





Introduction

The aluminum profile heat sink is a widely used thermal management component in power equipment, leveraging the high thermal conductivity and structural design of aluminum to effectively dissipate the heat generated during equipment operation. The primary function of the heat sink is to maintain the equipment temperature within a safe and efficient operating range, thereby extending the equipment's lifespan and enhancing its performance.

Application Areas

Aluminum profile heat sinks are widely used in the following power equipment:

- Switching Power Supplies: Help manage the heat from switching components and inductors, ensuring stable power output.
- Uninterruptible Power Supplies (UPS): Dissipate heat in critical power protection equipment, ensuring continuous and reliable power supply.
- Inverters: Used in solar and wind power systems to dissipate heat during the conversion of DC to AC power.
- Chargers and Adapters: Ensure safe and efficient charging processes in various electronic device charging systems.

Material Selection

Our aluminum profile heat sinks primarily use 6063 aluminum alloy, which is widely recognized for its excellent mechanical properties and thermal conductivity. The characteristics of 6063 aluminum alloy include:

- High Thermal Conductivity: Efficiently conducts and dissipates heat.
- Lightweight: Reduces the overall weight of the equipment, improving portability.
- Excellent Machinability: Easy to process into various complex shapes to meet different design requirements.
- High Corrosion Resistance: Enhanced corrosion resistance, suitable for various environments after anodizing treatment.

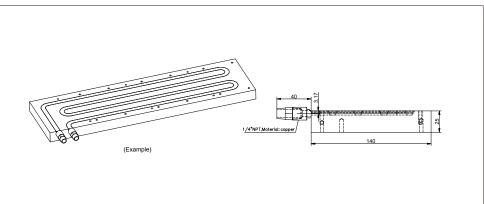




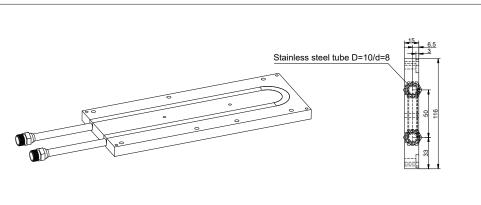
Profile Dimension Overview

• Water-cooling Heat Sink

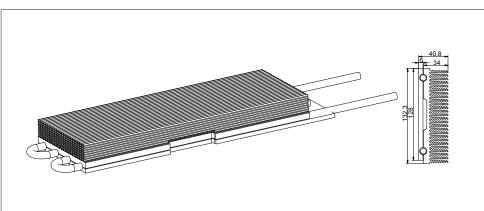




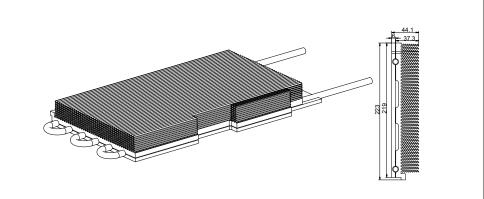
















• Aluminum Heat Sink Profile



