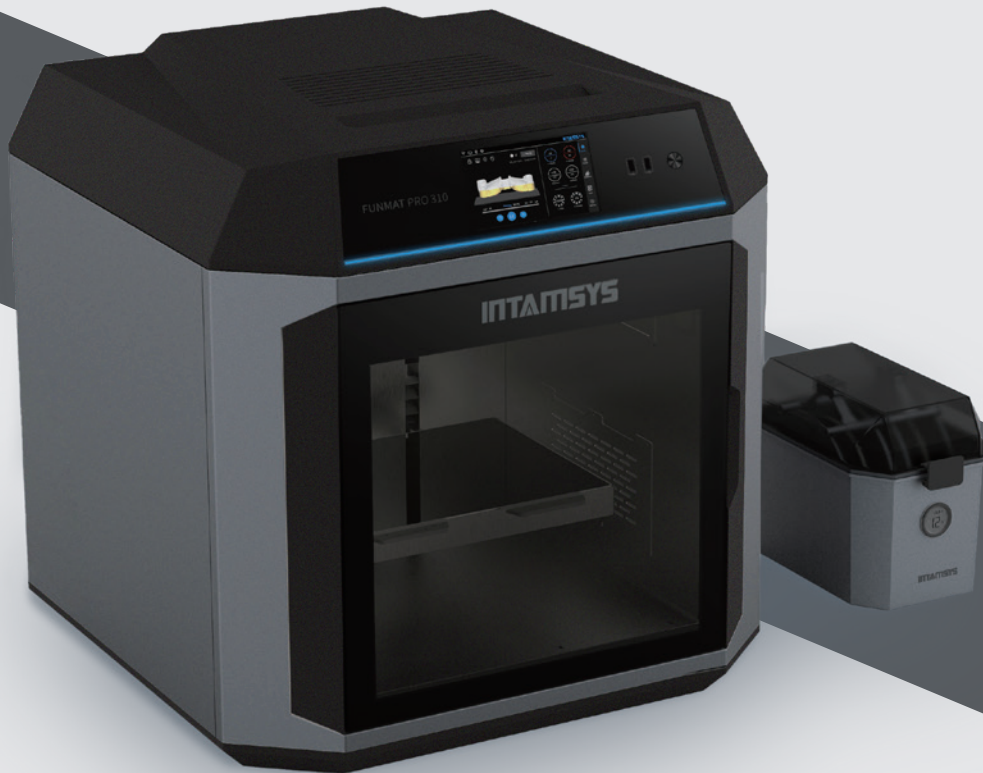


FUNMAT PRO 310

Bringing High Performance Material Printing Capabilities To Professional Engineers



Thermostatic chamber and full-size printing capability



IDEX, more possibilities with multi material printing and twice as fast with duplication and mirror modes



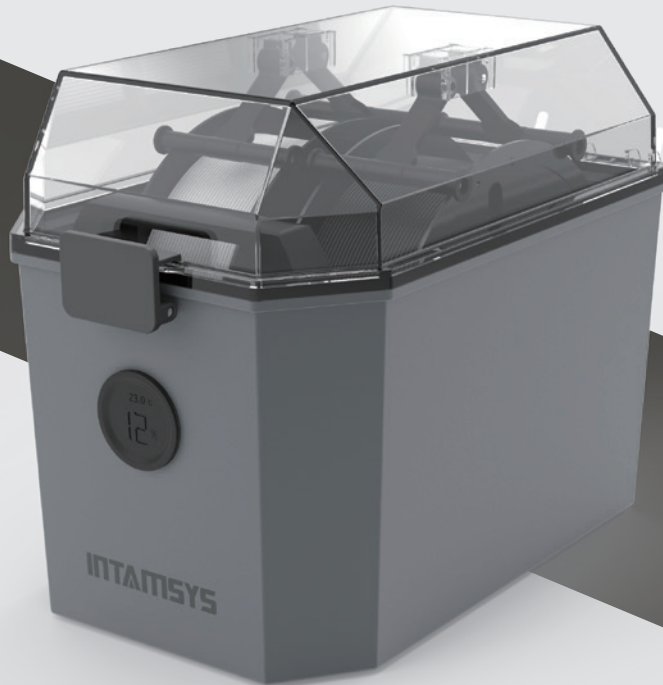
Independent Filament Box keeps material dry for high-quality prints



Intelligent design and whole-process control

INTAMBox

Keep Your Material Dry for Longer



Independent
and sealed



Molecular sieve
desiccant



Anti-tangle
design



Temp. and
humidity
monitoring

Technical parameters

| | |
|---------------------------|--|
| Number of filament spools | 2 x 1kg |
| Spool size | Diameter 200 ± 4 mm, width 40-70mm |
| Drying time | $\leq 10\%$ RH for 20 days (closed) |
| Environment temperature | $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ ($14^{\circ}\text{F} - 140^{\circ}\text{F}$) |
| Desiccant | 4A molecular sieve, 900g |
| Regeneration of desiccant | Dry at 200°C (392°F) for 2 hours |
| Product size | 315 x 205 x 257mm |
| Product weight | 2.45kg |



Reusable
Drying Unit

Assist Cabinet

Meeting the Needs of Engineers
for Convenient Work



Measurement

735 x 668 x 648 mm
28.9 x 26.3 x 25.5 in



Wheels for
easy movement



Folding
side table



Accessory
drawer



Filament storage
drawer

Accessory Drawer Overview

- | | |
|---------------------------------------|---|
| ① High temperature resistant glove x1 | ⑧ Pvp glue x2 (additional purchase required) |
| ② Copper brush x1 | ⑨ Flash drive x1 |
| ③ Allen driver w/ handle x4 | ⑩ Leveling card x1 |
| ④ Allen key set x1 | ⑪ Printhead x1 (additional purchase required) |
| ⑤ Scraper x1 | ⑫ Nozzle x6 (additional purchase required) |
| ⑥ Needle-nose pliers x1 | ⑬ Tweezer x1 |
| ⑦ Cutting pliers x1 | |



Product Performance Overview

| Product Series | INTAM Engineering Materials | | | | | | | | |
|---|--|--|--|--|--|---|--|-------------------------------------|------------------------------------|
| Material | PC | PC-ABS | PC-PBT | PC-FR | PA6/66 | PA6-CF | PA12-CF | ABS | ASA |
| Tensile strength (MPa) <small>ISO 527</small> | 60.7 | 42.7 | 43.2 | 66.8 | 72.7 | 74.8 | 69.3 | 28.8 | 43.8 |
| Young's modulus (MPa) <small>ISO 527</small> | 2,480 | 2,260 | 2,100 | 2,810 | 2,595 | 3,918 | 3,748 | 1,847 | 2,379 |
| Elongation at break(%) <small>ISO 527</small> | 5.6 | 4.7 | 6.9 | 3.5 | 4.6 | 5.8 | 2.9 | 3.8 | 6.7 |
| Flexural strength (MPa) <small>ISO 178</small> | 84.3 | 76.5 | 56.7 | 97 | 123.1 | 130.5 | 114.1 | 66.5 | 73.4 |
| Flexural modulus (MPa) <small>ISO 178</small> | 1,685 | 2,055 | 1,938 | 2,490 | 1,681 | 5,224 | 3,532 | 1,530 | 3,206 |
| Notched impact strength (KJ/m2) <small>ISO 178</small> | 15.6 | 16.2 | 26.9 | 12.1 | 8.1 | 12.0 | 12.1 | 16.4 | 10.3 |
| Heat deflection temperature (°C) <small>ISO 75 1.8MPa</small> | 99.3 | 106 | 91 | 107 | 69 | 140 | 105 | 98 | 100.2 |
| Glass transition temperature(°C) | 113 | 109 | 140 | 115 | 67 | 74 | 42 | 101 | 97.8 |
| Melting point (°C) | - | - | 223 | - | 190 | 220 | 178 | - | - |
| Support material | HIPS | HIPS | HIPS | HIPS | PVA SP3040 | PVA SP3040 | SP3050 | HIPS | HIPS SP3040 |
| Material characteristics | Durable and stable Wide range of applications | Good toughness High temperature resistance High surface finish | Good corrosion resistance High toughness at low temperature | Excellent flame retardancy High mechanical strength | High strength Good toughness High temperature resistance | High strength High dimensional stability Smooth print surface | High strength High dimensional stability Low moisture absorption | Durable Good overall performance | Anti-UV Good weather resistance |

Note: The mechanical performance is based on samples printed by INTAMSYS 3D printers.



The FUNMAT PRO 310 responds to the growing demands of professional engineers with a thermostatic chamber and full-size printing capability on a desktop machine. The thermostatic chamber can reach up to 100 °C to print engineering plastics with a build volume of 305X260X260mm. Plug & play and easy-to-remove modular IDEX design provides multiple printing modes. With whole-process control, the FUNMAT PRO 310 offers engineering material capabilities such as ASA/ABS/PC/PC-ABS/PA/PA-CF with our user-friendly 3D model-slicing software, INTAMSUITE.

Technical Parameters

| | | | |
|-------------------------|--|--------------------------|---|
| Technology | FFF | Print Speed | Max.120mm/s |
| Build Volume | Single Nozzle: 305 × 260 × 260 mm; (12 × 10.2 × 10.2in) | Nozzle Diameter | 0.4mm (Optional:0.25/0.6mm) |
| | Dual Nozzle: 260 × 260 × 260mm (10.2 × 10.2 × 10.2in) | Chamber Temperature | Max. 100°C (212°F) |
| Printer Size | 700 × 655 × 700mm 27.6 × 25.8 × 27.6in | Build Plate Temperature | Max. 160°C (320°F) |
| Layer Thickness | 0.1- 0.3mm | Leveling | Mesh leveling(Max. 100 points) |
| Number of Nozzles | 2 (IDEX) | Filament Diameter | 1.75mm |
| Nozzle Temperature | Max.300°C (572°F) | Travel Speed | Max.XY 500mm/s |
| | | Resolution | XY: 16µm Z: 1.25µm |
| | | Functions | Filament Absence Warning, Remote Monitor, Remote Control, Remote Print |
| Voltage | 100–132V/15A or 200–240V/7A, 50/60 Hz | Nozzle maintenance | Quick release design, easy installation and disassembly |
| Max. Power | 1600W | Filament Box | Standalone, overall sealed, built-in reusable molecular sieve to ensure low humidity, real-time monitoring of temperature and humidity. |
| Connectivity | WiFi, Ethernet, USB | Number of Filament Trays | 2 (Max 1Kg/pcs) |
| Screen | 7" Touch Screen | Materials* | PA6/66, PA6-CF, PA12-CF, PC, PC-ABS, ABS, ASA, PLA, HIPS, PVA |
| Build Plate | Flexible Buildplate + Magnetic Fixation | | |
| Cooling | FAN | | |
| Filtering system | HEPA+Activated Carbon, replaceable | | |
| Safety Design | Safety door lock, over temperature protection, overload protection, warning labels | Certification | CE, FCC, SGS |
| Safety Standards | EN60204 | Slicing Software | INTAMSUITE |
| | | Supported File Types | STL/OBJ/X3D/3MF/STP/IGES |
| | | Operating System | Windows |
| Environment Temperature | 15~30°C(59~86°F) | Storage Temperature | 0~35°C(32~95°F) |
| Environment Humidity | 30~70% | Storage Humidity | 20~90% |

*Printing materials are not limited to this table, recommended printing materials are fully validated on the printer.

INTAMSYS is a world-leading high-tech company providing 3D printing and industrial direct additive manufacturing solutions for high-performance materials. It is co-founded by a team of engineers from world-class high-tech companies engaged in precision equipment development and high-performance materials research for many years.

Focusing on aerospace, aviation, automotive, electronic manufacturing, consumer goods, healthcare, scientific research and other industries, INTAMSYS provides comprehensive additive manufacturing solutions from functional test prototyping, tooling and fixture manufacturing to small batch production of final products, software, high-performance materials and printing services.

| Global Sales Network



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