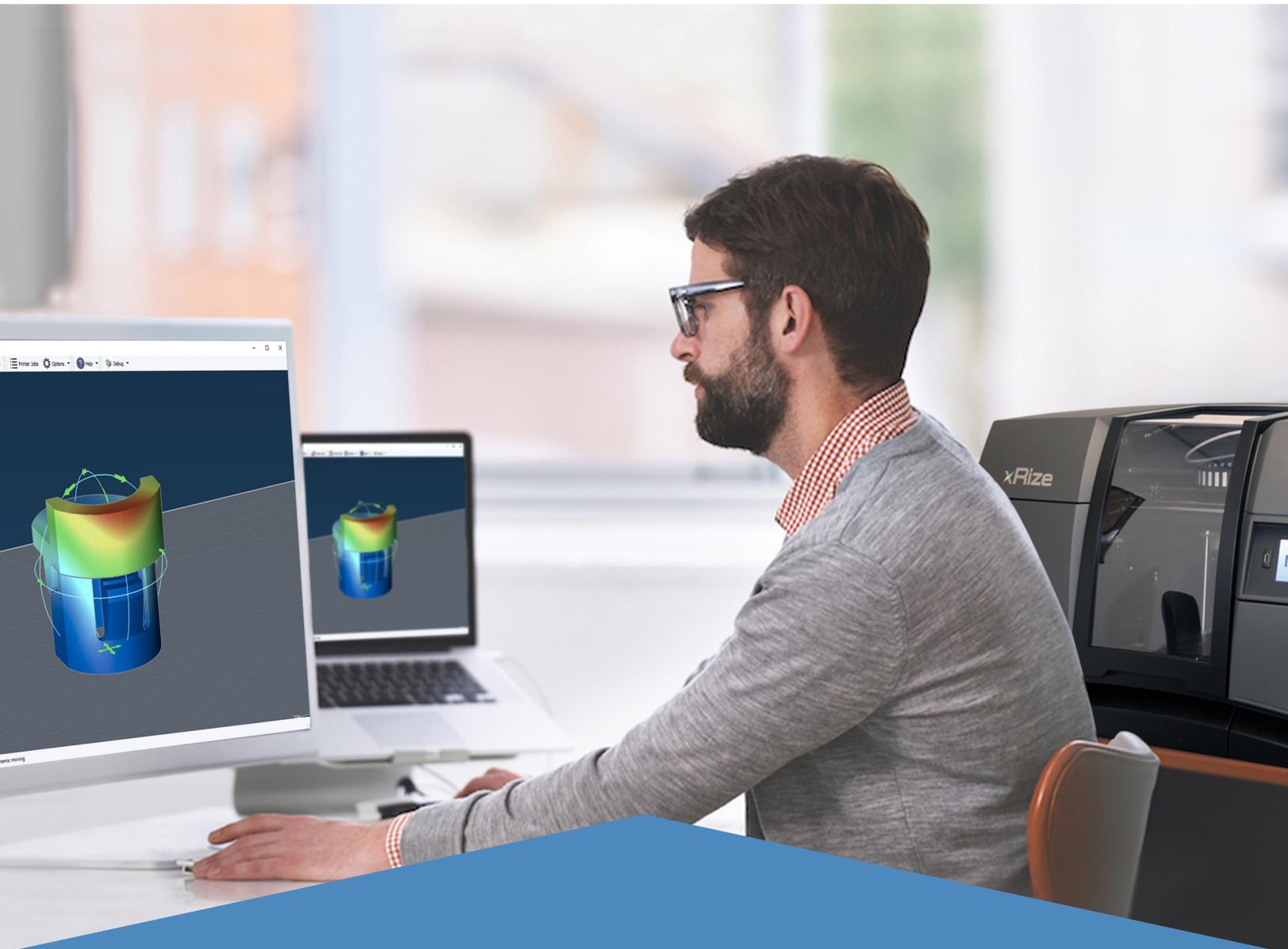


# INDUSTRIAL 3D PRINTING MADE SAFE AND EASY

Full Color + Safe + Strong + Affordable



**riZE**

# VERSATILE, MULTI-MATERIAL INDUSTRIAL SOLUTION

RIZE's versatile enterprise technology platform redefines additive manufacturing, making it easy and safe for all users, while providing industrial-strength parts suitable for functional prototyping, tooling and end-use applications. RIZE's intelligent and innovative solutions focus on the user as much as the machine. And, our patented technology enables much-desired IP security for companies.

## FULL-COLOR, FUNCTIONAL PRINTING

Indelibly apply graphics and text to parts to include QR codes, part numbers, instructions or safety warnings.

## BEST-IN-CLASS Z-STRENGTH

Ideal for functional prototypes, tooling and end-use parts.

## EASY TO USE, FASTEST TIME TO PART

Minimal, clean pre- and post-processing.

## DIGITALLY AUGMENTED PARTS

Text, images and QR codes for traceability, built-in trust and IP controls.

## SAFE MATERIALS AND PROCESS

People safe, environmentally friendly and recyclable. Suits office, production and field use.

## LOWEST COST OF OWNERSHIP

From initial investment to operational costs; a trained technician is not required.



# RIZE ONE

## THE FIRST HYBRID 3D PRINTER

RIZE™ ONE builds enhanced engineering thermoplastic parts with unmatched features, such as digital traceability and part identification, best-in-class Z-strength and simple post-processing.



Augmented Deposition, our unique and patented hybrid of extrusion and jetting makes this possible. By jetting a specially formulated release agent between layers of extruded material, support structures are quickly, easily and cleanly removed, while maintaining a superior finish on supported surfaces. Jetting also provides for the indelible application of graphics, text and digital tracing information on any part surface.

Industrial class features set the RIZE ONE apart. The heated build chamber ensures parts are printed with dimensional accuracy and superior layer adhesion. Locking covers prevent operator injury and comply with regulatory safety standards. Automatic filament swap simplifies supplies management to ensure uninterrupted printing. And consumable cartridges are

digitally encoded to ensure the correct process parameters are applied for every print job.

RIZE ONE is robust and designed to work in any environment. Zero VOC emissions makes RIZE ONE the right choice for offices, factory floors and any environment with health and safety concerns.

RIZE ONE combines strength, safety, security and speed for the most affordable and sustainable production of replacement and custom tooling, fixtures, jigs and end use parts.

### FEATURES

<b>Color</b>	Monochrome
<b>Build Material</b>	RIZIUM™ ONE , RIZIUM™ BLACK, RIZIUM™ ENDURA, RIZIUM™ CARBON*
<b>Industrial + Office Safe</b>	Yes, materials and process
<b>Heated Build Chamber</b>	Yes, for industrial part strength and accuracy
<b>Security</b>	Secure Internet Connection
<b>Fastest Time to Part</b>	Minimal pre-processing and post-processing

### SPECIFICATIONS

<b>Device Dimensions</b>	21.4" H x 36" W x 25.4" D (535 x 915 x 647mm)
<b>Build Volume</b>	12" x 8" x 6" (310 x 200 x 152mm)
<b>Weight</b>	135 lbs (61kg)
<b>Layer Thickness</b>	.250mm or .125mm
<b>Resolution</b>	X/Y 300dpi; Z 200dpi at .125mm layer thickness
<b>Accuracy</b>	X/Y +/- .127mm, or +/- .003mm/mm, whichever is greater and Z +/- layer thickness (.250mm or .125mm)

\*Final specs subject to change

# XRIZE

## THE FIRST FULL-COLOR INDUSTRIAL 3D PRINTER TO CREATE FUNCTIONAL PARTS WITH MINIMAL POST-PROCESSING

For the first time in the industry, XRIZE™ enables users to manufacture functional plastic parts in full color. XRIZE shares all the benefits of RIZE ONE, including safety, ease of use, minimal pre- and post-processing and minimal material management. Users throughout the enterprise, from engineering to marketing to the manufacturing floor, can use XRIZE to easily manufacture full-color prototypes for FEA and stress analysis, tooling with safety instructions, end-use consumer products such as eyewear, package design, GIS mapping, realistic anatomical parts for patient/clinician communication, pre-surgical planning and education and parts for marketing and entertainment.

XRIZE leverages RIZE's Augmented Deposition process by extruding an engineering-grade thermoplastic and simultaneously jetting C, M, Y, K (cyan, magenta, yellow and black) inks through industrial printheads to achieve the full-color part. RELEASE INK is jetted between the part and the automatically-generated supports to enable peel-away support removal, leaving a smooth surface finish. With RIZE ONETOUCH software, users can quickly and easily apply text, images and texture maps to monochrome part files and import color CAD files.



### FEATURES

<b>Color</b>	Full, CMYK color
<b>Build Material</b>	RIZIUM™ ONE , RIZIUM™ BLACK, RIZIUM™ ENDURA, RIZIUM™ CARBON
<b>Industrial + Office Safe</b>	Yes, materials and process
<b>Heated Build Chamber</b>	Yes, for industrial part strength and accuracy
<b>Security</b>	Secure Internet Connection, Optional Cloud connectivity
<b>Fastest Time to Part</b>	Minimal pre-processing and post-processing

### SPECIFICATIONS

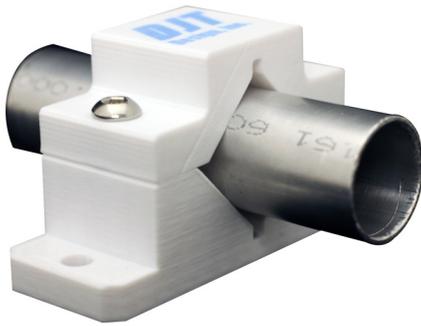
<b>Device Dimensions</b>	21.4" H x 36" W x 25.4" D (535 x 915 x 647mm)
<b>Build Volume</b>	12" x 8" x 8" (310 x 200 x 200mm)
<b>Weight</b>	137 lbs (62kg)
<b>Layer Thickness</b>	.250mm or .125mm
<b>Resolution</b>	X/Y 300dpi; Z 200dpi at .125mm layer thickness
<b>Accuracy</b>	X/Y +/- .127mm, or +/- .003mm/mm, whichever is greater and Z +/- layer thickness (.250mm or .125mm)

## MATERIALS

The RIZIUM™ family of filaments and inks are designed for high strength, superior layer adhesion, long term stability and clean operation. All RIZIUM filaments are VOC-free for safe operation in enclosed environments, and require no special venting, disposal equipment or protective gear.

### RIZIUM CARBON

RIZIUM™ CARBON is based on an engineering-grade thermoplastic, reinforced with carbon fiber for a higher modulus and incredible visual finish. RIZIUM CARBON is ideal for applications such as functional prototyping for manufacturing.



### RIZIUM ENDURA

Fiber-reinforced RIZIUM™ ENDURA delivers high impact strength and dimensional stability across large areas. RIZIUM ENDURA is ideal for large functional parts and is compatible with RIZE full-color inks.

### RIZIUM ONE AND RIZIUM BLACK

Our own compound of engineering-grade thermoplastic, parts made with RIZIUM™ ONE and RIZIUM™ BLACK have an interlayer bond superior to 3D printed polycarbonate, carbon-fiber reinforced nylon, and ABSPlus. Moisture absorption less than .01% enhances stability and simplifies storage and handling.



### CMYK AND MARKING INKS

Indelible inks in vivid colors enhance communication of branding, imagery and data on physical models. Text and graphics can be applied to any surface for adding part numbers, operating instructions and safety warnings. A part digitally augmented with data, such as a QR code, builds trust and traceability into the additive manufacturing process.

### RELEASE ONE

Jetted between the part and its support structure, RELEASE ONE is a repelling agent that weakens the bond between the part and the support structure, making support removal faster and safer than any other 3D printing process, while preserving a smooth surface finish.



# SOFTWARE AND CLOUD PLATFORM

## RIZE ONETOUCH

The RIZE slicer has been custom designed from the ground up to generate tool paths for building parts fast without compromising strength. Users can import files in multiple formats, including stl, obj, 3mf, ply, vrml, and flx or use the SOLIDWORKS plug-in to directly import a model from CAD. Intelligent slicing automatically identifies and handles problems in the imported file, such as incomplete surfaces or mismatching surface boundaries. A simple and intuitive interface lets users rotate, move and scale one or multiple parts on the build bed for printing with automatic support-structure generation. Use the default settings for reliable results or the advanced options to specialize output for unique situations. And, only RIZE ONETOUCH software includes markup features to apply text, graphics and 2D barcodes to parts.

## RIZE CONNECT

RIZE CONNECT enables users to remotely manage and monitor their RIZE ONE and XRIZE 3D printers from any location to improve production efficiency. Users can receive notifications, queue jobs and manage an enterprise print farm with an intuitive graphical user interface. Using RIZE CONNECT, users can also build greater security into their parts with digital part identification and other forms of part augmentation, such as QR codes and version control for part traceability, compliance and authenticity.

