



Laser Sintering System for the Production of Serial Parts  
and Functional Prototypes from Polymer Materials



# EOS P 396: Cost-Effective Industrial Manufacture of Components – Highly Efficient, Reproducible and Reliable

With an effective build volume of 340 x 340 x 600 mm, EOS has managed to set standards in the medium frame Laser Sintering segment. This highly productive system delivers tool-free manufacture of serial components, spare parts, functional prototypes and models directly from CAD data.

## High productivity with low cost per part and homogeneous part properties

- Thanks to state-of-the-art software and hardware components, the build progress is on average 15% higher compared to its predecessor\* and the build time and cost per part are reduced significantly.
- The spot pyrometer accurately and continuously measures the temperature of the material layer to be exposed and allows an overall reduction of non-productive time down to 60%.
- With the low-wear, high-speed recoater, the material is applied faster with the same consistent precision, thus improving the build speed.
- The powerful 70 W laser helps to boost the build rate.
- With 12 commercial polymer materials and 22 combinations of materials/layer thicknesses currently available, EOS is a benchmark in terms of material variety. In addition, the EOS ParameterEditor allows customized exposure parameters to be defined based on proven starting values.
- The powder handling solutions IPCM P and IPCM P plus integrate the EOS P 396 system in a closed and traceable powder cycle and thus ensures dust-free and ergonomic working conditions.

## Technical data EOS P 396

Building volume	340 mm x 340 mm x 600 mm (13.4 x 13.4 x 23,6 in)
Laser type	CO <sub>2</sub> , 70 W
Build rate	up to 32 mm/h** (1.3 in/h); up to 3.7 l/h
Layer thickness (availability depending on material)	0.06 mm (0.00236 in), 0.10 mm (0.00394 in), 0.12 mm (0.00472 in), 0.15 mm (0.00591 in), 0.18 mm (0.00709 in)
Precision optics	F-theta-lens
Scan speed during build process	up to 6 m/s (19.7 ft/s)
Power supply	32 A
Power consumption	nominal 10 kW, typical 2.4 kW

## Dimensions (W x D x H)

System	1,840 mm x 1,175 mm x 2,100 mm (72.4 x 46.3 x 82.7 in)
Recommended installation space	min. 4.3 m x 3.9 m x 3.0 m (169.3 x 153.5 x 118.1 in)
Weight	approx. 1,060 kg (2,337 lb)

## Software

PSW 3.8, EOSAME, EOS ParameterEditor, EOS RP Tools, EOSTATE Everywhere

## Materials

PA 2200, PA 2201, PA 1101, PA 3200 GF, Alumide®, PA 2202 black, PA 1102 black, CarbonMide®, PrimeCast® 101, PrimePart® ST, PrimePart® FR (PA 2241 FR), PrimePart® PLUS (PA 2221)

## Optional accessories

IPCM P, IPCM P plus, Modular Unpacking- and Sieving Station, Industrial Vacuum Cleaner, Blasting System, Lift trolley, Sieving Machine, Unpacking Stand, Big Bag Emptying Station.

\* EOSINT P 395

\*\* typical build rate for PA 2200 for 120 µm (0.00472 in) layer thickness

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