

# OMNI500 LITE



## **BUILD VOLUME 460 x 460 x 600 mm**

You can print big elements or a few smaller ones at the same time.

## **2 EXTRUDERS WITH FILAMENT PRESENCE SENSOR**

The machine is equipped with dual heads which make it possible to print on both sides of a fabric during one printout, the main build and the support material.

## **PRINTER MANAGEMENT BY WEBSITE**

The printer can be managed through a dedicated website, so you can easily start printing and control the process remotely.

## **PRINTER FARM MANAGEMENT**

The possibility of remotely building and managing a printer set.

## **AUTOMATIC PLATFORM CALIBRATION**

Those are only selected functions which will optimize your work and allow you to make 3D printouts fast and effectively.

## TECHNICAL SPECIFICATION

|                                |                                  |
|--------------------------------|----------------------------------|
| Print technology               | FFF (fused filament fabrication) |
| Build volume XYZ               | 460 x 460 x 600 mm               |
| Chamber                        | enclosed and isolated            |
| Min. layer height              | 50 µm                            |
| Build platform                 | heated, glass-ceramics surface   |
| Number of printing heads       | 2                                |
| Drive type                     | screw drives in all axes         |
| Nozzle diameter                | 0,4 mm (optionally 0,6 / 0,8 mm) |
| Filament diameter              | 1,75 mm                          |
| Max. printing speed            | 86 cm³/h                         |
| Dimensional accuracy           | +/- 0,2% *                       |
| Automatic platform calibration | yes                              |
| Air filtration                 | CARBON + HEPA (optional)         |
| Max. head temperature          | 260 °C / 360 °C / 500 °C         |

|                           |   |
|---------------------------|---|
| Max. platform temperature | 130 °C  |
| Max. chamber temperature  | 50°C  |
| Communication             | SD card, Ethernet, WiFi   |
| User interface            | 7" LCD touch screen, website + camera   |
| Software                  | Simplify3D  |
| Predefined print settings | Yes, for filaments from Omni3D and for selected filaments from external producers |
| Compatible files          | .stl, .obj, .3mf, .gcode, .factory  |
| Power Supply              | 230 V / 50 Hz (optional 110 V / 60 Hz)  |
| Max. power consumption    | 2,0 kW  |
| Printer dimensions        | 118 x 105 x 76 cm   |
| Printer weight            | 150 kg  |
| Safety certification      | CE  |
| Warranty                  | 12 months (optionally extendable)   |

\* Dimensional accuracy depends on whether the model has been appropriately scaled before printing it out – so as to compensate material shrinkage, model geometry, and layer height.

# FILAMENTS COMPATIBLE WITH OMNI500 LITE

## ABS-42

This is a standard filament of great versatility. It is highly durable and mechanically strong and is also known for its ease of processing.

## ABS-20s

Modified ABS material with increased flexibility. It is both hard and impact resistant, ideal for models used in industry. It is also very light and durable, so it is perfect for producing tools, setting equipment, final elements, etc.

## ASA-39

This material is used in projects where there is a need for resistance to atmospheric conditions, especially UV resistance. It is also filament with high-quality wall finish and high strength.

## PET-G-32

Material with low shrinkage. It can be used to create highly accurate models. It is suitable for the food industry and medical applications as it can be sterilised.

## HIPS-20

A filament used mainly to create supports during printing with all materials (except nylon). This material is also used in the metal industry to print lost molds due to its ease of firing.

## PLA-36

Biodegradable polymer, made from renewable resources. Universal, used in many industries. It is characterized by high precision and aesthetics of made models, ease of printing and excellent adhesion between layers.

## TPU-93A

Flexible material with a hardness of 93A Shore. It has such features as low processing shrinkage, high durability and good bonding of layers, making it suitable for the production of tool components, e.g. those in contact with the car body, flexible hoses, holders and housings.

## PVA

Support material, dissolvable in water. The filament enables printing supports in enclosed spaces, thanks to which there are no geometric restrictions on the printed models. PVA cooperates well with PLA and PET-G (it does not require high temperatures).

## WS-20

Support material, dissolvable in water. This filament has increased resistance to high temperatures, which makes it compatible with the ABS-20s filament.

## Vinyl 303 (PVC)

Polyvinyl chloride has many advantages: it is resistant to chemical agents, oils, acids, and weather. It has great resistance to chemical corrosion and fire, high mechanical, thermal stability, and low moisture absorption.



## COOPERATION WITH OMNI3D

1



### PRE-IMPLEMENTATION AUDIT

Return on investment, cost-benefit analysis - these are just some of the elements of the audit prepared by 3D printing professionals.

2



### SAMPLE PRINT

Check the print quality. Make a sample print of your model.

3



### RANGE OF POSSIBILITIES

Equipment purchase, 3D printing on demand or printer rental. Choose the best option for your business.

4



### TRAINING & SUPPORT

Client installation, employee training, technology support, and service.

[sales@omni3d.com](mailto:sales@omni3d.com), +48 61 666 12 34

OMNI3D Sp. z o. o., ul. Świętego Michała 43, 61-119 Poznań, Poland

[www.omni3d.com](http://www.omni3d.com)



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