

High-Temperature Vacuum Insulation Panel for Wide Temperature Range

Vacuum insulation panels utilize high-temperature core materials for thermal performance across a wide temperature range. These panels maintain structural integrity and minimize thermal conductivity under extreme temperature gradients.



Product Overview

High-Performance Thermal Management

This advanced Vacuum Insulation Panel (VIP) is engineered for extreme thermal management, operating effectively across a wide temperature range from -196°C to 800°C. Utilizing a unique structure that combines thermal dissipation and insulation, it provides superior performance for new energy batteries and energy storage systems. As a fifth-generation upgrade, it serves as a high-efficiency replacement for traditional materials like aerogel, ceramic fiber, and glass fiber paper.

Technical Specifications

Fire Rating

Class A Non-combustible

Temperature Range

-196°C to 800°C

Core Materials

Basalt Fiber, High Silicon Fiber

Membrane Materials

Aluminum Foil, Stainless Steel Foil

Key Features

Key Performance Attributes

- High and low temperature resistance
- Low thermal conductivity
- Long service life
- Puncture resistance
- High compressive strength

Replaces Traditional Materials

- High silica cotton
- Ceramic fiber felt
- Aerogel felt
- Glass fiber paper
- PIR
- PUR