



The KAIROS state-of-the-art CL1720 3D printer system offers significant capability at a fraction of the price of leading competitors. Through our knowledge and expertise, KAIROS is focused on providing Additive Manufacturing (AM) solutions that provide functional, end use parts. Strong fiber reinforced thermoplastics are leveraged with our easy to use 3D printer in order to produce strong, high quality, and consistent parts. The KAIROS filament is carbon fiber filled and made in the USA.



### COMPETITIVE PRICING

Other “Industrial Grade” machines range from \$90,000 to \$450,000 for the base versions. KAIROS Additive Manufacturing (AM) systems provide more capability at a fraction of the price.



### BUILD REPORTER

Comprehensive reports are produced at the conclusion of each print cycle outlining build parameters, 3D model views, extruder/hot bed performance charts, and enhances part traceability by including the model name and date of print.



### MAINTENANCE REMINDERS

Built-in software tracks the travel of each axis and alerts users when main maintenance is required.



### STRENGTH

KAIROS systems are built using aircraft-grade aluminum and industrial-grade linear drive components suitable for semiconductor manufacturing.



### MINIMAL SETUP

Systems can be setup and calibrated quickly. After setup on a stable surface, the system is designed to auto-calibrate allowing most users to start printing within 1 hour of initial setup.



### ACCURACY

Each system includes closed-loop motor control for every axis and extruder motor. This design guarantees accuracy and maximizes part strength— even in scenarios where the print is physically disrupted.



### OPEN-SOURCE SOFTWARE

Each system includes industry-proven software at no cost and setting can be fully customized. There are no annual software maintenance fees or other software-related charges.



### SCALABLE DESIGN

Our systems can be scaled to meet specific customer AM requirements and can be scaled to print very large parts. No job is too big or too small.



### CLICK-TO-PRINT

Dynamic settings manipulation for move-by-move optimization, enabling repeatable print performance to produce high quality parts at the click of a button. This helps increase beginner’s capability with CL3450 operation.



### UNLIMITED FILAMENT SELECTION

Each system includes closed-loop motor control for every axis and extruder. Systems allow users to choose any material that can be extruded under +400°C or +752°F — including PEEK, Ultem™, and several other unique materials.

## CL3450 Specifications

### FRAME AND STRUCTURE

- Extruded aluminum design ensures stiff frame that is modular and extremely rigid
- Integrated caster and leveling feet
- Transit package version available

### CLOSED-LOOP LINEAR DRIVE AND MOTORS

- High-torque NEMA 23 X, Y and Z Axis Motors
- 10mm semi-conductor grade ball screw
- Guaranteed 10-micron accuracy

### HIGH-TEMP EXTRUDER

- All metal, high-torque, dual-extruder supports continuous printing up to 400 c.
- NEMA 11 Closed-Loop motors with 1:13 planetary reduction for substantially more torque
- Proven to print: PEEK, Ultem™, ABS, Polycarbonate, Nylon, HIPS, Ninjabflex, PVA, and more

### HOTBED

- Design offers consistent heat distribution
- Redundant heater element design that includes 3x embedded, 350W strip Heaters (120VAC)
- Capable of reaching temperatures above 175 deg c.

### POWER SUPPLY

- 120V AC and heavy-duty power supply cable
- UPS and battery backup options available

### POWERFUL DESKTOP OPTIMIZED FOR SLICING

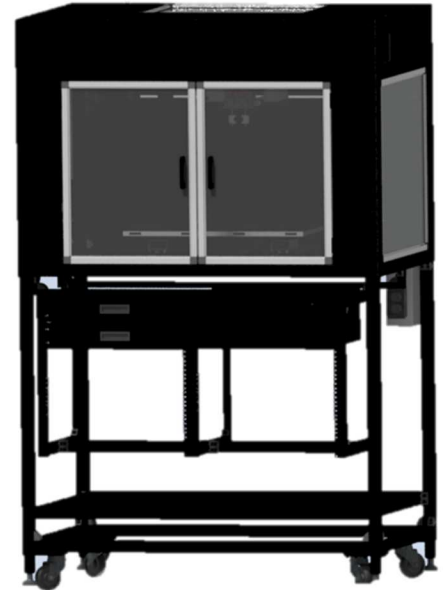
- Integrated 22" HD LED Screen
- Integrated keyboard & mouse stand
- Large hard drive for 3D model storage

### BUILD VOLUME

- 300mm X 600mm X 300mm (approx. 2 cubic feet)

### CONTROLLER SOFTWARE

- Fully Open Source, Repetier-based (no annual fees)



### FILAMENT

While the CL3450 printer system is compatible with all third-party filaments, KAIROS Additive currently offers 3 types of filament designed specifically to work with Click-to-Print on the CL3450.

#### CF - ABS

Carbon filled ABS is a great general printing material that offers great surface finish and stiffness without being difficult to use.

#### CF - NYLON

Carbon fiber filled Nylon has a shiny finish, great mechanical properties and chemical resistance.

#### CF - PC

Carbon fiber filled Polycarbonate is a tough and durable material capable of high performance, even at elevated operating temperatures.

CONTACT DAVE EDELEN @ [ADDITIVE.MANUFACTURING@KAIROSINC.NET](mailto:ADDITIVE.MANUFACTURING@KAIROSINC.NET)  
FOR MORE INFORMATION OR A FREE QUOTE

