In recent years, Germany has faced significant cybersecurity challenges with cloud-based home security systems. To address these issues, we are developing a system that empowers smart home developers to easily test their prototypes before launching them to the market. Our goal is to create a complete smart home simulator that is both secure and fast, leveraging the power of the Internet Computer Protocol (ICP) to achieve this. Our home simulator system, built on blockchain technology, ensures privacy, transparency, and safety for smart homes. By integrating blockchain with home security systems on the ICP platform, users gain unprecedented control, privacy, and security levels. They can trust that their home security data is securely stored and inaccessible to unauthorized parties, thanks to the robustness of ICP blockchain. One of the key features of our system is real-time monitoring, allowing users to keep an eye on their property remotely. This enhances overall security and provides peace of mind even when users are not physically present. To address energy consumption challenges associated with conventional Proof-of-Work (PoW) consensus protocols, we have explored lightweight blockchain technologies. These innovations optimize resource use and improve data dependability, making them ideal for Internet of Things (IoT) devices with limited processing power. Our efforts include updating the ICP Blockchain simulator with difficulty levels for hash target identification, leading to more accurate block formation times. Through studies using the updated simulator, we have determined ideal difficulty levels for lightweight blockchain implementations, showcasing the effectiveness of our modified PoW consensus protocol in streamlining block formation processes. In conclusion, our blockchain-enabled home security system offers an efficient and reliable way to ensure safety, openness, and privacy in smart homes. By combining the security features of blockchain technology with the convenience of smart devices, we provide users with a comprehensive and secure home security experience tailored for the Central European market.