HeyGears

ULTRACRAFT
A2D 4K

HeyGears was founded in 2015 as an innovation-driven company, devoted to providing digital manufacturing solutions in various industries. The company bases its core competencies in 3D printing, software development, materials, and big-data handling. We have a global presence with teams across the US, UAE and China.

HeyGears believes in a product development process rooted deeply into vertical applications, and our vision goes beyond just 3D printing technology. We strive to create vertically integrated solutions through the solid establishment of hardware, software, material, and service platforms, delivering our goal to bring advanced technology into daily life.

Quality and Efficiency Combined

High Precision 3D Printer for Mass Production

HeyGears

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ULTRACRAFT
A2D 4K

UltraCraft A2D 4K is a high-performance DLP 3D printer designed for digital dentistry applications, featuring high precision and mass production capabilities. It works with an automated production system, providing the optimal solution for dental labs to improve their printing results with efficiency.

C O N T E N T S

01 Ultra-high Precision
Stable Printing Results

±26.8 µm A New Level of Precision in 3D Printing

**0.66"
DMD Chip**

Unparalleled Performance

A **0.66" DMD** chip with a higher light utilization rate creates fine details, breaking the boundaries of traditional DLP printing.

**4K
3840 x 2160p
Resolution**

Quality Controlled Production

High-resolution **DLP XPR 4K** pixel technology allows for highly detailed final printed products that require minimal readjustments.

**P-grade
Linear
Module**

Excellent Printed Results

The p-grade linear module ensures industrial-grade precision through stable movement and positioning. This improves z-axis precision for **micron-level details** and high-quality results.

A2D 4K

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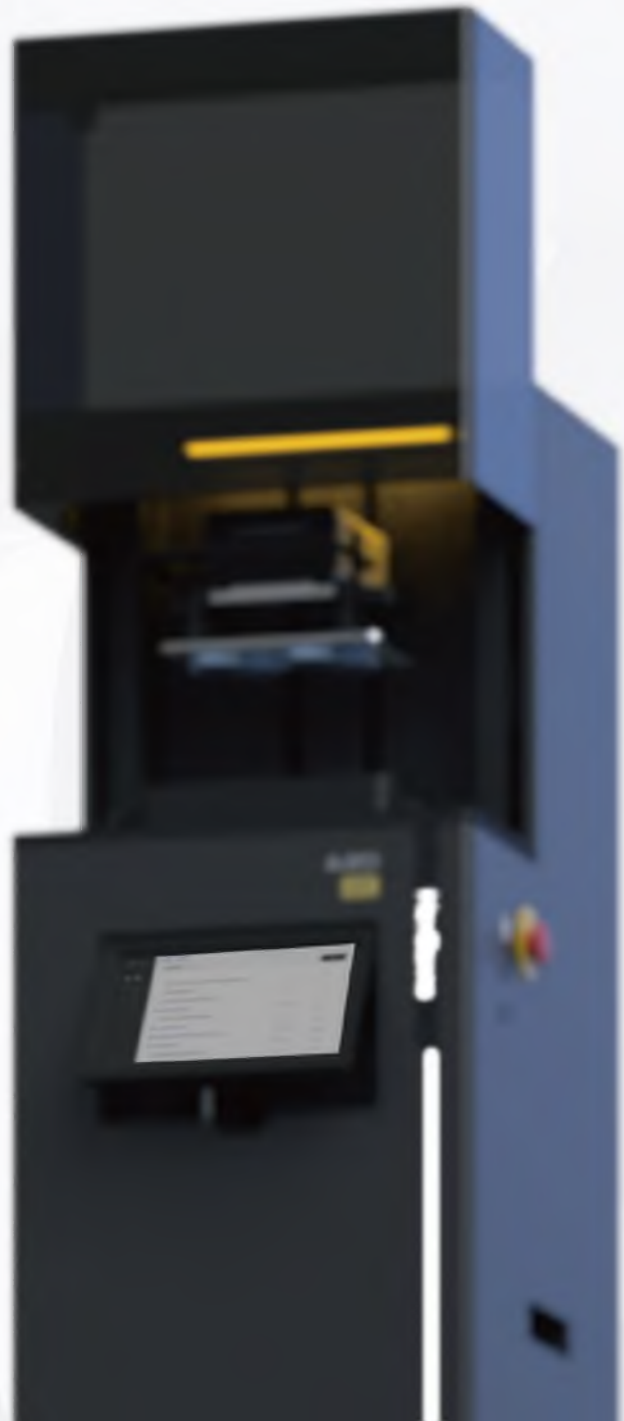
A2D 4K

02 Advanced Applications Bring Dental Production to the Next Level

A2D 4K meets the needs of dental applications which require advanced precision such as dental implants, empowering higher quality digital dentistry.

Advanced Model

Implant Model

A2D 4K   A2D

±26.8 μm   ±37.5 μm

Ultra-precise Detail

Marginal Gap   Hair Strand

<100 μm   ≈90 μm

A2D
4K

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03 Detail Restoration High Quality Printing
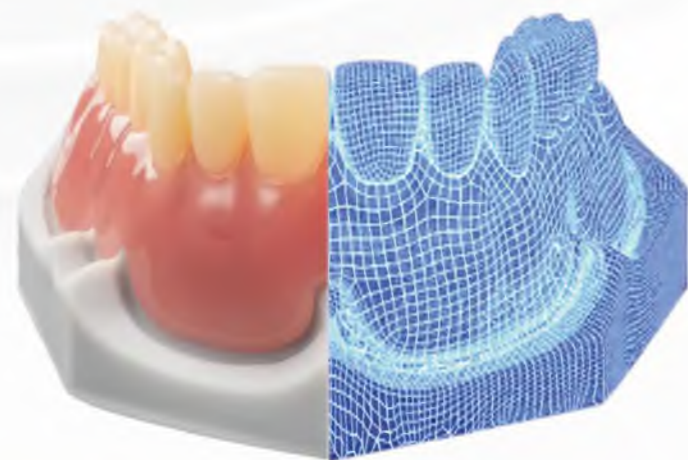
96% Restoration Accuracy *

Application-driven Print Strategies

Easy Restoration of Complex Dental Cases & Design Models

Near Copy/Paste Level Results from Digital Model to Printed Product

Printed result is a **96%** match with the original digital model

*Data from HeyGears Lab test results

Consistent & Customized Results

The printing results ensure the best diagnosis and treatment. The unique features of the application can be preferentially set, striking a balance between standardization and customization.
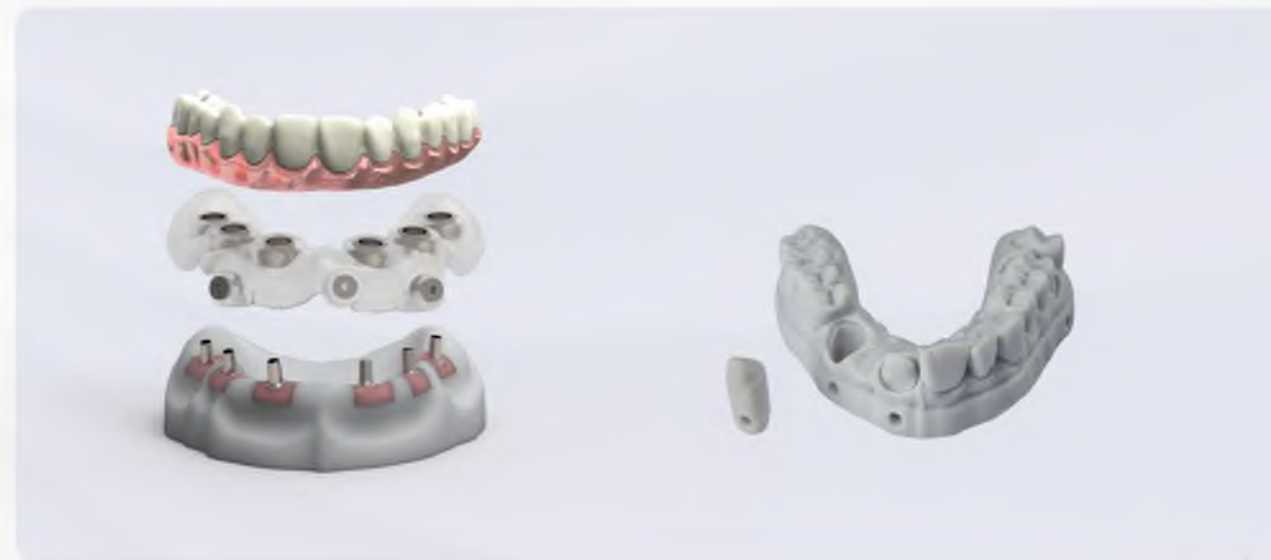

Pixel-level Calibration

AI Error Correction

Micro-level Adjustments

A2D 4K

Accurate O-ring Positioning After Multiple Prints

Tightness Adjustment of Sectioned Models for Specific Clinic Processes

04 Balanced Quality & Efficiency
Rapid Mass Production

206 mm x 116 mm Ultra-large Build Volume

116 mm

206 mm

A2D 4K

135
Single Temporary
Crowns per Platform

16
Quadrant Oral &
Tooth-supported
Surgical Guides per
Platform

7
Full Arch Implant
Models per Platform

70
Gingiva Masks
per Platform

Prints Twice as Fast
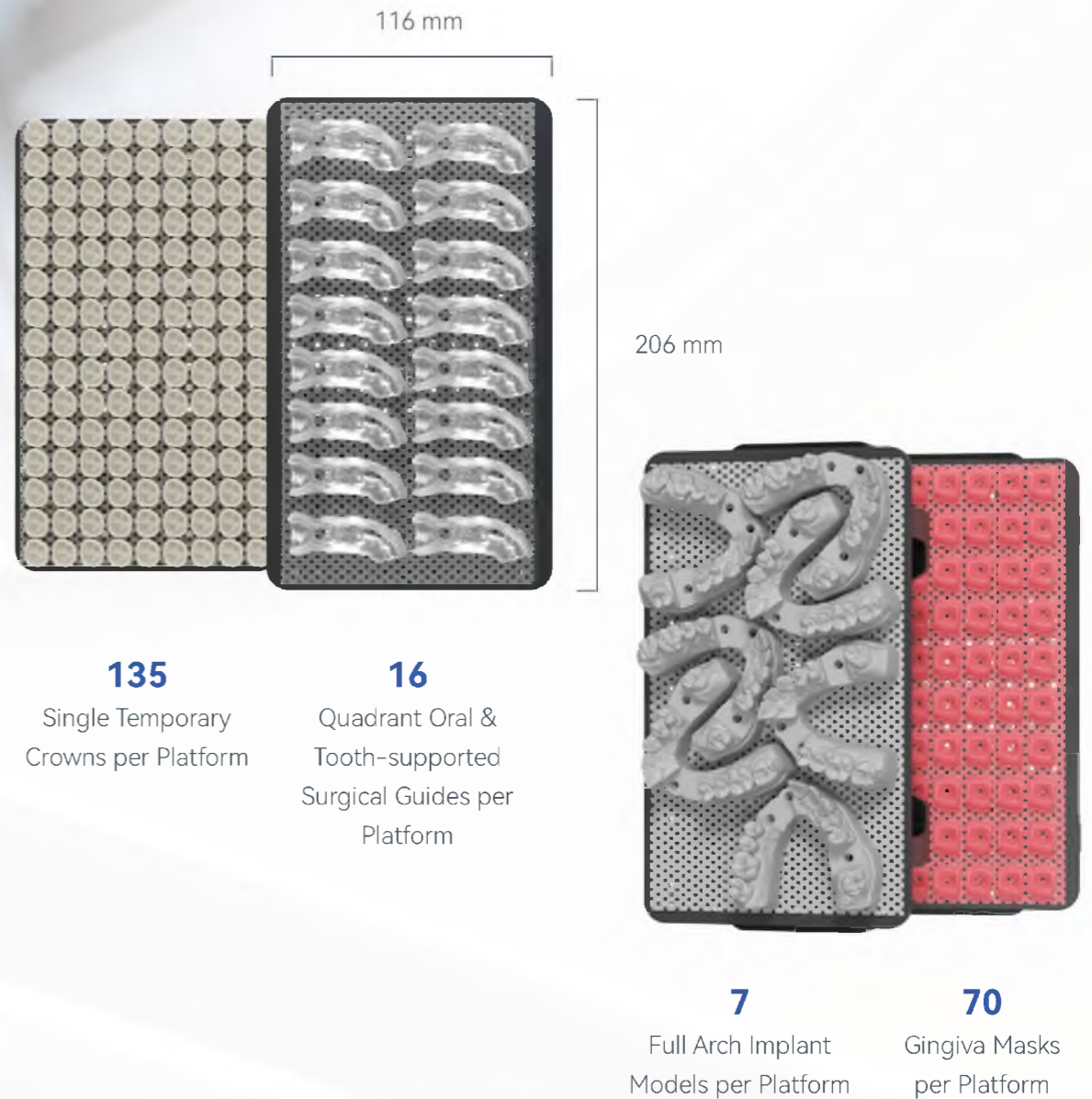

6-core CPU
for Strong
Computing Power

Peel Strength
Automatically Calculated
by Force Sensor

385 nm UV Light
Source for High-
speed Curing

The 385 nm wavelength UV light penetrates the resin material faster,
providing deeper curing when compared with 415 nm.

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05 Automation
Continuous Production without Limits

HiVE (High-volume Enabler) Module Capabilities

3 mins
Platform Swapping

3 L
Liquid-filling Module*

24/7
Automated Production

Easily upgrade Your 3D printing productivity

*Obtained through upgrade
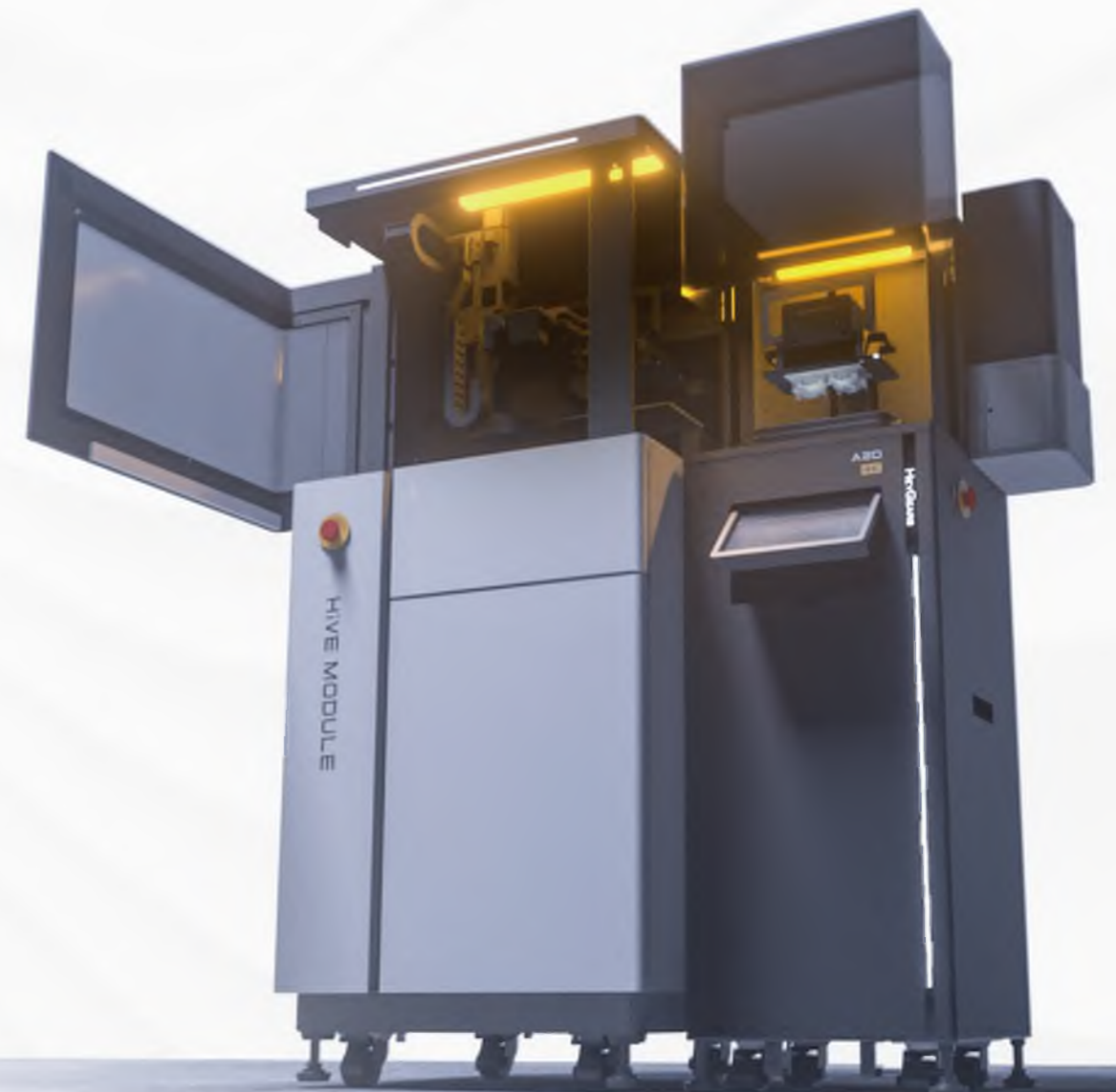
Complete Process Monitoring

◆ Printed Part Drop
◆ Open/Closed Chamber
◆ Module Status
◆ Remaining Capacity
◆ Collection Bin Positioning

Scalable Production

◆ **Larger Capacity:** **1** x UltraCraft A2D 4K + HiVE = **3** x UltraCraft A2D 4K

◆ **Increased Efficiency:** Non-stop **24/7** production

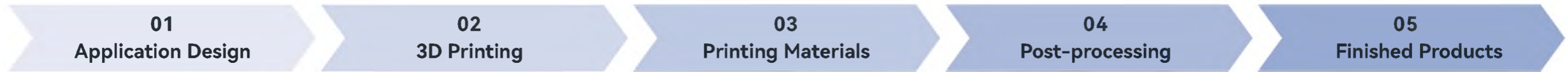◆ **Swift Production Line Transformation:** Cloud-based business expansion

A2D 4K

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06 Integrated Connection
One-stop Complete Production

Whole-process Support

01	02	03	04	05
Application Design	3D Printing	Printing Materials	Post-processing	Finished Products

HeyGears Cloud

HeyGears Design

HeyGears Design Center

- 4 Main Fields of Dental Applications
- One-stop Service
- Customized Design
- Fast Delivery

Streamflow A HeyGears Software

Pre-processing Service

- Get Started with One Easy Click
- Easily Switchable Application Presets
- Quick Cloud-based Operation
- Smart, Automated, and Efficient

ULTRA·NET

Production Management System

- One Click Cloud Access
- Flexible Task Management & Planning
- Fast and Accurate Problem Tracing
- Data-based Decision-making Improves Operation
- Data Security Mechanisms Provide Greater Protection

UltraPrint Dental Materials

Ultrasonic Cleaner   UltraCraft PCU 3.0

07 Complete Dental Production Covering a Variety of Applications

50+
Dental Applications

4
Major Fields of Dentistry

1 Fixed Restoration

2 Removable Restoration

3 Implants

4 Orthodontics

Implants
Print 7 full arch model within 62 mins
(approx. 1 every 9 minutes)

Fixed Restoration
Print 16 quadrant models within 60 mins
(approx. 1 every 4 minutes)

Clear Aligners
24/7 mass production

Night Guard

Custom Impression Tray

Immediate Restoration of Implant

Try-in Denture

Temp C&B

Indirect Bonding Guide

Implant Surgical Guide

Wax RPD

Occlusal Splint

A2D 4K

10+
High Performance Dental Materials

1 Compatible with Most Dental Applications

2 Application-based Material Matching

3 Continuous Research and Development

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08 Support for Digitalization

Support & Services

1 Quarterly Inspection

Regular equipment inspections, corresponding reports, and necessary online services for software upgrades and hardware optimization.

2 Equipment Maintenance

Early warning of potential faults, online maintenance, on-site support, and application fault diagnosis and repair. HeyGears offers free replacement for equipment that cannot be diagnosed and repaired due to faults or usage wear.

3 Further Support

If the maintenance exceeds 3 days, customers are able to send their printing tasks to HeyGears for printing.

1 Online & Offline
24/7 Support

2 Fast Response
Within 30 Minutes

3 On-site Service
Within 48 Hours

Worldwide Service Outlets

Headquarters: Guangzhou, China

Global Coverage: United States, Europe, Middle East, and Asia

09 Specifications

A2D 4K

Build Volume	206 x 116 x 110 mm 8.11 x 4.57 x 4.33 in
Resolution	3840 x 2160p
XY Native Pixel	75 µm
Build Precision	±26.8 – 37.5 µm
XPR Pixel Size	53 µm
Wavelength	385 nm
Light Source Lifetime	> 30,000 hours
Machine Dimension (W * D * H)	450 x 480 x 1516 mm 17.72 x 18.9 x 59.69 in
Weight	122 kg
Touchpad Size	11.6''
Voltage	110–220V AC, 50/60Hz, 800W