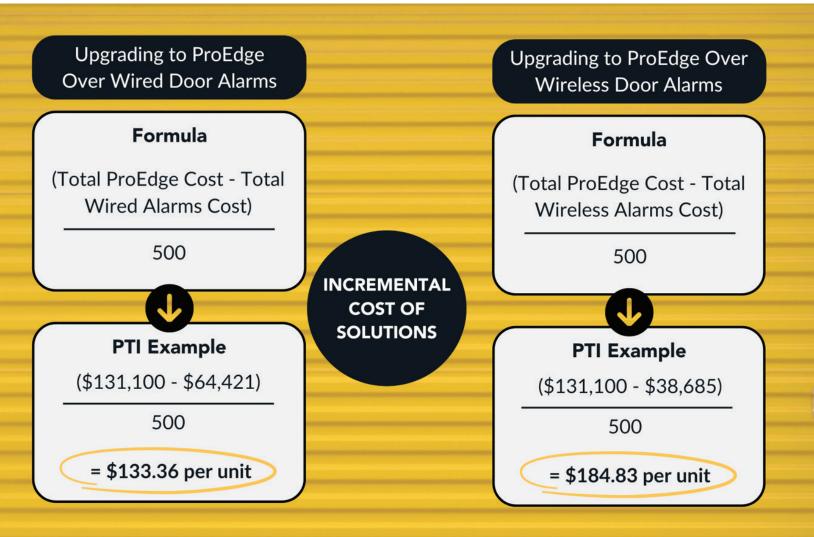
500 Wireless Door Alarms - New or Existing Construction						
Components	Quantity	C	ost		Total	
Headend	1	\$	1,534.56	\$	1,534.56	
Repeater	3	\$	601.97	\$	1,805.91	
Wireless Transmitter (Alarms)	500	\$	70.69	\$	35,345.00	
		Total Cost		\$	38,685.47	

500 ProEdge Smart Latches - New or Existing Construction						
Components	Quantity	Cost			Total	
ProEdge Gateway	3	\$	500	\$	1,500	
Repeater	2	\$	300	\$	600	
Individual Lock	500	\$	250	\$	125,000	
Yearly Subscription	500	\$	8	\$	4,000	
		Total Cost		\$	131,100	

Note the figure above assumes the average square footage of a 500-unit facility to be 1 acre or 43,560 square feet. Of that total square footage, only 30% contains tenant units, so the required amount of wiring needed is estimated to be 13,068 square feet.

Calculating the Per Unit Incremental Costs

To calculate the incremental cost of upgrading to a smart tech unit security solution, the operator will take the total cost of the smart solution, subtract the cost of an alternate solution, and divide by 500 (the number of units.) Operators should do this for each solution option. Using PTI solutions as an example, the incremental per unit costs are shown below.



Insurance

Traditional self-storage facilities pay significant amounts for property insurance. Enhancing security can theoretically lower insurance premiums, boosting profit margins and providing a competitive edge by attracting new customers with a state-of-the-art, secure facility. Adding in-unit motion detection systems, such as the StorageDefender monitor, further enhances security and notifications.

While insurance companies might not immediately lower premiums, the long-term benefits of adopting automated, smarter security solutions can reduce overall ownership costs. Evaluating these upgrades is worthwhile for both improving security and potentially reducing expenses.

Cost vs Benefit



Operators should assess whether the benefits of smart unit security solutions justify their incremental cost. These solutions enhance tenant experience with seamless access, allowing operators to potentially charge a premium for these upgraded units.

Smart systems integrate smoothly with access control, boosting automation capabilities and providing valuable data such as peak visit times, durations, and device status. This data enhances operational efficiency, leading to greater profitability.

Smart solutions also eliminate the need for laborintensive tasks like manual lock checks and overlocking doors when tenants are delinquent. Once payment is received, operators can promptly remove the lock electronically if using a smart lock or latch. However, not all facilities may find the added expense worthwhile. Ultimately, operators need to balance the potential benefits with the cost of upgrading security systems.









Navigating the Smart Tech Shift

With the self-storage industry becoming increasingly competitive post-COVID, operators face the dual challenge of distinguishing their facilities while maintaining profitability. The 2023 Self Storage Demand Study highlights evolving tenant preferences, underscoring the need to integrate technology into storage experiences for tenants at all ages and stages. Adding unit security is no longer optional but essential, prompting operators to evaluate which solution offers the best return on investment (ROI).

The decision to upgrade to smart technology, such as the PTI ProEdge Smart Latch, hinges on a detailed assessment of initial and incremental costs compared to traditional wired and wireless door alarms. Smart tech offers benefits like enhanced tenant experience, detailed activity data, seamless integration, and improved automation, which can lead to higher satisfaction, retention rates, and profitability.

While smart technology presents compelling advantages, operators need to carefully weigh all associated costs, including those for new construction versus existing facilities, necessary hardware, potential maintenance, and the incremental expenses involved. Their decision should be guided by a comprehensive cost-benefit analysis tailored to their facility's specific needs and constraints.

Ultimately, opting for smart technology over traditional security solutions should align with the facility's strategic objectives, market position, budget, and anticipated ROI. By gaining clarity on the costs and benefits of each option, operators can confidently choose solutions that meet their facility's goals and tenant expectations, ensuring secure and efficient operations tailored to today's dynamic self-storage market.

NEXT-GEN TECHNOLOGY

FOR SMARTER SELF-STORAGE SECURITY



SIMPLE. SLEEK. SMART.

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