

Case Study

| Outdoor Cabinets for TAWAL



End Customer:	TAWAL
Project Address:	Saudi Arabia and GCC Country
Requirements:	Outdoor Cabinets (Mini Shelter) shall be suitable for operation in the temperature, humidity, dust and other conditions to be expected at site
Related Products:	Ningbo Spring 42U Outdoor Cabinet and 84U Dual Depth Outdoor Cabinet

Project Background

TAWAL is a prominent Saudi telecommunications tower company, playing a crucial role in the Kingdom's digital transformation. As a leading provider of advanced network infrastructure solutions, TAWAL empowers businesses and individuals by offering reliable and efficient connectivity.

The advent of 4G and 5G technologies has significantly increased the demand for tower sites. The higher data rates and new applications enabled by these technologies necessitate denser network deployments. Shorter wavelengths associated with 5G networks require more frequent cell site installations, while technologies like MIMO demand additional antennas and equipment. As a result, tower companies face increasing pressure to expand their infrastructure to meet the growing needs of telecommunications operators.



Challenges

Deploying outdoor enclosures in Saudi Arabia's harsh climate presents a unique set of challenges for telecommunications providers. Extreme temperatures, sandstorms, and dust can significantly impact the reliability and longevity of critical infrastructure. To mitigate these challenges, outdoor enclosures must be designed and constructed to withstand these extreme conditions.

Robust materials, advanced cooling systems, and effective sealing techniques are essential to protect equipment from the elements. Additionally, reliable power supply and efficient heat dissipation are crucial for optimal performance. Security measures, such as sturdy locks and surveillance systems, must be implemented to deter theft and vandalism.

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The remote locations of many tower sites in Saudi Arabia further complicate deployment and maintenance efforts. Logistical challenges, including transportation of equipment and personnel, must be carefully considered. Remote monitoring and control systems can help mitigate these challenges by enabling real-time monitoring and troubleshooting.

By addressing these challenges and investing in high-quality outdoor enclosures, telecommunications providers can ensure the reliability and performance of their network infrastructure in Saudi Arabia.

Solution Overview

To meet the unique requirements of this project, Ningbo Spring provided customized 42U single bay outdoor cabinets and 84U dual-depth outdoor cabinets. These robust enclosures, constructed from high-quality materials and equipped with reliable cooling systems, ensure optimal performance in demanding outdoor environments.

- 42U Single-bay Outdoor Cabinets



- Featuring a double-wall construction with middle insulation and coated with outdoor-grade powder, these enclosures are exceptionally robust and offer superior insulating properties, providing corrosion resistance and UV protection.
- Equipped with a 2kW air conditioner, the enclosures ensure adequate climate management inside, keeping your equipment safe and operational in any environment.
- 4-point locking mechanism to enhance the security and overall durability.



- 84U Dual-depth Outdoor Cabinets



- Same material structure with 42U single-bay outdoor cabinets, dual-depth design offers a total of 84U space (42U per bay) for equipment and batteries.
- Both of front and rear doors are equipped with 2kW 48VDC air conditioner, ensuring the adequate climate management inside the enclosure, to extend the battery life.

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Client's Feedback

Our collaboration with Ningbo Spring has been a truly positive experience. From the initial stages of product conception to the final delivery, their team has consistently impressed us with their professionalism and dedication. Their commitment to quality is evident in the exceptional performance of their outdoor cabinets, which have exceeded our expectations in terms of durability, reliability, and ease of installation. The seamless communication and proactive approach of the Ningbo Spring team have made the entire process efficient and stress-free. We are particularly impressed with their ability to tailor solutions to our specific needs, ensuring that the outdoor cabinets meet our exact requirements. We look forward to continuing our partnership with Ningbo Spring and exploring future

