

SUNLU SUNLU AMS Heater

SUNLU AMS Heater Instruction Manual

Model: SUNLU AMS Heater

1. INTRODUCTION

The SUNLU AMS Heater is an advanced accessory designed to enhance your 3D printing experience by ensuring optimal filament conditions. This device allows for simultaneous drying and printing, effectively preventing common issues caused by humid filament such as clogging, stringing, and poor adhesion. It features intelligent humidity control, rapid heating capabilities, and multiple safety protections, making it a reliable addition to your 3D printing setup. This manual provides detailed instructions for the installation, operation, and maintenance of your SUNLU AMS Heater.

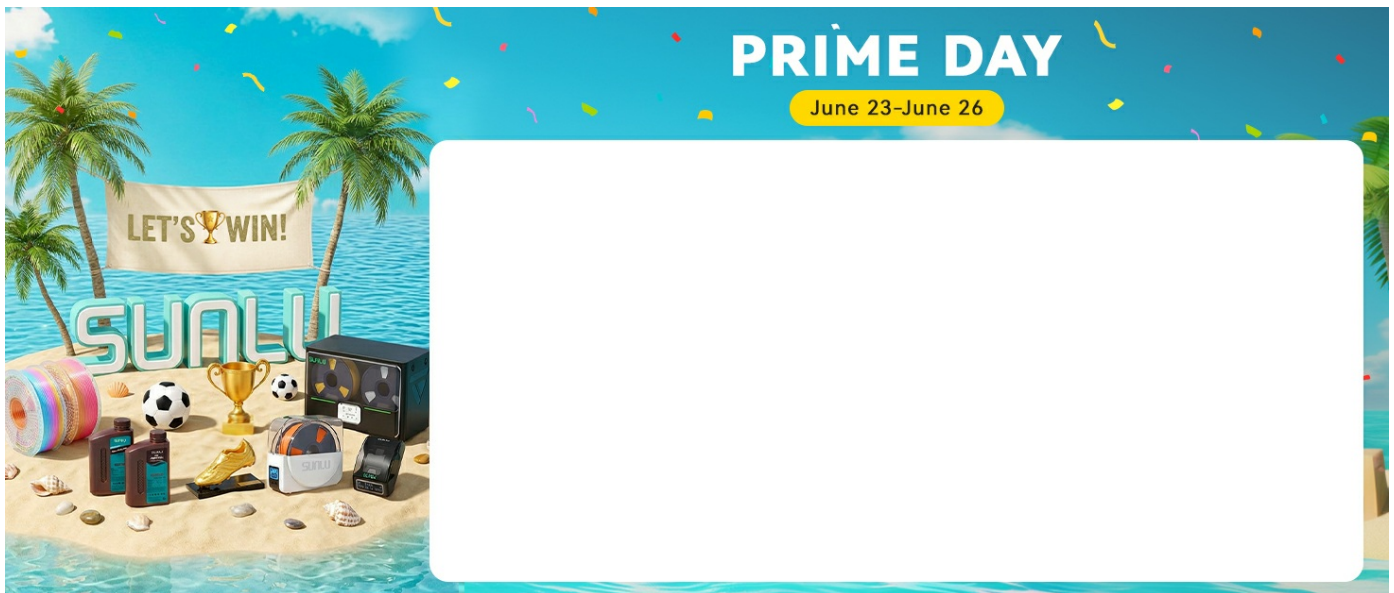


Image: Overview of the SUNLU AMS Heater, highlighting its function for drying while printing.

2. SAFETY INFORMATION

Please read all safety instructions carefully before using the SUNLU AMS Heater. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Ensure the device is connected to a grounded power outlet with the correct voltage (AC 110V 60Hz or AC 220V 50Hz). Do not operate with damaged cords or plugs.
- **Heat Warning:** The device heats up to 70°C. Avoid direct contact with heating elements during operation. Allow the

device to cool down before handling or maintenance.

- **Ventilation:** Ensure adequate ventilation around the device to prevent overheating. Do not block air vents.
- **Water and Moisture:** Keep the device away from water or other liquids. Do not operate in damp or wet conditions.
- **Children and Pets:** Keep the device out of reach of children and pets.
- **Intended Use:** Use the device only for its intended purpose of drying 3D printer filaments. Do not modify the device.

The SUNLU AMS Heater incorporates triple protection features for safe operation:

- **Level 1: Smart PTC Heating:** Automatic shut-off if abnormal temperature is detected.
- **Level 2: Temperature Switch:** Monitors temperature and automatically controls heating.
- **Level 3: Software Protection:** Provides instant alerts in case of anomalies.

Triple protection de sécurité

Séchage sûr et fiable avec le chauffage SUNLU AMS



Niveau 1



PTC intelligent

Arrêt automatique en cas de température anormale détectée

Niveau 2



Commutateur de température

Surveille la température et contrôle automatiquement le chauffage

Niveau 3



Protection logicielle

Alertes instantanées en cas d'anomalies

Image: Diagram illustrating the three levels of safety protection integrated into the AMS Heater.

3. SETUP

The SUNLU AMS Heater is designed for easy integration with your AMS Gen 1 system. Follow these steps for installation:

1. **Loosen:** Unscrew the four hinge screws on your AMS top cover.
2. **Remove & Install:** Carefully remove the original AMS top cover. Mount the provided hinges onto the side pins of

the AMS Heater.

3. **Tighten:** Secure the four screws to complete the installation.

This installation process will not damage your existing AMS unit.

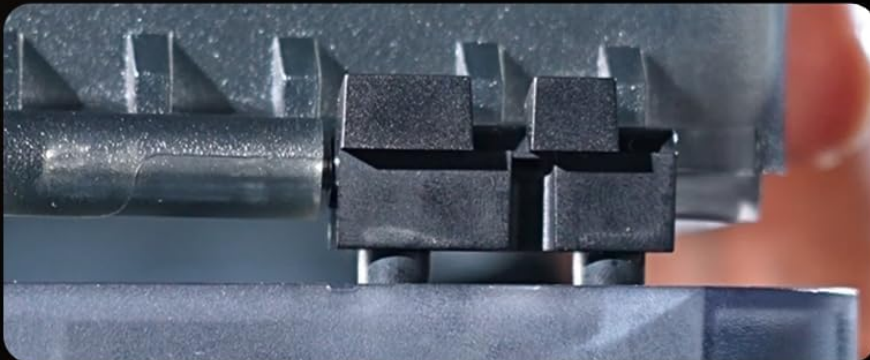
Installation facile

Mise à niveau en seulement 3 étapes



1

Desserrer



2

Retirer et installer



3

Serrer

L'installation du chauffage AMS n'endommagera pas l'AMS

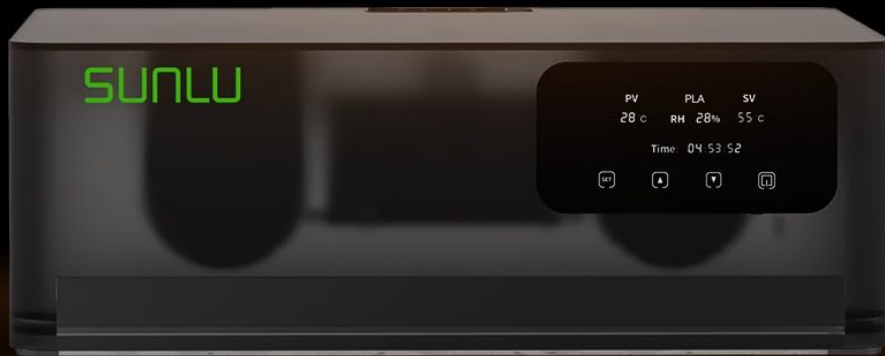
Image: Step-by-step visual guide for installing the AMS Heater onto an AMS unit.

Package Contents

Verify that all components are present in your package:

- AMS Heater x 1
- Hinge x 4
- Hexagonal Screws x 8
- Power Cord x 1
- User Manual x 1
- Hexagonal Screwdriver x 1

Packing List



AMS Heater*1



Hinge*4



Hexagonal Screws*8



Power Cord*1



User Manual*1



Hexagonal
Screwdriver*1

Image: Contents of the SUNLU AMS Heater package, including the main unit and accessories.

4. OPERATING INSTRUCTIONS

The SUNLU AMS Heater is designed for user-friendly operation, allowing you to dry your filaments efficiently.

Power On and Initial Setup

1. Connect the power cord to the AMS Heater and a suitable power outlet.
2. Place your filament spools inside the AMS unit. The heater supports up to four spools simultaneously.
3. The device will power on and display current temperature and humidity readings.

Intelligent Humidity Control

The integrated intelligent humidity sensor automatically activates the drying cycle when high humidity is detected (typically $\geq 50\%$) and stops once the desired humidity level is reached (typically $\leq 20\%$). This ensures optimal drying without unnecessary energy consumption.

Contrôle intelligent de l'humidité

Arrêt automatique une fois qu'un taux d'humidité prédéfini est atteint

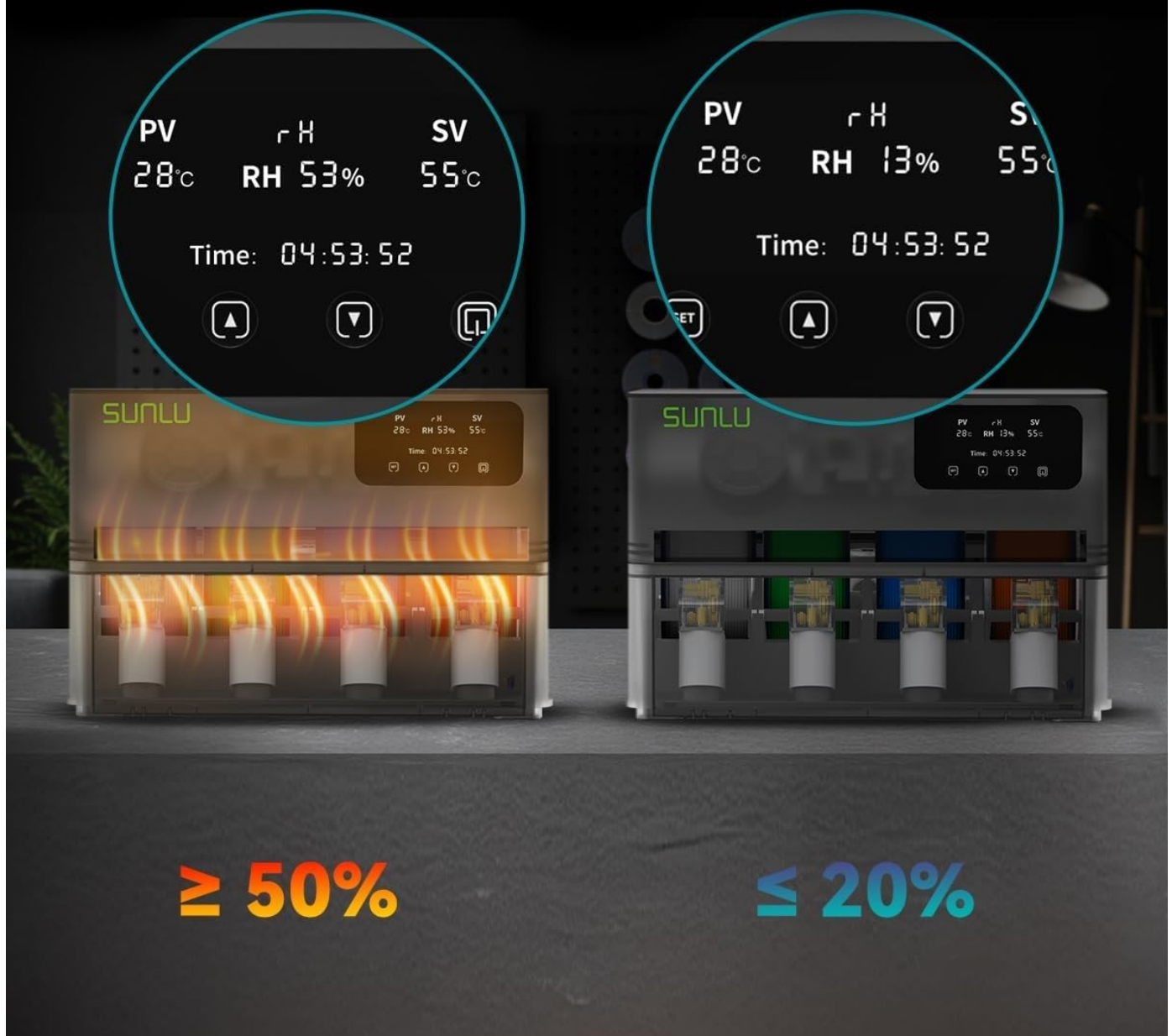


Image: Display showing humidity levels before and after the intelligent drying process.

Rapid Heating

The AMS Heater can reach its ideal internal temperature of 70°C in approximately 20 minutes, preparing your filament quickly for printing.



Image: Visual representation of the AMS Heater's rapid heating capability, reaching 70°C quickly.

Setting Temperature and Time

The control panel allows you to adjust drying temperature and time settings. You can also select presets for different filament types.

Fonctionnement facile

Démarrage en un seul toucher pour le chauffage AMS



Préréglage pour différents types de filaments 3D

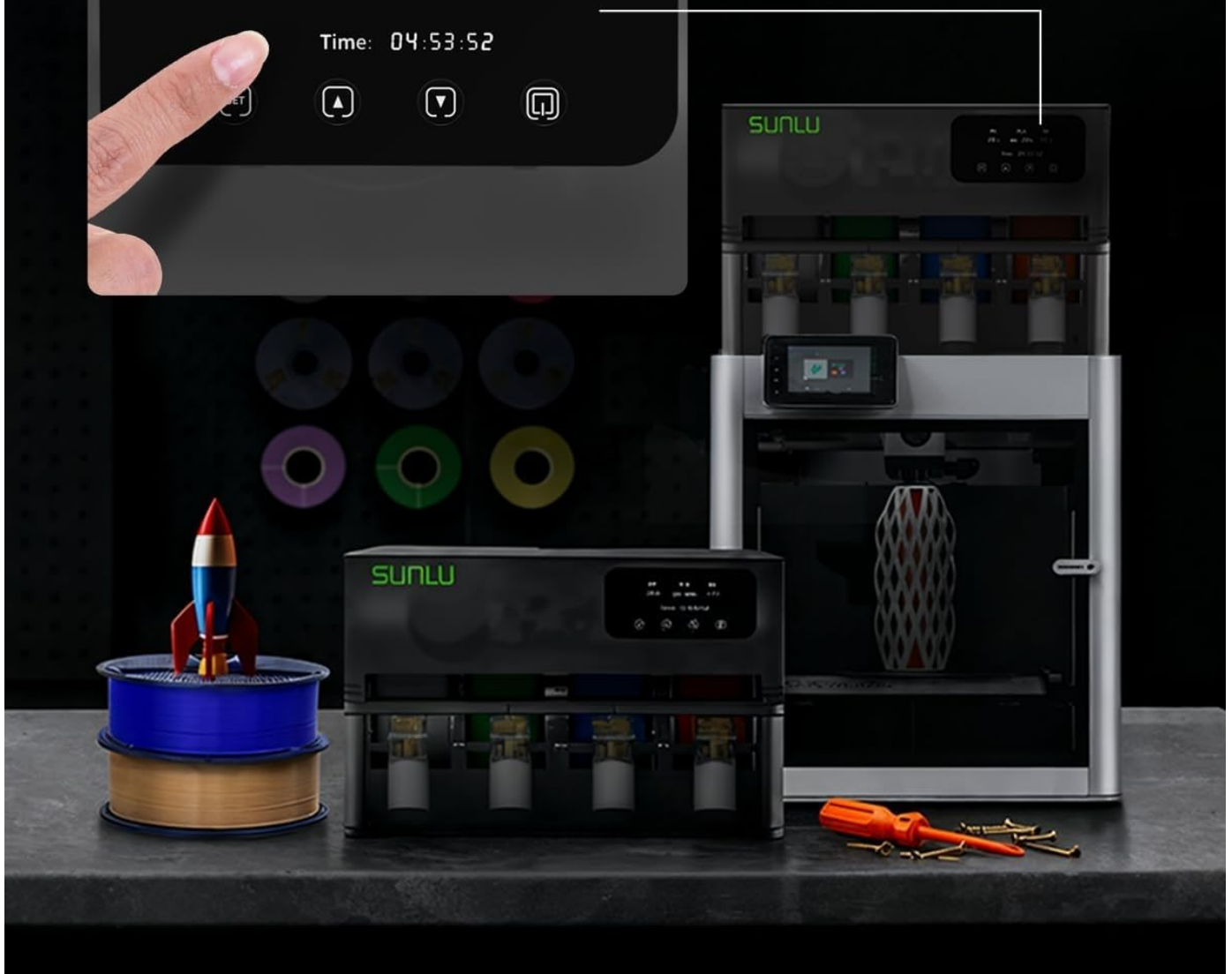


Image: Close-up of the control panel, showing options for temperature, humidity, time, and filament type presets.

Drying While Printing

One of the key features of the SUNLU AMS Heater is its ability to dry filament simultaneously while printing. This ensures that your filament remains in optimal condition throughout the entire printing process, leading to higher quality prints.

Grande Compatibilité

Compatible avec AMS (1ère génération)



Rangement hermétique



Impression multicolore



Empilage pris en charge



Effet amélioré affiché - AMS non inclus dans l'emballage

Image: The SUNLU AMS Heater mounted on an AMS Gen 1 unit, demonstrating its compatibility and simultaneous operation.

Official Product Video: Eliminating Filament Humidity

Your browser does not support the video tag.

Video: This video from SUNLU-EU demonstrates the process and benefits of eliminating humidity from 3D printer filaments using a filament dryer.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your SUNLU AMS Heater.

- **Cleaning:** Disconnect the power before cleaning. Use a soft, dry cloth to wipe the exterior of the device. Do not use abrasive cleaners or solvents.
- **Internal Cleaning:** Periodically check the interior for dust or filament debris. Use compressed air or a soft brush to gently remove any accumulation.
- **Storage:** When not in use for extended periods, store the device in a cool, dry place away from direct sunlight.
- **Inspection:** Regularly inspect the power cord for any signs of damage. If damaged, contact customer support for replacement.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your SUNLU AMS Heater.

Common Issues and Solutions

- **Device not powering on:**
 - Check if the power cord is securely connected to both the device and the power outlet.
 - Ensure the power outlet is functional. Try plugging in another device.
- **Filament not drying effectively:**
 - Verify that the temperature and time settings are appropriate for the specific filament type.
 - Ensure the AMS Heater is properly sealed and there are no significant air leaks.
 - Check the humidity display to confirm the drying cycle is active.
- **Unusual noises or odors:**
 - Immediately power off the device and disconnect it from the power source.
 - Inspect for any visible damage or foreign objects inside the unit.
 - If the issue persists, contact customer support.
- **Error messages on display:**
 - Refer to the specific error code (if any) in the full user manual (if available) or contact customer support with the error details.

Importance of Dry Filament

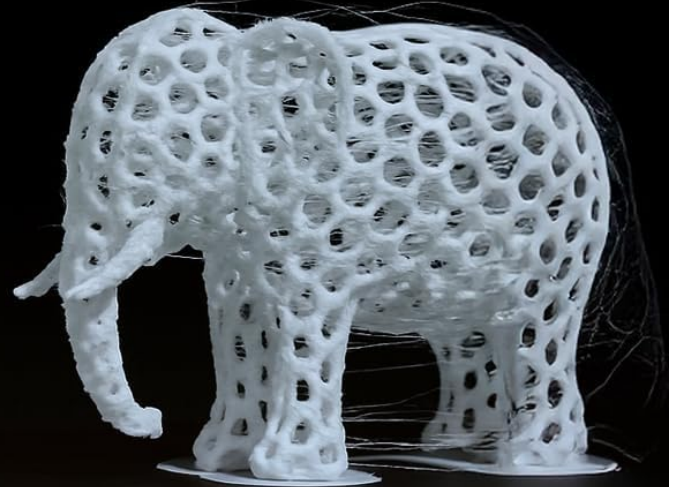
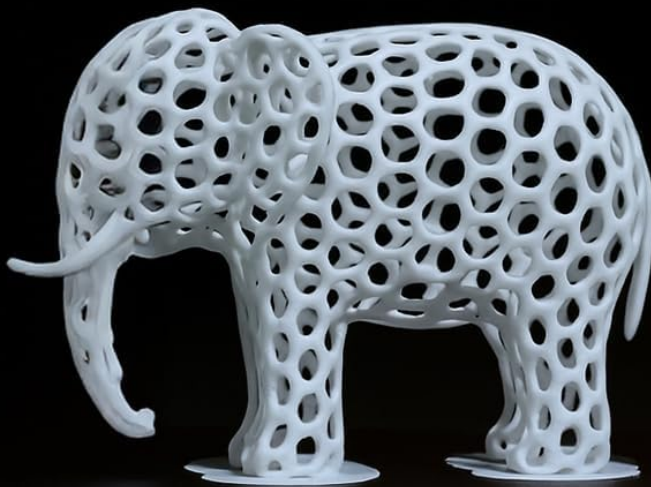
Humid filament can lead to various printing problems, including:

- Clogging of the nozzle.
- Stringing and oozing.
- Poor layer adhesion.
- Bubbles or voids in prints.
- Reduced print strength and quality.

Using the SUNLU AMS Heater helps mitigate these issues, resulting in smoother and more reliable prints.

Pourquoi avoir besoin d'un séchoir à filament

Le chauffage SUNLU AMS empêche le colmatage, les fils parasites et la mauvaise adhérence causés par un filament humide.



PLA+ après séchage (50 °C-6 h)

PLA+ avant séchage

Image: A visual comparison demonstrating the improved print quality achieved with properly dried filament versus humid filament.

7. SPECIFICATIONS

Feature	Detail
Brand	SUNLU

Feature	Detail
Model Number	SUNLU AMS Heater
Material	AMS Heater
Color	Black
Product Dimensions (LWH)	363mm x 278mm x 131mm
Product Net Weight	1.7 kg
Time Setting Range	0-99 Hours
Temperature Control Range	35°C - 70°C
Humidity Display Range	10% - 90%
Heating Method	PTC
Compatible Filaments	PLA, TPU, ABS, ASA, PETG, PC, PA
Filament Diameter	1.75mm / 2.85mm
Power Input	AC 110V 60Hz or AC 220V 50Hz
Maximum Operating Power	390W
Standby Power	0.6W
Rated Power	220W
Country of Origin	China

8. WARRANTY AND SUPPORT

Warranty Information

The SUNLU AMS Heater comes with a **1-year warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or improper installation. Please retain your proof of purchase for warranty claims.

Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact SUNLU customer support through the official website or your retailer. Provide your product model number and a detailed description of the issue for efficient service.

Online Resources: Visit the official SUNLU website for FAQs, updated manuals, and additional support resources.

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question