

Outdoor power supply can withstand maximum temperature

Is high temperature bad for your power supply?

High temperature has several negative effects on the performance of your power supply. It is pretty clear that a high temperature environment can cause your supply to overheat.

What is the operating temperature of a power supply?

The operating temperature specified for a power supply refers to the temperature of the environment around it, rather than the external ambient temperature of the equipment. Typically, the operating temperature range for power supplies is between 0°C and 40°C, with some products able to reach standards of 0°C to 50°C.

Why should you choose a wide temperature power supply?

To address such extreme environments, users are advised to opt for wide temperature (Wide Temperature) power supplies. These devices are designed to provide stable power even under high or low-temperature conditions, ensuring the reliable operation of connected equipment.

Do power supplies need to be housed outside?

Power supplies need to be housed outdoors, where the extreme heat of the summer and the extreme cold of the winter will both be present. Power supplies heat themselves up at different rates and intensities, and environmental influences will impact how quickly a power supply is exposed to high temperatures.

How does temperature affect the reliability of a power supply?

Since your power supply has a specific efficiency, energy will inevitably be wasted as heat (in watts), which will lead to an increase of ambient temperature within a system. This will decrease the reliability of the supplies' components. High temperature environments can also cause insulators to fail and mechanical connections to loosen.

Which wattage power supply should I Choose?

Therefore, if the working environment temperature ranges between 50°C and 70°C and the load requirement is between 400W and 700W, customers are advised to select a higher wattage wide temperature power supply and strictly follow the derating curve guidelines.



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