



# MAKERGEAR M3

The Ultimate Workhorse



**MakerGear® LLC**  
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[www.makergear.com](http://www.makergear.com)



# Meet the **M3**



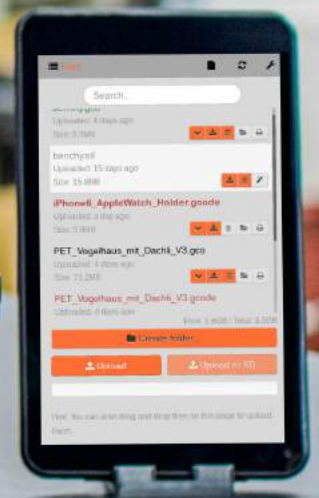
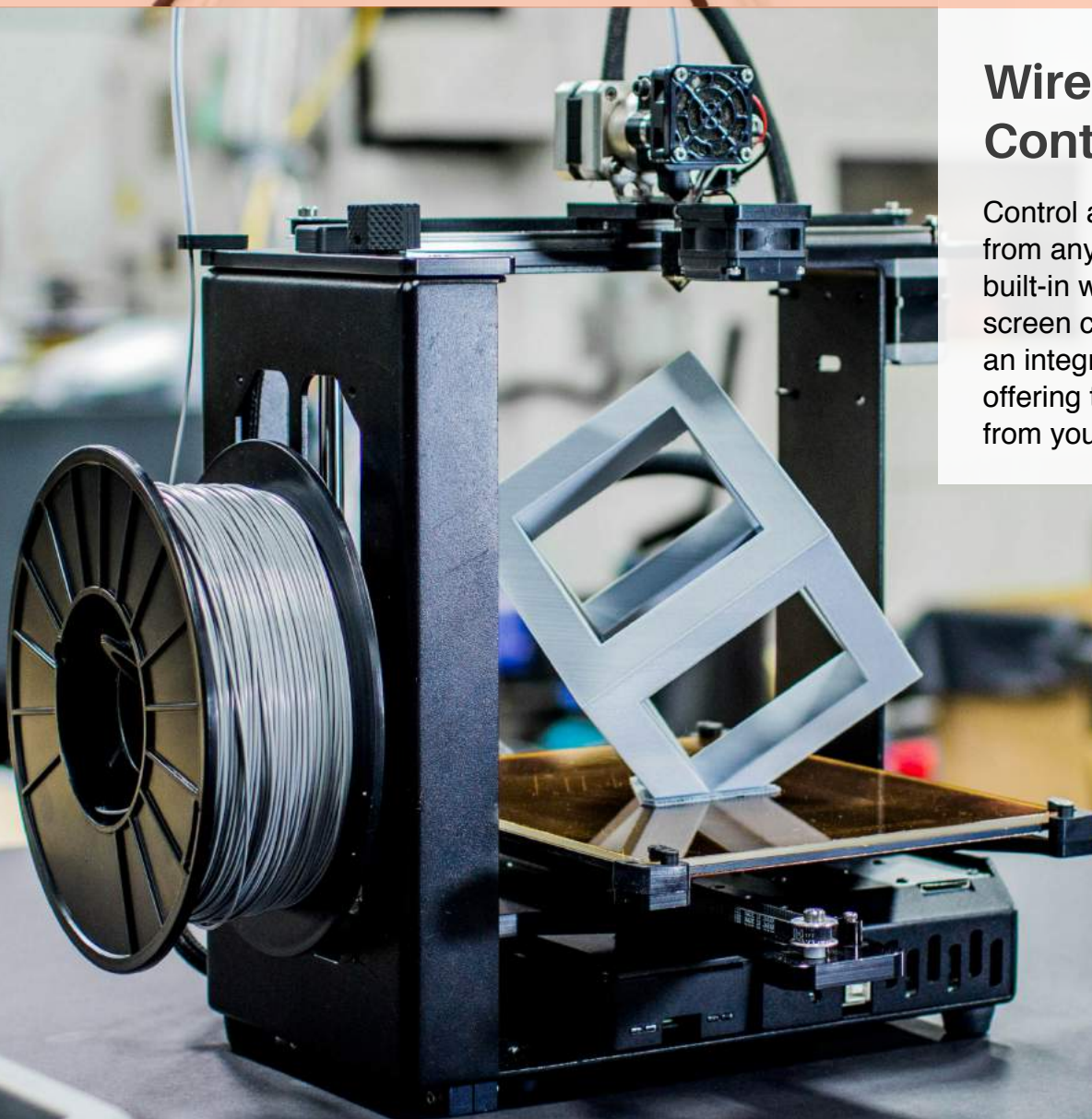
## V4 Hotend Family

Sleek, simple, and swappable, the V4 hotend reaches temperatures up to 300 °C to enable you to print in the widest range of FFF materials. Available in a variety of sizes ranging from 0.25 mm - 0.75 mm, V4 nozzles come in brass and stainless steel.

## Wireless Control



Control and monitor your printer from anywhere. The M3 offers built-in wifi connectivity, touch-screen control capability, and an integrated user interface, offering total control straight from your favorite device.



### Precise Linear Motion

Linear rails and bearings on independent X and Y axes mean smooth, true linear motion for precise prints. All moving parts move with respect to precision CNC machined cast aluminum components.

### Precision Cooling

Minimize air friction and maximize cooling distribution with the M3's all-new, powerful cooling system.

# M3

## Ready to Run. Built to Last.

### Dimensional Accuracy

The reason MakerGear has been awarded best in class, year after year. The M3 delivers outstanding print quality and dimensional accuracy. Achieve 0.020 - 0.350 mm (20 - 350  $\mu$ m) resolution on external features, as well as on holes and internal features.

### True-Leveling™

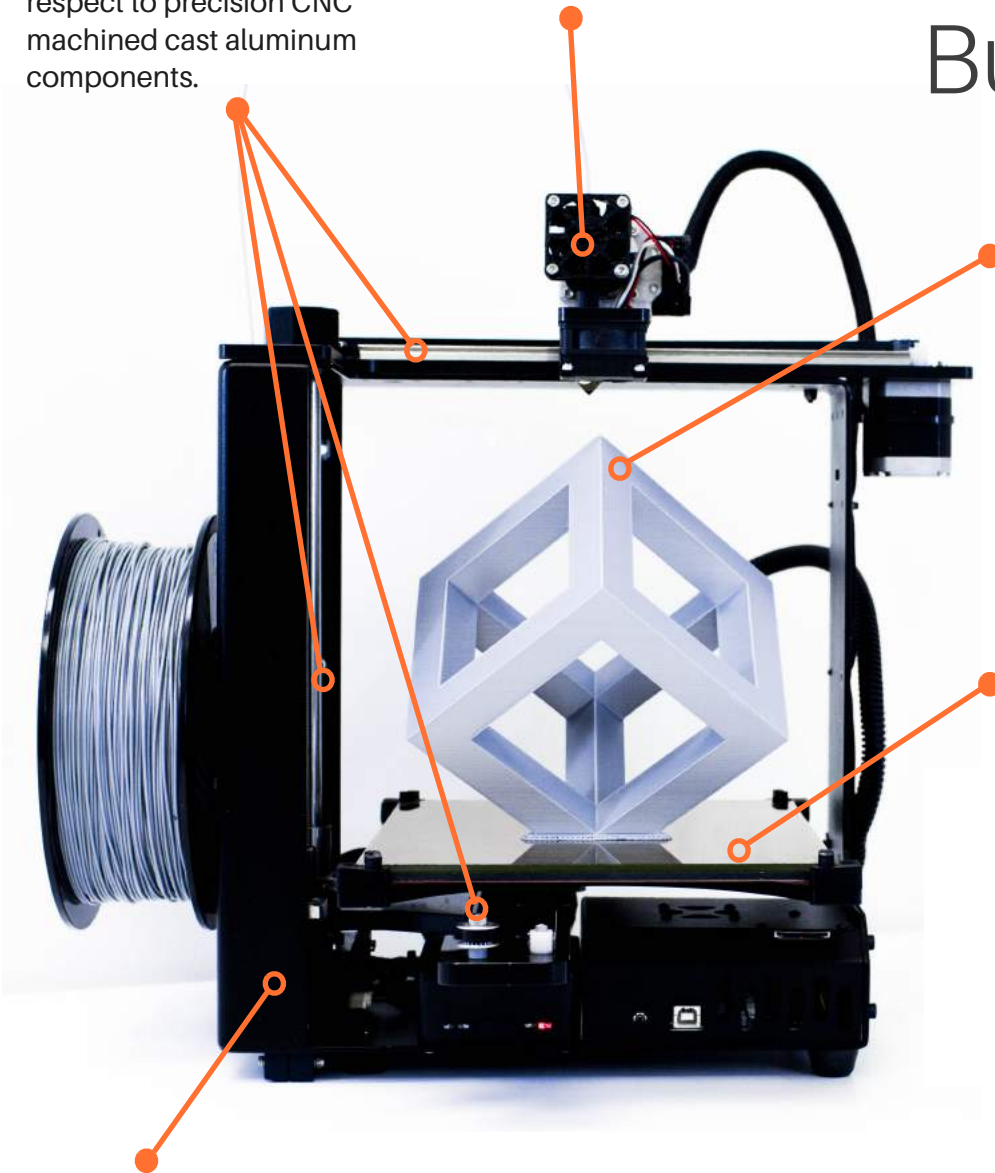
The proof is in the leveling. Do away with the irregularities of "auto-leveling", and enjoy the simplicity of a machine that is easy to properly level, and stays level. MakerGear's True-Leveling integrates hardware, software, and firmware controls that ensure precision, reliability, and truly linear performance for months at a time.

### Rock Solid Construction

Quality starts with stability. Our Powder Coated 11 gauge Steel Frame provides superior rigidity compared to the acrylic or lighter gauge frames on the market. That means alignment for the long-haul. Combined with its precision-machined components, MakerGear is the embodiment of stability and performance.

### Variety of Print Materials

The M3 prints in a broad range of materials including: ABS, HIPS, Nylon, PET-G, PET-T, PLA, polycarbonate, PVA, Flexible (TPU, TPE, etc.), metal composites, wood composites, carbon fiber composites, and more.





# M3

## Software to Suit You

The MakerGear M3 is compatible with many open-source and commercially available modeling, slicing, and printer control software for Windows, Mac and Linux.

### OctoPrint for MakerGear

Access everything you need in one place. From tutorials and tech support, to temperature controls and live monitoring, OctoPrint for MakerGear offers an integrated user experience with advanced customization options.

### Auto-Prep

Prepare STL files in one click for maximum efficiency. Choose from a menu of pre-configured material profiles, or upload your own custom-built profiles for even greater optimization.



## Warranty and Protection Plans

**Peace of mind comes in many forms, choose what works for you.**

Every MakerGear M3 comes with a standard **12-month warranty** that includes phone and email support and fast, free fulfillment on warranty parts shipped USPS Priority or FedEx Ground.\*

Want even better coverage? Signup for the **MakerGear Premium Protection Plan** to extend your peace of mind for years to come.

\*Non-US customers are responsible for shipping charges.

# MAKERGEAR M3 Specifications

## PRINTER & PRINTING PROPERTIES

<b>Technology</b>	Fused Filament Fabrication (FFF)
<b>Print Head</b>	Single Extrusion
<b>Build Volume</b>	203 x 254 x 203 mm (8" x 10" x 8")
<b>Filament Diameter</b>	1.75 mm
<b>Layer Resolution</b>	0.020 - 0.350 mm (20 - 350 $\mu$ m), recommended 0.050 - 0.250 mm (50 - 250 $\mu$ m)
<b>Movement Resolution</b>	0.001 mm (1 $\mu$ m)
<b>Print Head Travel Speed Range</b>	30 - 450 mm/s
<b>Build Speed</b>	0.35 mm nozzle: up to 18 mm <sup>3</sup> /s
<b>Build Plate</b>	Borosilicate glass plate with polyimide film (flat within 50 $\mu$ m)
<b>Build Plate Temperature</b>	20 - 120 °C
<b>Assisted Leveling</b>	Yes
<b>Assisted Leveling Method</b>	True-Leveling™
<b>Printable Materials</b>	ABS, HIPS, Nylon, PET-G, PET-T, PLA, polycarbonate, PVA, Flexible (TPU, TPE, etc.), metal composites, wood composites, carbon fiber composites, and more
<b>Nozzle Diameter</b>	0.35 mm standard, 0.25 - 0.75 available
<b>Nozzle Temperature</b>	180 - 300 °C
<b>Nozzle Heat Up Time</b>	< 2 minutes
<b>Build Plate Heat Up Time</b>	< 4 minutes (70 °C), < 10 minutes (110 °C)
<b>Operating Sound</b>	< 65 dBA
<b>Connectivity</b>	Wi-Fi, LAN, USB
<b>Monitoring</b>	Remote Monitoring Upgrade Kit coming soon

## PHYSICAL DIMENSIONS

<b>Dimensions with Spool &amp; Full Range of Motion</b>	533 mm (21") x 610 mm (24") x 420 mm (16.5")
<b>Unit Weight</b>	12 kg (26.5 lbs)
<b>Shipping Weight</b>	19 kg (42 lbs)
<b>Shipping Box Dimensions</b>	535 mm (21") x 535 mm (21") x 535 mm (21")

## POWER

<b>AC Input</b>	100 - 120 V (4 A)/ 220 - 240 V (2 A), 47 - 63 Hz/ 100 - 120 V (4 A)/ 220 - 240 V (2 A), 47 - 63 Hz
<b>Power Requirements/Consumption</b>	24 V DC @ 15 A/ 360 W maximum

## SOFTWARE

<b>Supplied Software</b>	OctoPrint for MakerGear / M3 QuickStart
<b>Compatible Software</b>	Wide variety of free/commercial modeling, slicing and hosting software programs
<b>Supported OS</b>	MacOS, Windows, Linux
<b>File Types</b>	STL, OBJ



# Global Accolades

There's a reason MakerGear has been chosen by thousands of users in all 50 states and more than 75 countries to create prototypes and products for business, classrooms, labs, and the marketplace. And there's a reason we've been awarded the best in class by 3D Hubs for three years running.



## For Businesses & Professionals

Round holes, smooth surfaces, clean layer changes, and sharp corners - the M3 delivers the print quality and reliability needed for prototyping and product manufacturing day after day, year after year. Need more than one? Talk to us about getting a print lab up and running in your business.



## For Schools

Whether your goal is to bring 3D printing to one classroom or an entire school district, MakerGear is dedicated to providing the information, tools, and support necessary to equip your students with the skills to succeed. Ready to use out of the box, low maintenance, and built with flexible software options, the M3 is ready for your classroom.



## For Makers

Our company was founded by Makers. And since the beginning we've had an active community of dreamers and doers creating and sharing their inspiring work on our MakerGear Forum. We are proud to provide the precision tools that bring your ideas to life.

# Meet MakerGear



**MADE IN THE USA** Our factory is located in Beachwood, Ohio where all of our machines are built and individually tested before shipping. Many of our components are manufactured within 25 miles of the factory including the fabricated steel frame and steel parts, machined cast aluminum alignment components, extruder parts and the wiring harness. Off the shelf components (motors, power supply, etc.) are sourced from domestic and foreign suppliers.



**INDUSTRIAL PRECISION** MakerGear products are tools, not toys. MakerGear printers are designed, engineered, manufactured, and inspected according to standards that ensure optimal performance for professionals and innovators— from designers, engineers, and architects to teachers and business owners, as well as hobbyists, DIY enthusiasts, and costume designers — in dozens of industrial applications.



**REAL CUSTOMER SERVICE** If you ever need to contact MakerGear for support, our team is staffed with the most knowledgeable and responsive MakerGear experts. We have an established record of providing prompt, friendly, and expedient technical support, by phone and email.



**THRIVING COMMUNITY** When you purchase a printer from MakerGear, you become part of the thriving MakerGear community - an enthusiastic, engaged, and helpful group of 3D printing experts — particularly designers, engineers, educators, and hobbyists. Whether you are 3D printing industrial parts, architectural models, DIY quad-copter drones, or your favorite cosplay props, the MakerGear Forum offers a wealth of guidance and information about 3D printing. Join our vibrant network of makers and professionals, and contribute to our ever-growing community in which designs, inspiration, and advice are freely shared.



## Contact Us

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