ELEGRP

MODULAR SMART HOME SOLUTION

Make your business smart and profitable

Modular Smart Home Solution

From devices to cloud, we help you
build your own smart ecosystem.

> ELEGRP enabled a customized smart home architecture that goes beyond standard platforms, giving Lysome greater control over product design, user experience, and ecosystem integration.

Lysome is a U.S. company focused on smart lighting control solutions, primarily serving consumer users through direct-to-consumer and e-commerce channels.To support its product expansion and customization requirements, Lysome partnered with ELEGRP to develop a scalable smart home ecosystem that integrates devices, applications, and cloud infrastructure into a unified architecture.

Challenge

As Lysome evolved into a more design-oriented smart home brand focused on lighting control products, it required a solution that could go beyond standard platforms to support greater flexibility and product differentiation.

The brand also needed hardware that reflected its positioning, including rotary interaction and integrated display elements, while maintaining a consistent experience across multiple smart home ecosystems. Existing platform limitations made it difficult to achieve both customization and system-level consistency, creating a gap between product vision and user experience.

Solution

We worked with Lysome to develop a fully integrated smart home system that connects devices, application, and cloud into a unified architecture.

The solution includes Wi-Fi-enabled smart devices designed with rotary interaction and integrated display elements, supporting intuitive control and modern product design. A customized Lysome App was developed to align with brand identity and enhance user interaction.

Built on the Espressif IoT platform and AWS cloud services, the system ensures stable performance, scalability, and long-term flexibility. It also supports compatibility with major smart home ecosystems, including Amazon Alexa, Google Home, and enabling users to control their devices across different platforms seamlessly.

Results

The solution enabled Lysome to streamline product development, improve user experience, and establish a scalable foundation for future expansion across its smart home ecosystem.

> ELEGRP accelerated Slomin's transformation into a unified smart home ecosystem—turning complex systems into a seamless, scalable user experience.

Slomin's is a home services company headquartered in New York with over a century of experience, with core business covering home security, HVAC systems, and energy services.

As demand for connected living continues to grow, Slomin's sought to expand beyond traditional security into a more integrated smart home offering, including lighting control, environmental management, and system connectivity.

Challenge

Slomin's needed to evolve into a comprehensive smart home solutions provider. However, limited internal IoT capabilities and the fragmented nature of existing platforms made it difficult to build a unified system. Compatibility issues across devices and ecosystems led to a disjointed user experience, while project timelines required a solution that could be deployed quickly without starting from scratch.

Solution

Built on the Tuya IoT ecosystem, the solution leverages mature cloud services, device connectivity, and standardized application frameworks to ensure stability, scalability, and rapid deployment.

ELEGRP provided a full range of smart devices, including switches, outlets, dimmers, and sensor-based lighting controls, supporting diverse home scenarios. The solution also enables centralized device access and consistent system interaction through a unified platform structure.

The overall architecture supports integration with central control systems, enabling coordinated operation across security, lighting, and HVAC, while combining local and cloud-based automation.

Results

The solution enabled Slomin's to quickly establish a complete smart home ecosystem without heavy internal development. It supported the company's transition from a traditional security provider to a broader smart home solutions brand, improving user experience, strengthening system integration, and creating a scalable foundation for future growth.

> ELEGRP enabled a customized smart home architecture that goes beyond standard platforms, giving Lysome greater control over product design, user experience, and ecosystem integration.

Shelly is a European smart home brand focused on B2B distribution and online sales, with a product portfolio covering lighting control, energy management, and security.

With its own cloud platform and software ecosystem, Shelly is expanding from modular devices into finished products to strengthen its smart lighting offering.

Challenge

As Shelly's ecosystem expanded, its product portfolio remained centered on modular devices, limiting its ability to support complete smart lighting solutions for residential and commercial applications.

To address this, Shelly aimed to expand into finished products such as smart switches and dimmers while maintaining compatibility with its existing cloud platform.

At the same time, ensuring alignment between hardware and its proprietary software system, while allowing flexibility in product design, became key challenges.

Solution

ELEGRP partnered with Shelly to develop smart lighting products, including smart switches, dimmers, and outdoor outlets.The solution integrates Shelly's cloud platform and software ecosystem directly with ELEGRP hardware by embedding modules that serve as a direct replacement for traditional Tuya-based solutions. This enables seamless compatibility with Shelly's cloud environment without requiring changes to the existing hardware design.

In addition, industrial design customization was applied to create differentiated product appearances while keeping the internal structure unchanged. This approach allows Shelly to expand its lineup of finished smart lighting products efficiently, leveraging existing hardware while extending its cloud-driven ecosystem.

Results

The collaboration enabled Shelly to expand its smart lighting product line with finished devices built on a scalable and compatible hardware foundation. By integrating its proprietary cloud platform with ELEGRP hardware solutions, Shelly strengthened its product portfolio, improved system consistency, and enhanced its ability to serve both residential and commercial smart home markets.

> ELEGRP enabled Lowe's to adopt an ACK-based smart home architecture, accelerating product deployment within a fully managed ecosystem.

Lowe's is a leading home improvement retailer in the United States. To expand its smart home offerings, Lowe's partnered with ELEGRP to develop a new product line based on Amazon's Alexa Connect Kit (ACK), enabling seamless integration within a cloud-managed ecosystem.

Challenge

Lowe's required a solution to quickly launch smart home products without developing its own app or backend system. Traditional approaches did not align with its strategy of leveraging a fully managed cloud ecosystem.

Solution

The solution is built around an ACK-based smart home architecture, enabling seamless integration between devices, cloud services, and user interfaces.

Amazon-certified ACK Wi-Fi modules are embedded into smart hardware products, enabling direct and secure connection to Amazon's cloud infrastructure. With cloud services, device connectivity, voice control, mobile app access, and automation fully managed within the Amazon ecosystem, there is no need for additional backend or proprietary app development. The solution also supports compatibility with major smart home platforms, ensuring flexible control and seamless interoperability across devices and systems.

Results

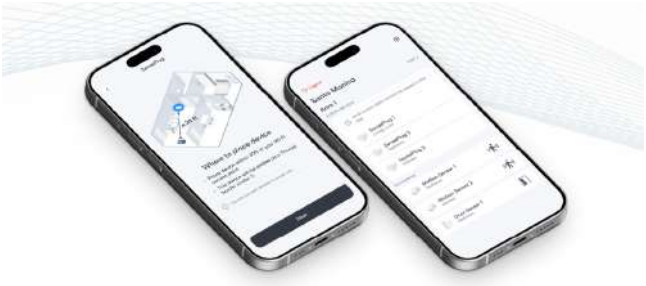
The solution enabled Lowe's to quickly launch a new smart home product line, accelerating time-to-market and simplifying deployment within a unified ecosystem, while delivering a seamless user experience and cross-platform interoperability.

> ELEGRP enabled Nami to transform Wi-Fi sensing technology into smart devices, bridging advanced sensing capabilities with real-world applications.

Nami is a Singapore-headquartered Wi-Fi sensing and AIoT technology company providing turnkey safety and sensing solutions, as well as integration-ready systems for partners across the security, care, telecom, insurance, and IoT industries. With offices in Paris and Montreal, the company operates globally across Asia-Pacific, Europe, and North America.

Challenge

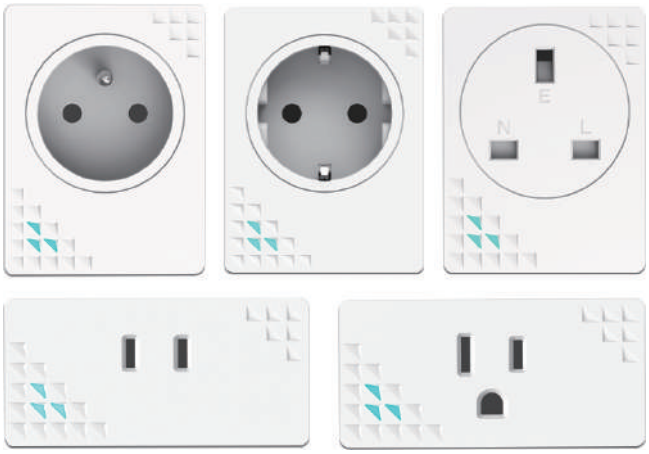
Nami needed hardware capable of supporting both connectivity and sensing functions while maintaining compatibility with its proprietary software ecosystem and supporting global market deployment.



Solution

We worked with Nami to develop smart plug products by integrating customized wireless modules based on Wi-Fi and Thread communication protocols. The hardware architecture was designed to support reliable connectivity, enabling seamless communication between devices and the Nami application.

The solution ensures stable performance across different environments while maintaining compatibility with Nami's cloud-based system and application layer. By aligning hardware design with software requirements, the products deliver consistent user experience across multiple markets and use cases.



Results

The collaboration enabled Nami to commercialize its sensing technology through consumer-ready products, helping expand into multiple target markets while supporting scalable deployment across both residential and commercial applications.

> ELEGRP enabled MXCHIP to transform IoT modules into complete smart home devices, supporting scalable whole-home solutions.

MXCHIP is an IoT solution provider specializing in wireless modules, embedded systems, and cloud platforms. To expand its presence in the U.S. residential market and serve home builders and MXCHIP has partnered with ELEGRP to deliver integrated smart home solutions.

Challenge

As MXCHIP expanded its smart home business, it needed to extend its wireless module capabilities into complete, user-ready devices. However, bridging module-level technology with finished products required seamless integration across hardware, system architecture, and application-level control, while maintaining compatibility with its existing ecosystem.

Solution

ELEGRP partnered with MXCHIP to develop smart switches and touch dimmers designed for seamless integration with its Bluetooth modules. The solution aligns hardware architecture with system requirements, enabling efficient module integration without redesigning existing platforms, while ensuring stable performance across devices. This approach allows MXCHIP to extend its module-based ecosystem into complete smart home products, supporting flexible deployment across residential scenarios.

Results

The solution enabled MXCHIP to deliver complete smart home solutions, accelerating deployment across residential projects in the U.S. market.