ARTILLERY

HORNET

Installation Manual

ARTILLERY 3D PRINTER

TABLE OF CONTENTS

READ THIS MANUAL COMPLETELY BEFORE ASSEMBLING AND POWERING UP YOUR PRINTER!

HAZARDS AND WARNINGS

The Artillery Hornet 3D printer has motorized and heated parts. When the printer is in operation, always be aware of possible hazards.

ELECTRIC SHOCK HAZARD

Never open the electronics bay of the printer while the printer is powered on. Before removing the access panel, always power down the printer and unplug the AC power cord.

BURN HAZARD

Never touch the extruder nozzle, the heater block, or the heated bed without first turning off the hotend and heated bed and allowing it to completely cool down. The hotend and heated bed can take up to twenty minutes to completely cool down. Also, never touch recently extruded filaments. The filament can stick to your skin and cause a burn.

FIRE HAZARD

Never leave flammable materials or liquids on or near the printer when powered on or in operation. Liquid acetone and vapors are extremely flammable.

PINCH HAZARD

When the printer is in operation, be careful never to put your fingers in the moving parts, including the belts, pulleys, gears, wheels, or lead screws.

STATIC CHARGE

Make sure to ground yourself before touching the printer, especially the electronics. Electrostatic charges can damage electronic components. To ground yourself, touch a grounded source.

AGE WARNING

For users under the ages of 18, adult supervision is recommended. Beware of choking hazards around children.

LEGAL

PRODUCT WARRANTY

The Artillery Hornet 3D Printer is covered by a limited warranty. For terms and conditions, see https://desk.zoho.com/portal/evnovo/en/kb/articles/evnovo-limited-warranty

OVERALL PROVISIONS

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LETTER FROM ARTILLERY

Dear Customer,

Thank you for choosing Artillery Hornet 3D printer.

This guide will step you through the assembly and the first run of the printer. If you have any problems during assembly, please contact our customer service or visit our official Facebook group at:

https://www.facebook.com/groups/artilleryhornet/

For a detailed warranty policy, please visit
https://desk.zoho.com/portal/evnovo/kb/articles/evnovo-limited-warranty

For support, please send an email to support@artillery3d.com
or visit our ticketing page at
https://desk.zoho.com/portal/evnovo/newticket

Or you can visit our Facebook group at
https://www.facebook.com/artillery3d

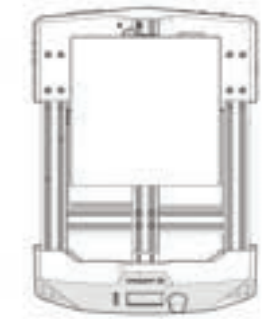
Regards,

Artillery

Shenzhen Yuntu Chuangzhi Technology Co., Ltd.
Last update date: 29 January 2021
This manual is updated to the date of printing,
please refer to the electronic version if in doubt.

ACCESSORY CHECKLIST

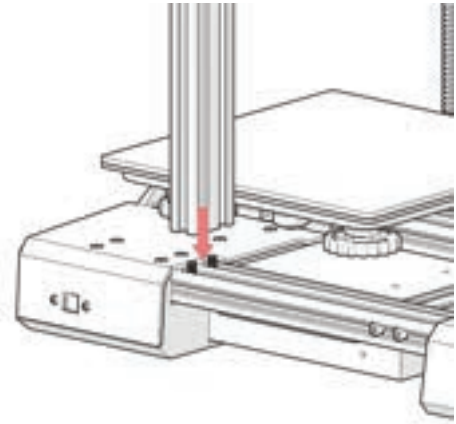
EN



ASSEMBLY

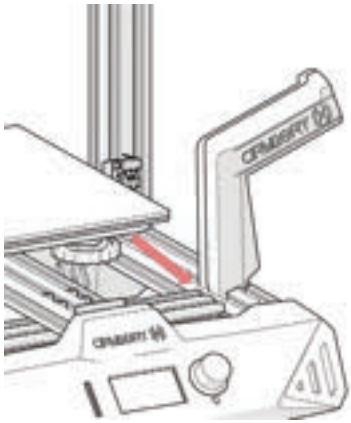
STEP 1

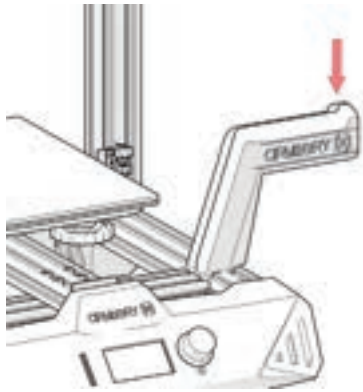
Align the XZ gantry to the notch on the base, then fix the gantry to the base with the 4pcs of M5x25 pre-installed on the base.



STEP 2

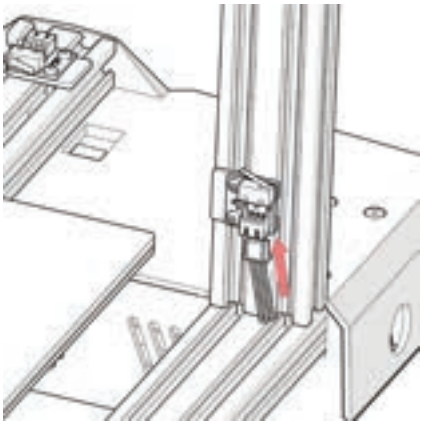
Slide the spool holder into the groove on the base as shown in the picture below, and press it down to fix in place:

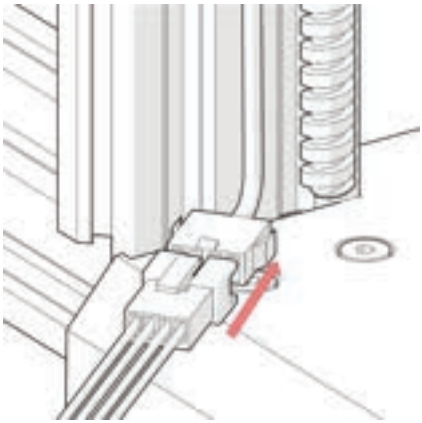


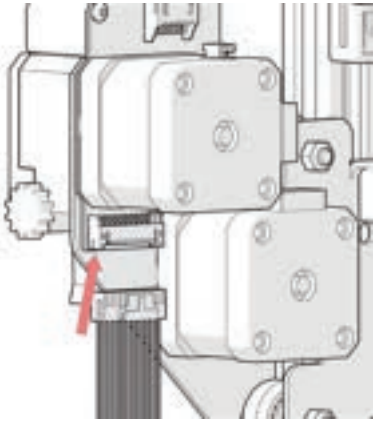


STEP 3

Connect the Z endstop cable, then connect the Z stepper motor, finally, connect the main cable.

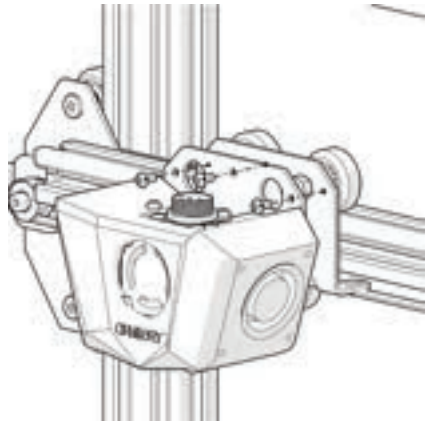






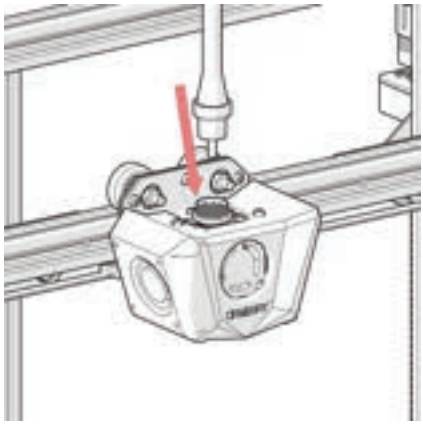
STEP 4

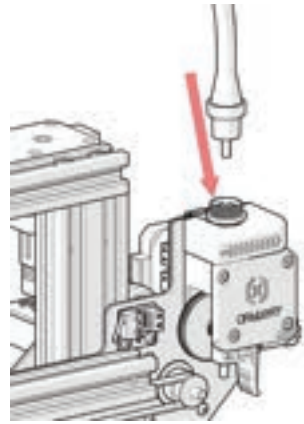
Install the hotend onto the carriage with the M3x6 screws (3pcs) supplied in the tool bag.



STEP 5

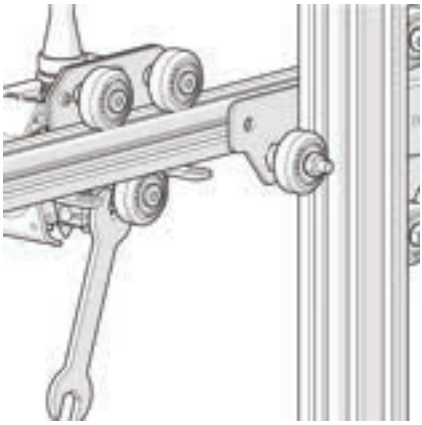
Connect the extruder cable, tighten down the cable by turning the locking mechanism.

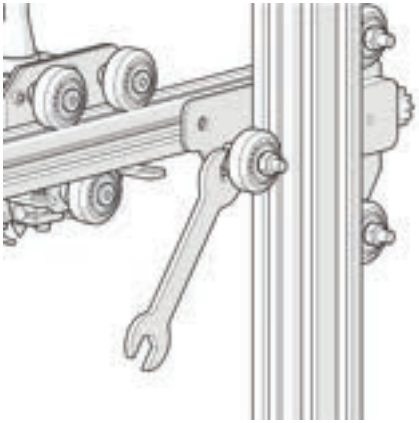


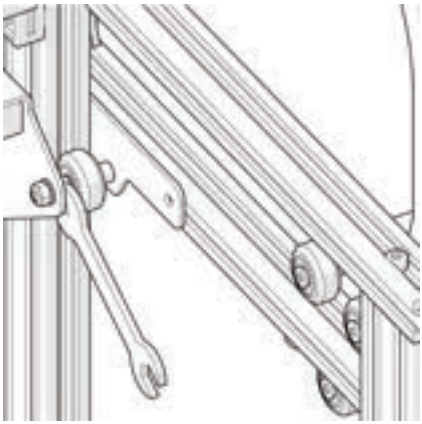


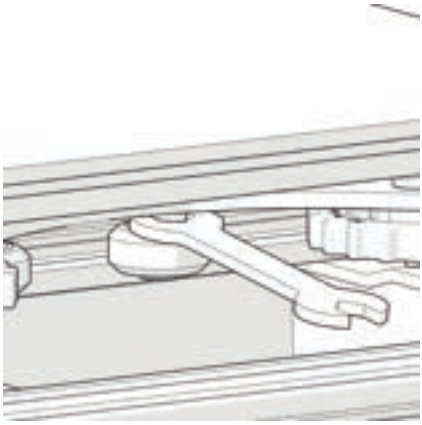
STEP 6

Adjust the tension on the eccentric nuts with the spanner supplied when needed.









LEVELING THE BUILD PLATE

To print good parts, the build plate needs to be leveled, and the nozzle needs to be about 0.1mm from the build plate in all locations. This is about the thickness of a single piece of A4 paper. You want to adjust the height of the build plate so that you can barely slide the paper between the nozzle and the build plate with only a little resistance.

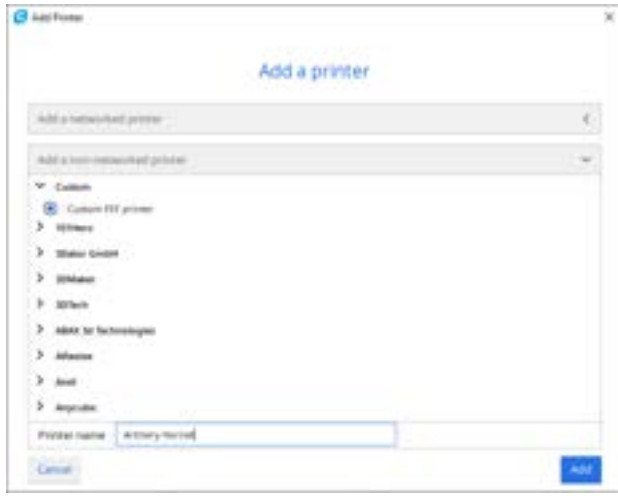
1. Select **Temperature** -> **Preheat PLA** -> **Preheat PLA**. This will heat up the bed and the nozzle t actual printing conditions, making the leveling more accurate. Wait for 1 minute after the machine reached the target temperature.
2. Select **Motion** -> **Level Corners**. This will home the machine first, then move the nozzle to the first corner.
3. Slide a piece of A4 paper between the nozzle and the build plate.
4. Turn the leveling knob under the bed closest to the nozzle until the piece of paper slides, with just a bit of drag.
5. Choose **Next** to move to the **Next Point**, and repeat **step 4**.
6. Leveling is completed after all 4 points are leveled.
7. You may want to repeat **steps 5-6** for **2-3 times** for better results, since adjusting one corner will affect other corners.
8. You may need to make fine adjustments to the bed level when you start printing. The first layer of the print will show whether the distance between the nozzle and the build plate is correct. You want it to be pushed into the build surface slightly to maximize surface area contact while still allowing good extrusion flow.
    - You can try to carefully adjust the leveling knob during the first layer of the print while the plate is moving until the distance between the nozzle and the build plate is producing smooth extruded lines.
    - After you have fine-tuned the bed level during the first layer, you may want to stop the print, clear the build plate, and restart the print.

PREPARING SLICING SOFTWARE

EN

This printer works with most slicing software like Slic3r, Cura, Simplify3D, etc. But we will go in detail for Cura software and tell you how to set it up so that you can make your first print. First, we recommend you to install the software on the memory card included, for other operating systems, please download from their official site.

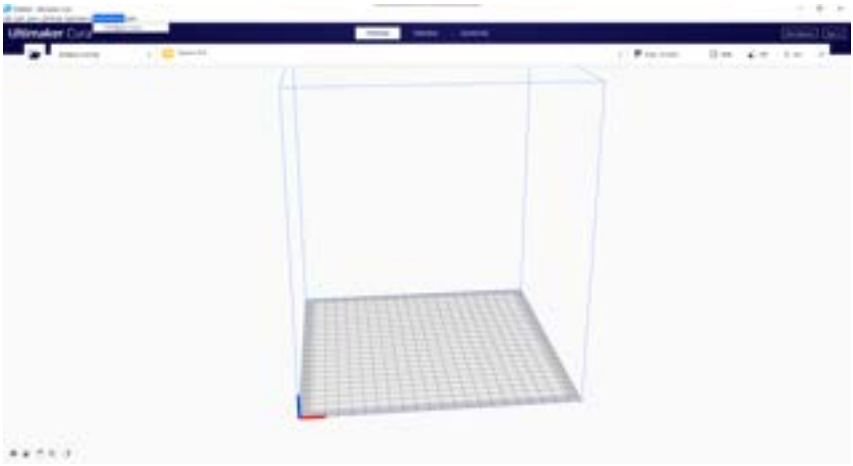
After installation and start the software, you should see the following screen, continue until you see **Add a printer** page:



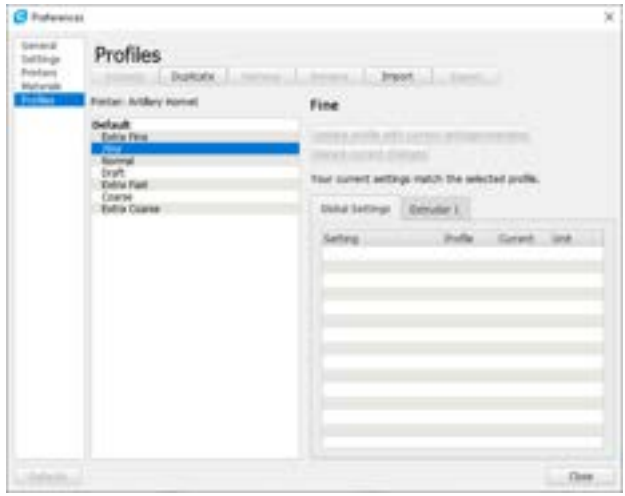
In the **Add a non-networked printer**, scroll down to **Custom** and choose **Custom FFF Printer**, and type in **Artillery Hornet** in **Printer name**. Then click on **Next** button.

Set **X (Width)**, **Y (Depth)** as **220**, **Z (Height)** as **250**. Make sure **Heated Bed** is checked, then copy and replace the content of **Start G-code.txt** and **End G-code.txt** on the memory card to the respective fields.

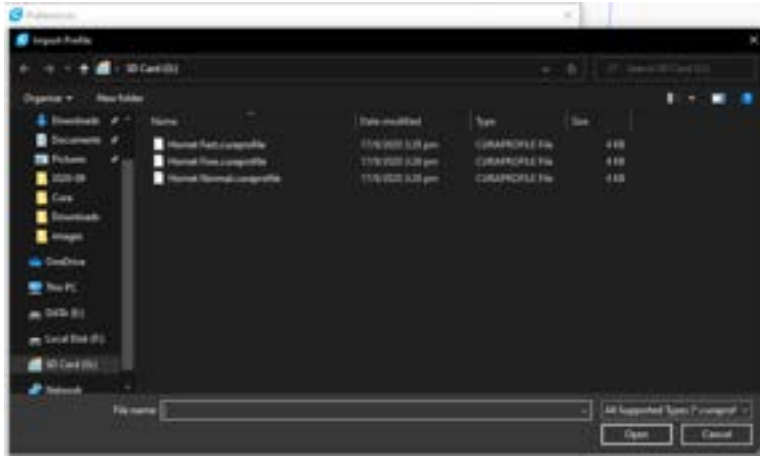
Change **Compatible material diameter** to **1.75**



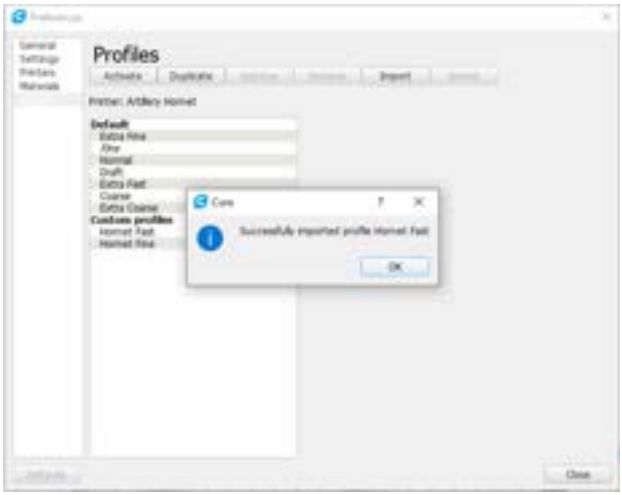
From toolbar, click on **Preferences** -> **Configure Cura...**



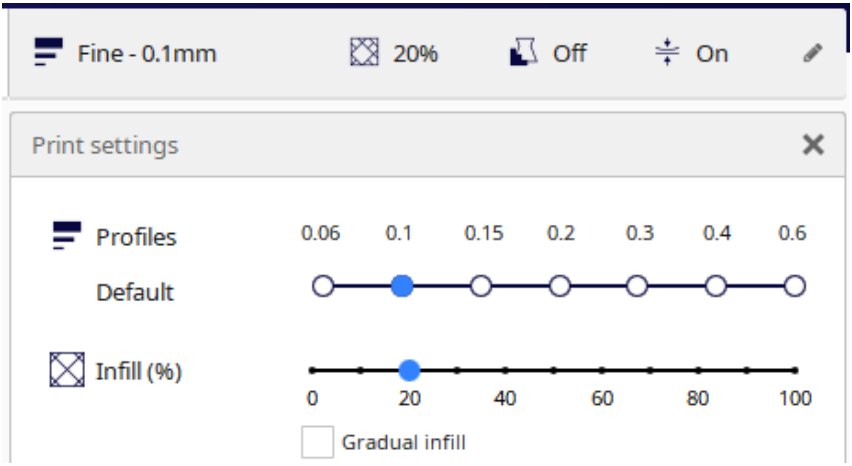
Click on **Profiles** then click on Import button.



Browse to the memory card and import the profile files.

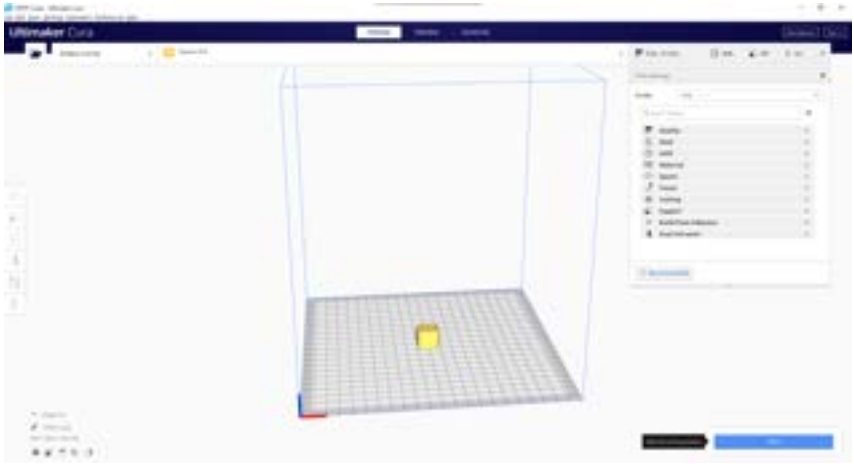


Profile successfully imported.

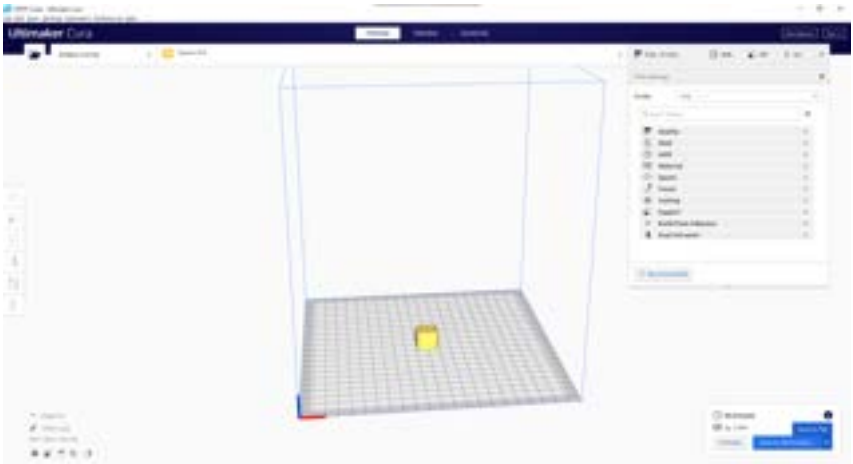


Click on **Print settings** and the floating window will pop up.

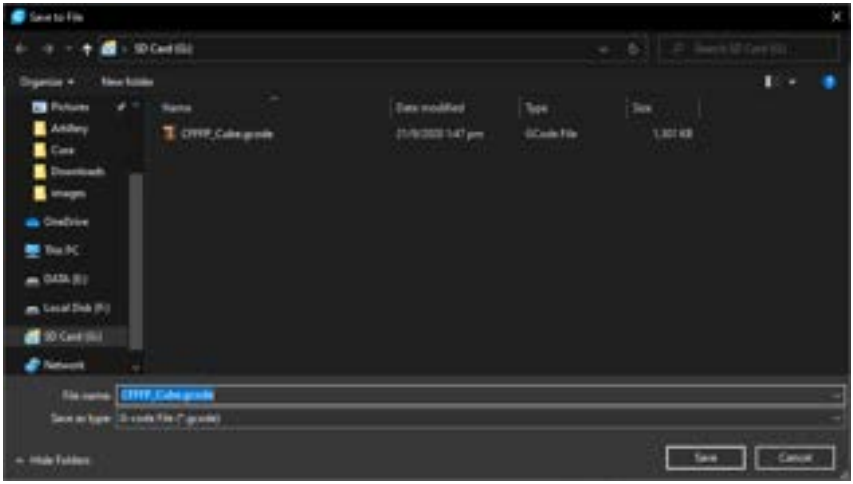
From the **Profile** dropdown, choose the imported profile.



Drag and drop the STL file (or other supported format) to the slicer or load the model file with **File** -> **Open File(s)...** then click on **Slice** button.



You can click on **Save to Removable Drive** (if the memory card is detected) or **Save to file** button to save the sliced file to the memory card.



Save the file to the memory card for printing.

SPECIFICATIONS

PRINTING

Print Technology:	Fused Deposition Modeling
Build Volume:	220x220x250 mm (8.7x8.7x9.8 in)
Layer Resolution:	100-300 microns
Filament:	1.75 mm (0.069 in)
Nozzle Diameter:	0.4 mm (0.015 in)
Print File Type:	Gcode
Material Compatibility:	PLA, PETG, TPU

SIZE & WEIGHT

Product Dimensions:	470x410x450 mm (18.5x16.1x17.7 in)
Shipping Box:	560x500x255 mm (22.0x19.7x10.0 in)
Printer Weight:	8 kg (17.6 lbs)
Shipping Weight:	9.8 kg (21.6 lbs)

ELECTRICAL

Power Requirements:	110V/220V, 350W
Connectivity:	Memory Card, USB

MECHANICAL

Construction:	Aluminum, ABS
Build Surface:	Glass + Aluminum plate
Stepper Motors:	1.8° step angle with 1/256 micro-stepping
XY Positioning Precision:	10 microns
Z Positioning Precision:	100 microns