SolarInnovate Energy Solutions

Bogota builds communication base station with uninterrupted power supply

Overview

Do power failures affect BTS sites?

In today’s dynamic world, BTS sites function as the backbone of mobile networks that provide communication services for millions of users. However, in practice, power failures can disrupt the critical operation of BTS sites which impact network reliability and user experience.

Why do mobile network operators face frequent power supply failures at BTS sites?

Mobile network operators (MNOs) face frequent power supply failures at BTS sites, leading to revenue loss and increased operational expenditure (OPEX). Despite their critical role, BTSs face significant operational challenges due to vulnerabilities in their power supply. These disruptions can arise from various external and internal sources .

How can predictive analytics improve BTS power supply reliability?

Leveraging redundant BTS power supply with predictive analytics allows network operators to anticipate outages, crucial for maintaining service reliability and minimizing disruptions while optimizing maintenance schedules.

What power source does a BTS use?

The primary power source for a BTS, supplied by the utility grid, offers a cost-effective and reliable electricity supply for the radio units. Operating at either 220V RMS AC for single-phase or 380V RMS AC for three-phase configurations, it forms the critical backbone of BTS functionality.

What is a BTS power system?

The BTS power system incorporates processing and distribution units such as automatic transfer switch (ATS), rectifiers, alternating current (AC) and direct current (DC) distribution boards, circuit breakers, and fuses (See Fig. 1 below).

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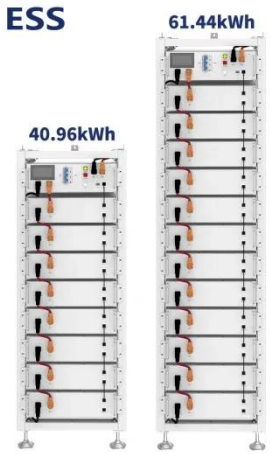

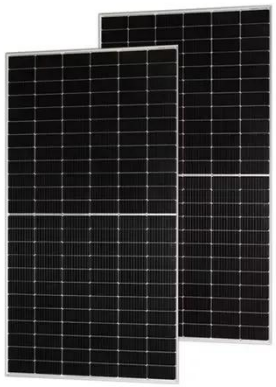

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