

# Robotfactory

## 3DLPrinter-HD 2.0+ - ACCURACY, SPEED, EASY OF USE



The **3DLPrinter-HD 2.0+** is a 3D printer fast, robust and precise, that allows you to achieve excellent surface resolution and definition of details, guaranteeing the best **price - performance ratio** for the same range of product. The **3DLPrinter-HD 2.0+** has **EC certification** and it is provided with a **warranty of 1 (one) year**.

The **3DLPrinter-HD 2.0+** builds, with high-precision, 3D models obtained by layering the light curing resin, using **DLP © ①** printing technology. Excellent its use for prototyping of 3D objects, aesthetic and designer evaluation, small series production, in fields such as: jewelry, goldsmith's, design, dentistry, architecture, production of medical equipment, etc.

The **3DLPrinter-HD 2.0+ solution** is offered as a complete **printing system**, in fact it is provided with the management software and all the accessories needed for cleaning and finishing the printed part.

To complete the **3DLPrinter-HD 2.0+** system, **Robot Factory** provides two different types of resin:

- 'castable' (**RF Resin - CS Red**), it can be used for the process of lost wax casting
- 'mechanics' (**RF Resin – HT Green**), it can also be used in the vulcanization process ("rubberizing")

All resins are supplied with instructions for use and safety data sheets (MSDS).

The **management software**, supplied with the printer, focuses on **intuitive and fast use**. For the realization of the 3D object the software start from a three-dimensional model, with the appropriate supports, in the **".stl"** (**Standard Tessellation Language**) format which is a native file format for all **3D CAD** systems.

The **ease of use** of the printing system is due not only to the ease use of the management software, but also at a structure designed and engineered to ensure the best printing results with a few **simple steps**. Once done the set point of the Z axis, inserted the resin into the vat, close the top cover and uploaded the **file ".stl"**, you start the "slicing", with a thickness that can range **from 30µm to 100µm** (parameter set by the user), and you'll go directly to the printing. The software performs the slicing in an almost immediate and the printing, thanks to an ingenious mechanical choice, it is very fast. **Result**, the whole process of printing is done in a **very short time**.

Once you have finished printing, you can proceed to the cleaning and finishing, using **all** the tools provided with the printer, which include: **metal spatula** to remove the piece from the construction base, the **ultrasonic device** to dissolve any residual resin, up to the **UV oven** used for stabilization and hardening the resin.

With its unsurpassed **printing speed** the **3DLPrinter-HD 2.0+** is an extremely useful tool for the professional creation of accurate models with high definition, just think that setting a resolution of **50 µm**, you can print one or more pieces (depending how much pieces you want to place on construction base) of approximately 2.5 cm in height in one hour, a speed among the highest reach by printers in the same range of product. Consider also the fact that the size of the **building size** are particularly generous: **100 x 56,25 x 150 mm** (Length, Width, Height).

The printer **3DLPrinter-HD 2.0+**, is equipped with a carrying **structure** of steel powder coated of black color and anti-reflective, and **prismatic linear guideway with** double ball bearing, that make it very **stable, robust and fast**, ensuring optimum performance and reliability, as well as the details and the surface quality of the printed part, all qualities necessary to '**professional**' utilization of the 3D printing.

If we consider that, for its performance, **3DLPrinter-HD 2.0+** is placed in a range of market very close to the most prestigious brands of stereolithographic printers with markedly higher costs, the price of the **complete system** (Printer, Management Software, Accessories and Resin) is particularly competitive, especially taking into account the exceptional convenience of all consumables, first of all the resin which, you know, is the element which more than any other influence on printing costs.



#### Technical Specifications

- **Overall dimensions:** 310 x 380 x 710 mm (Length, Width, Height)
- **Weight:** 35 Kg
- **Working dimensions:** 100 x 56,25 x 150 mm (Length, Width, Height)
- **Power supply:** 230v 50-60Hz – 400 W
- **X – Y resolution:** 50 µm (1920 x 1080 Pixel)
- **Z resolution:** from 30 µm to 100 µm, set by the user
- **Vat of resin** easily removable / Bottom of Vat in '**Siligel**' which allows quick replacement
- **Construction base** removable
- **Coverage** - protection in PMMA with ball bearings guide, with locking end
- **File** format input: **STL**
- Declaration of **EC conformity**
- **1 (one) year of warranty**
- **MADE IN ITALY.**

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① *The prototyping technique DLP® (Texas Instruments Inc. registered trademark) uses a special projector to project images on the photosensitive polymer resin, contained in a vat. The projected image hardens a layer of resin at a time, until it realizes the full 3D model*

*Robot Factory S.r.l. reserve to themselves the right to make changes in specifications, materials and accessories without prior notice.*