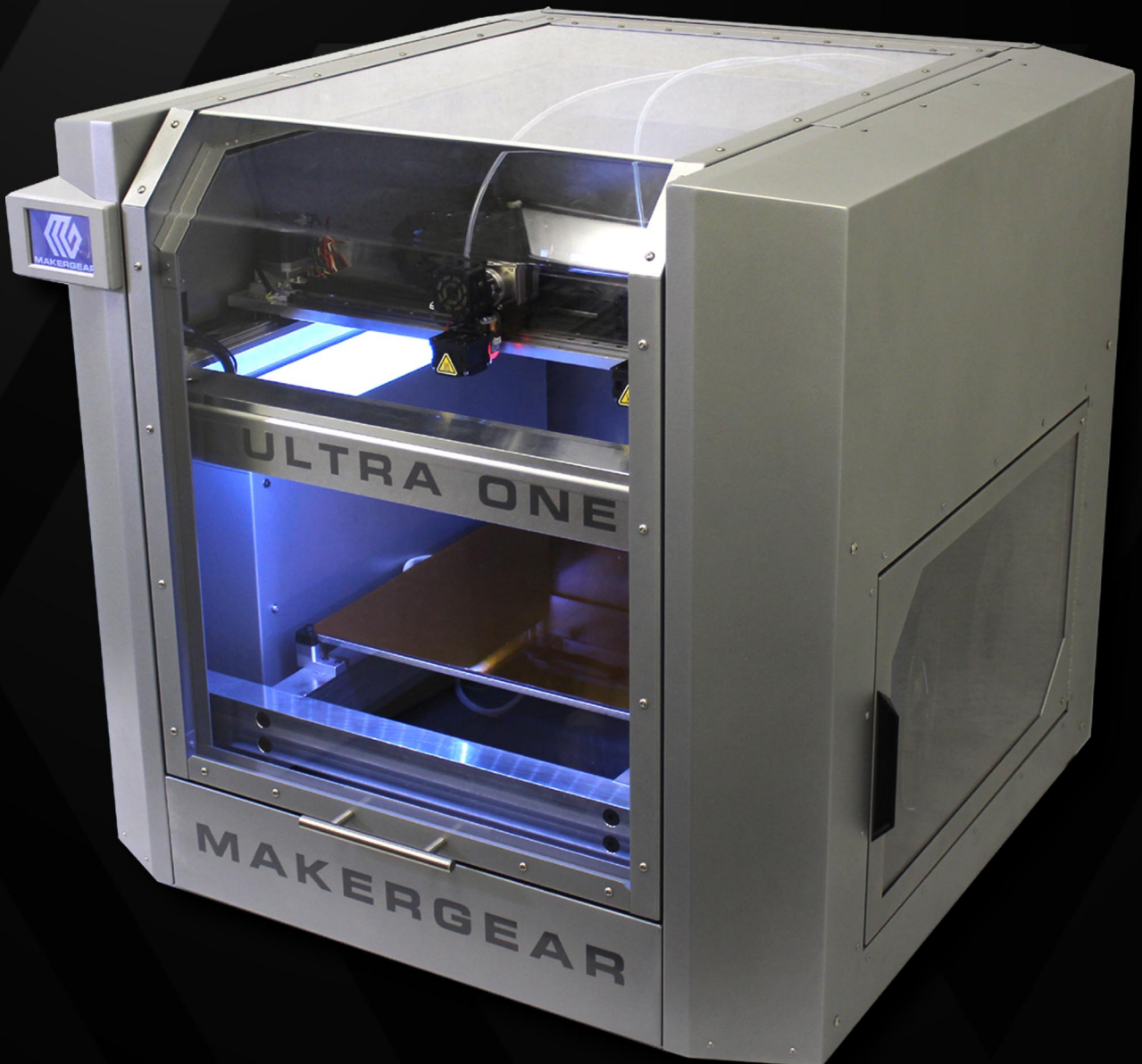




# MAKERGEAR

# ULTRA ONE

Industrial  
Series  
3D Printer

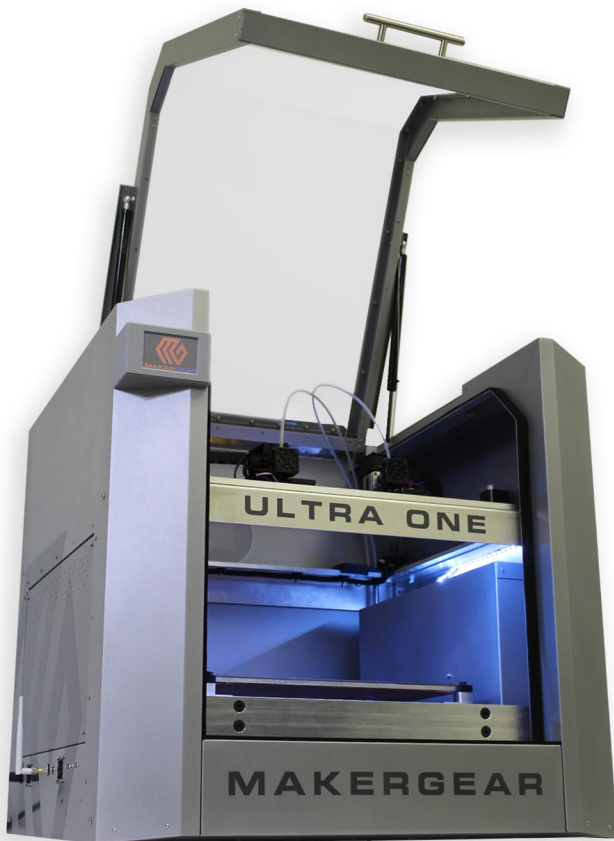


16" x 14" x 13"  
Build Volume

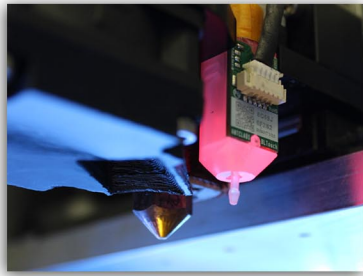
Proudly built in the USA

# ULTRA ONE

## Industrial Series 3D Printer

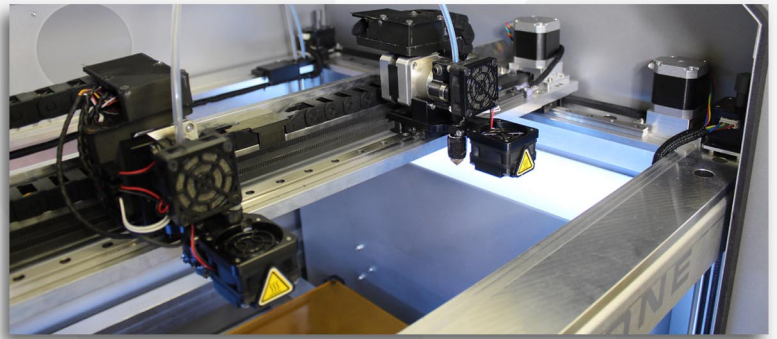


Designed and constructed with an uncompromising commitment to quality. Built without sacrificing the components critical to precision, repeatability, and durability. Capable of printing 16" wide, 14" deep, and 13" high, utilizing independent dual extruders, and supporting a wide variety of materials, the Ultra One delivers high quality FFF prints for your industrial, business, and educational needs.



### TOUCH PROBE

Maximize print adhesion with assisted leveling and auto-compensation.



### INDEPENDENT HEADS

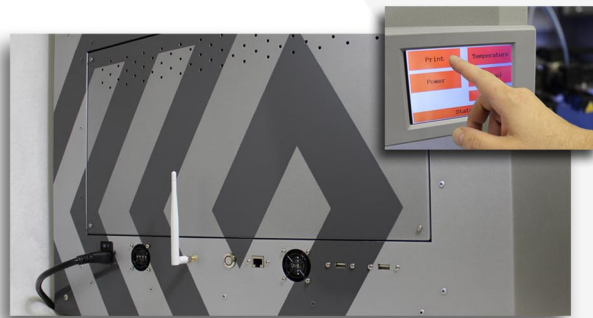
Cleaner prints when using multiple materials including soluble support.

### LINEAR RAILS

Industrial-grade components for true CNC reliability.

### FLEXIBLE ACCESS

Control with the built-in LCD or your WiFi or Ethernet device.



# MAKERGEAR



## TRUE MATERIAL FLEXIBILITY

High temperature capability enables users to print with a variety of materials. Unlike other industrial products, the Ultra One provides users the freedom to choose their filament supplier, greatly reducing ongoing costs.

## MATERIAL GRADES

PET	Carbon-Fiber Filled
PLA	Flexible (TPU/TPE)
ABS	Polycarbonate
HIPS	Polypropylene
ASA	Metal Filled
NYLON	BVOH (water soluble)

## SPECIFICATIONS

### TECHNOLOGY PRINT HEAD

Fused Filament Fabrication (FFF)  
Independent Dual Extruders (direct, non Bowden)

### BUILD VOLUME

16" wide x 14" deep x 13" high (406 mm x 356 mm x 330 mm)  
| Mimeo Mode 8" x 14" x 13" (203 mm x 356 mm x 330 mm)

### FILAMENT DIAMETER

1.75 mm

### LAYER RESOLUTION

0.10 - 0.35 mm with installed 0.5 mm nozzle | 0.05 - 0.50 mm available

### MOVEMENT RESOLUTION

0.001 mm per micro-step

### PRINT HEAD TRAVEL SPEED

10 - 500 mm/s

### BUILD PLATE

Borosilicate Glass Plate

### BUILD PLATE TEMPERATURE

20 - 140 °C

### MAX BUILD CHAMBER TEMP

50 °C

### ASSISTED LEVELING

Touch probe assisted leveling. Touch probe auto-compensation.

### NOZZLE TYPE & DIAMETER

Ships with 0.5 mm Brass. Brass (0.35, 0.5, & 0.75 mm) and Stainless Steel (0.35 & 0.5 mm) also available.

### NOZZLE TEMPERATURE

180 - 300 °C

### NOZZLE HEAT UP TIME

< 2 minutes (220 °C)

### X MOTION (LEFT/RIGHT)

The X gantry contains independent heads driven by Kevlar reinforced belts and guided with a precision linear rail.

### Y MOTION (FRONT/REAR)

Two precision linear rails guide the X gantry, which is independently driven by two Kevlar reinforced belts.

### Z MOTION (UP/DOWN)

Four 12 mm rods guide motion independently driven by four lead screws.

### BUILD PLATE HEAT UP TIME

< 10 minutes (110 °C)

### OPERATING SOUND

lower than 65 dBA

### AMBIENT OPERATING TEMPERATURE

15 °C to 32 °C (59 °F to 90 °F)

### STORAGE TEMPERATURE

0 °C to 32 °C (32 °F to 90 °F)

### CONNECTIVITY

Ethernet, WiFi, USB Drive (accessible through LCD screen)

### MONITORING

Webcam optional

### MACHINE WEIGHT & DIMENSIONS

165 lbs. (75 kg), 30" x 30" x 30"

### AC INPUT

100 - 120 V (15 A)/220 - 240 V (7.5 A), 47 - 63 Hz

### POWER REQUIREMENTS

1800 W maximum

### SUPPLIED SOFTWARE

Simplify 3D 4.0

### PRINTER INTERFACE

Touch Screen LCD & OctoPrint for MakerGear (web-based)

### SUPPORTED OS

Mac, Windows, Linux, iOS, Android

### FILE TYPES

.stl, .obj, .gcode

## WARRANTY

The Ultra One has a 12-month limited warranty and an optional warranty extension available through the MakerGear Protection Plan.

More info at [makergear.com/warranty](http://makergear.com/warranty).

MakerGear was founded in 2009 with the mission to empower individuals to create, prototype, and manufacture from their desktop. Most of our early customers were hobbyists hoping to access technology previously only available to those with significant revenue or funding. During these early years, we learned the importance of listening to our customers' needs and designed precise, reliable 3D printers to help them achieve their goals.

The partnership we developed with our customers enabled us to continue to improve our products and to evolve to meet industrial needs - resulting in countless 3D printing honors. After nearly a decade of supporting MakerGear customers and incorporating the feedback from our growing industrial segment, we are proud to release the Ultra One.



As part of our announcement of the Ultra One, a team of MakerGear employees took on an endurance challenge called 29029, where in the span of 36 hours, participants climb the vertical height of Everest. We thought this would be a very fitting way to unveil the Ultra One – the pinnacle of MakerGear's commitment to quality, reliability, precision, and customer support.

At MakerGear, we're excited about the challenges that lay ahead—if you think you have a good one for us, whether it be a 3D printing application or something else, we'd love to hear about it!

Proudly crafted in Cleveland, OH  
#madeinCLE

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