Basic parameters of solar panels for communication base stations

Overview

The photovoltaic modules are of 580Wp type, with photoelectric conversion efficiency ≥ 22. 5%, warranty period of not less than 25 years, and attenuation in the first year of ≤ 2. N+1N+m redundant configuration can be achieved, and the number of interfaces and modules can be. The communication base station installs solar panels outdoors, and adds MPPT solar controllers and other equipment in the computer room. The power generated by solar energy is used by the DC load of the base station computer room, and the insufficient power is supplemented by energy storage. Solar retrofit of existing grid-connected sites pre-equipped with rectifiers: Solar reduces electricity costs (OPEX), provides greater security and keeps the site up and running during prolonged outages. New sites: Off-grid sites with no or limited and intermittent access to grid electricity sites. This paper aims to address both the sustainability and environmental issues for cellular base stations in off-grid sites. For cellular network operators, decreasing the operational expenditures of the network and maintaining profitability are important issues. BSs are categorized according to their power consumption in descending order as: macro, micro, mini and femto. In this aspect, solar energy systems can be very important to meet this.

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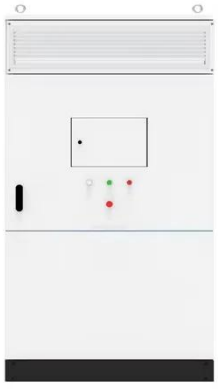

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