

## SolarTech Power Solutions

# Flat cooling using outdoor power supply



## Overview

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Are power devices rated for natural convection cooling?

Many power devices are rated for natural convection cooling as long as the air surrounding the unit remains within a limited temperature range that is cooler than the device. The advantage of this method of cooling is that no electromechanical fans are required.

Does a power supply have a fan?

Many power supplies come with a build-in fan to provide this forced air type of convection cooling. Other types of power supplies specify the amount of air flow that must pass through or around the device (in cubic-feet-per-minute) in order for the supply to provide its maximum rated output power.

Does a power supply use a heat-sink?

All power supplies use internal heat-sinks to help conduct the heat away from the hot devices. Unfortunately using heat-sink adds on weight and size to a power supply. Convection Cooling: This involves the transfer of heat from a power device by the action of the natural air flow surrounding and contacting the device.

What is a flatpack2 outdoor power system?

The Flatpack2 outdoor power system provides solution for the most outdoor demanding applications with total power output up to 36kW DC load in IP55 enclosure.

Are Puls power supplies convection cooled?

PULS standard din rail power supplies are convection cooled. Did you enjoy this great article?

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What is natural convection cooling?

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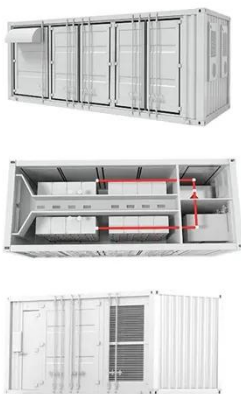


### The Complete Guide to Outdoor Cooling Solutions

Jun 23, 2025 · Modern cooling technology can drop outdoor temperatures by 15-30°F while using minimal water and energy. High-pressure misting systems work even in humid climates, while ...

## Types of cooling methods used in power supply

Apr 7, 2015 · In this article, we look at various types of cooling methods used in a power supply. Conduction Cooling: This is defined as the transfer of heat from one hot part to another cooler ...



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## Understanding convection cooled power supplies

Jun 2, 2015 · Open frame power supplies, for example, are typically mounted on a flat surface upon standoffs, and below, we can see how the air behaves. As the hot air rises, cooler air is ...

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