

SolarInvert Energy Solutions

Sound insulation design scheme for energy management system of communication base station





Overview

What is sound insulation enclosure?

Sound insulation enclosure is a kind of noise reduction device which can inhibit the noise trans-mission by making the noise source closed completely in a confined space. The sound-insulating effect of sound insulation enclosure is better than sound barrier, which can make the noise reduced by $15\sim25dB(A)$.

What is the design of sound absorption?

The design of sound absorption include the noise characteristics, the sound absorption coefficient of the room to be processed, the target value of noise reduction, the type of sound absorption mate-rials and sound absorption structure, the thickness and area of sound absorption material, etc.

How to control substation noise?

For substation noise source equipment which is arranged in outdoor, in addition to control the body noise, can also take measures to control the route of transmission so as to reduce the noise. For air borne noise, the noise transmission path can be controlled by setting sound barriers and sound insulation covers.

What is the acoustic design of sound barrier?

The specific acoustic design of sound barrier can refer to Norm on Acoustical Design and Measurement of Noise Bar-riers (HJ/T 90), including determining the design target value, the position, the geometry, the shape, the insertion loss estimation and design adjustment of sound barrier.

How noise-sensitive buildings are affected by airborne noise?

The noise-sensitive buildings that are close to noise source, are not only affected by airborne noise, but also affected by structure borne noise; The vibration isolation device can be installed to reduce this kind of noise, which



have a good inhibitory effect on low frequency noise and the noise can be reduced by $1\sim5$ dB(A) by this measure.

What is a sound absorbing material?

Sound-absorbing material or structures generally has 3~8 db(A) noise reduction effect. The commonly sound-absorbing material or structure for the substation and converter station con-tains porous sound-absorbing bricks, slag expanded perlite acoustical tile and micro-perforated sound absorption board, etc.



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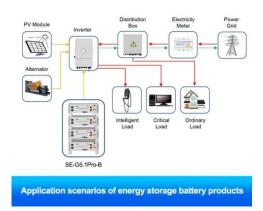
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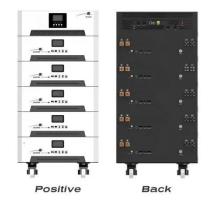
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51.2V 150AH, 7.68KWH

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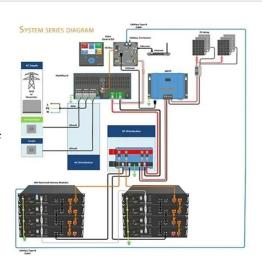
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Aug 1, 2023 · [4] illustrated the common methods of the joint design of BS sleep-user association in 5G system. [5] proposed an initial connection algorithm and a load sharing based BS sleep ...

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