

HENGS TECHNOLOGY

Hengs Technology evolving into a comprehensive renewable energy management group—RUCKUS supports enhanced competitiveness

RUCKUS® Networks enterprise-class Wi-Fi solution, designed for medium- to large-scale wireless network environments, is equipped with radio frequency (RF) and Wi-Fi® optimization technologies. It also comes bundled with the powerful RUCKUS SmartZone™ network controllers. This has helped Hengs Technology Co., Ltd. (TPE:4582) achieve a significant boost in wireless network stability as the company evolves into a global leader in the renewable energy management group.



Customer
Hengs Technology
Location
Taiwan

The ESG (environmental, social, and governance) wave is sweeping across the globe, driving the booming development of the renewable energy industry, including the solar power sector. This has led to intense competition among industry players. To stand out in the market, apart from outstanding products and technical service capabilities, the company also must foster tighter cross-departmental collaboration to seize rare and massive business opportunities.

Hengs Technology, which has achieved outstanding results in solar power plant construction and operations, chose to implement RUCKUS Networks enterprise-class Wi-Fi solution at

its Tainan headquarters. This has successfully improved employee work efficiency, providing significant support in strengthening the company's market competitiveness.

"We have long been dedicated to the creation, management, and utilization of renewable energy. As our business continues to grow, we have also been consistently promoting environmental sustainability—aspiring to create greater industry value for Taiwan's renewable energy sector and enabling the company to evolve into a comprehensive renewable energy management group," stated Chen Xin-Cong, IT manager, Hengs Technology.

Mr. Chen further elaborated, "After implementing the RUCKUS Networks enterprise-class Wi-Fi solution, our employees can now enjoy stable, uninterrupted networking connectivity when moving between buildings within the office place. This has also reduced the workload for our network engineers. We are very satisfied with the outcomes of this project."

Improving wireless network quality becomes imperative—RUCKUS is the top choice

Hengs Technology, founded in 1998, upholds the business philosophy of "Prudence, Responsibility, Innovation, and Sustainability." It provides a

range of services, including solar EPC (engineering, procurement, and construction) systems, operations and maintenance, energy storage, marketing, and investment. The company has continuously improved and refined its solar photovoltaic system integration technology, accumulating 25 years of experience and expertise. In Taiwan, Heng Technology has surpassed 350 megawatts (MW) in total installed capacity, and has also completed over 20 MW of projects in Southeast Asia. In 2023, the company's representative cases include the Chianan Management Office, Irrigation Agency, Ministry of Agriculture's Zhuziajiao section, and Jih-Guang phase 1 project located in Qigu District, Tainan, showcasing its outstanding overall performance.

To demonstrate its capabilities in solar power plant construction and operations, Heng Technology has built Taiwan's first large-scale, green, multifunctional office facility integrated with solar power generation at its Tainan headquarters. This not only attracts the attention of global industry players; it also helps the company implement its ESG strategy. However, due to the limited lifespan of the previously installed Wi-Fi infrastructure, the system's stability and reliability have declined over time. As a result, employees often experience poor wireless network connection quality when moving between different buildings—inadvertently impacting the overall work efficiency of the team.

According to Mr. Chen, "Even when our employees are attending meetings or handling other business in other buildings, although the wireless network icon on their laptops or phones shows full bars, they may still be unable to access the host applications or participate in online meetings. Ultimately, they can only choose to reboot the

device or wait for the network engineers to troubleshoot the issue. Given that the existing Wi-Fi equipment had reached the end of its five-year lifespan, the company decided to introduce new equipment to solve the problem. Both the in-house project team and external system integration partners recommended the RUCKUS Networks enterprise-class Wi-Fi solution as the most suitable option. Considering the brand's overall price-to-performance ratio and its ability to meet the company's operational requirements, Heng Technology ultimately decided to implement the RUCKUS solution."

RUCKUS SmartZone—intuitive and proactive in identifying network issues

In the past, Heng Technology used other enterprise-class Wi-Fi access points. Although it also adopted a single SSID, the wireless signal coverage and sensitivity were rather poor. As employees moved between different floors and buildings, the access points often failed to promptly detect and configure the appropriate communication channel. Furthermore, the product lacked management tools, requiring network engineers to spend a significant amount of time on troubleshooting whenever issues arose—substantially increasing their workload.

One of the key factors that attracted Heng Technology to the RUCKUS Networks enterprise-class Wi-Fi solution is the inclusion of the powerful RUCKUS SmartZone controller. This provides an intuitive and customizable management interface, greatly reducing the setup and monitoring workload for network engineers. Additionally, the product features a visual connection diagnostics troubleshooting tool, allowing engineers



to track the user connection progress through various stages, such as 802.11, RADIUS, EAP authentication, captive portal redirection, encryption key configuration, DHCP, and roaming. As a result, when network connection issues arise, network engineers can quickly identify the underlying problem, reducing the time required to resolve the issue.

"The Heng Technology headquarters in Taiwan spans an area of 3,500 pings (124,565 square feet), comprising three buildings covered with solar panels. The overall network infrastructure is extensive and complex. Whenever employees report 'Wi-Fi doesn't work,' network engineers must check each connection stage, which is a time-consuming process," explained Mr. Chen. "When we introduced the enterprise-class Wi-Fi solution, we also purchased a certain number of RUCKUS ICX® Ethernet switches. This allows us to use the RUCKUS SmartZone to monitor

the overall health of the network infrastructure. Whenever unexpected problems occur, network engineers can use the tool to identify the root cause—streamlining the troubleshooting process and reducing the time required to resolve the issue.”

BeamFlex+® and ChannelFly® enhance wireless network quality

Another factor that led Hengs Technology to select the RUCKUS Networks enterprise-class Wi-Fi solution was the product’s patented radio frequency (RF) and Wi-Fi optimization technologies. First, the BeamFlex+ (adaptive antenna technology) can enhance the performance and coverage range of each RUCKUS access point, mitigating RF interference and noise-related issues—particularly improving the traffic flow for mobile device applications. Secondly, when the access point detects that the signal strength of the channel being used by a client device is starting to weaken, the ChannelFly (channel optimization enhancement) can automatically switch the client

to a channel with a better signal, improving the overall wireless network performance.

“In addition to the many outstanding features of the product itself, the RUCKUS technical team also assisted us in re-examining the overall wireless network architecture during this project implementation,” said Mr. Chen. “They placed the access points in optimal locations to optimize overall Wi-Fi coverage and eliminate previous dead zones, improving the user experience for our employees.” As a result, after the deployment of the RUCKUS access points, there have been no more incidents of client computers being unable to access the Wi-Fi services, with the overall performance fully meeting the expectations set before the project. As the market demand for solar power plants continues to grow, Hengs Technology’s overall business performance has been remarkably strong, with plans to build a fourth building at its Taoyuan branch. Given the successful implementation of the RUCKUS Wi-Fi project, the company is

also considering the continued use of RUCKUS solutions in the new building, as well as evaluating the deployment of RUCKUS Cloudpath® services to facilitate user identity authentication and network security policy management. The aim is not only to improve staff efficiency, but also to enable the IT team to focus on other digital initiatives that support the company’s transition to a comprehensive renewable energy management group.”

“After implementing the RUCKUS Networks enterprise-class Wi-Fi solution, our employees can now enjoy stable, uninterrupted networking connectivity when moving between buildings within the office place. This has also reduced the workload for our network engineers. We are very satisfied with the outcomes of this project.”

Chen Xin-Cong
IT manager, Hengs Technology

About RUCKUS Networks

RUCKUS Networks is committed to creating and providing cutting-edge network solutions that can operate in harsh environments. RUCKUS offers high-performance wireless LAN, IoT, security, and safety solutions to different industries, providing excellent connectivity experiences for visitors, students, residents, citizens, and employees. The excellent hardware and AI-driven systems of RUCKUS can simplify complex issues for high-demand industries globally and improve business performance.

www.ruckusnetworks.com

Visit our website or contact your local RUCKUS representative for more information.

© 2024 CommScope, LLC. All rights reserved.

CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information, see <https://www.commscope.com/trademarks>. All product names, trademarks and registered trademarks are property of their respective owners. Wi-Fi and Wi-Fi 6 are trademarks of the Wi-Fi Alliance.

CS-118872-EN (04/24)

RUCKUS[®]
COMMSCOPE