

Victoria Communications Engineering Bureau 5G base station installation





Overview

Why is 5G a challenge for site evolution?

5G presents many daunting challenges for site evolution. Market insights show that only one pole can be deployed for each sector at 50% of sites. New antennas cannot be installed due to limited antenna space. The remaining capacity in existing battery cabinets is insufficient for 5G devices.

What is a 5G Brain Center?

Often referred to as the brain center, this includes: Baseband Unit (BBU): Handles baseband signal processing. Remote Radio Unit (RRU): Converts signals to radio frequencies for transmission. Active Antenna Unit (AAU): Integrates RRU and antenna for 5G-era efficiency. 2. Power Supply System.

What is the main base station equipment connection diagram?

The Core Layout: Main Base Station Equipment Connection Diagram The connection diagram provides a clear overview of how the main base station equipment operates within the network. Surrounding this central "brain" are the "Four Guardians" that ensure seamless functionality:.

What is a BBU in a base station?

The BBU is a key element of the base station's architecture. Unlike the large cabinet setups of the past, modern BBUs are compact and resemble distributed devices, similar in size to DVD players. Function: Processes baseband signals, which are low-frequency signals in their raw, unmodulated state.



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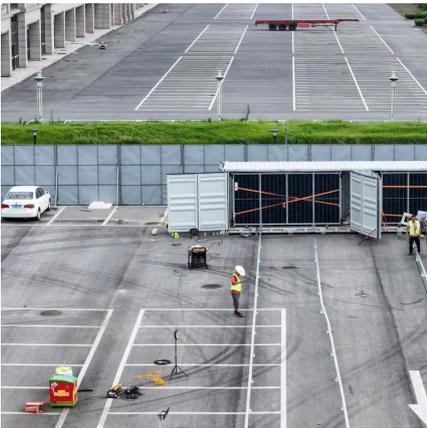
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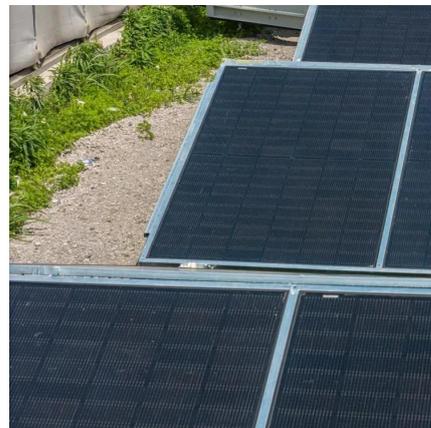
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Main Equipment Evolution
Antenna Reconstruction
Energy Reconstruction
Installation
In the 5G era, the power consumption of main equipment will double, and the power consumption of auxiliary equipment, such as temperature control equipment, will also increase. The total site power consumption will triple. This creates new challenges in terms of AC input power distribution, DC output power distribution, battery backup, and the stab See more on carrier.huawei ResearchGate



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