

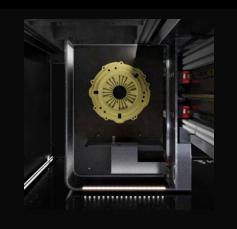
# **ARRAY**Product Sheet

High throughput and low cost industrial 3D printing.

## ARRAY **Key Features**



Large volume prints in up to 8 different materials.



**Automated systems** increase throughput by up to 10 times.



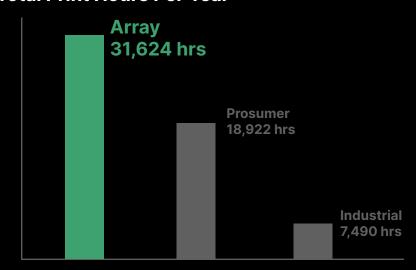
Integrated storage cart maximizes printer uptime.

- Support for industrial materials including PEEK, PEKK and Ultem 9085
- 72+ hours of continuous unattended operation,
- 95% more cost effective on a per print basis,
- Automated print bed removal, changeover, and failure detection
- Automated material changover and runout detection with Palette X

### **Total Print Hours Per Year**

个58%

Throughput increase when compared to other similarly spec'd 3D printing solutions.



<sup>1.</sup> Research based on currently available commercial 3D printers with comparable specifications being run in normal operating conditions.

<sup>2.</sup> Continous runtime is measured as back-to-back print jobs, without print or material failure and/or print material changover issues.

3. Relative total cost factors in material cost, labour, system depreciation over a 5 year period.

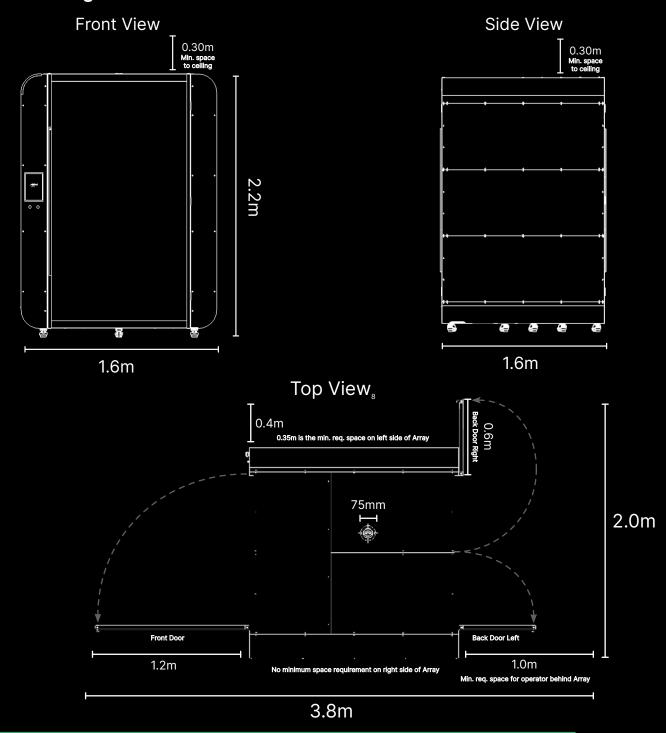
<sup>4.</sup> Based on a total matched investment of \$60,000 or the price of equivalent Prosumer and Indsutrial 3D printing FFF systems.

## **ARRAY**Specification Sheet

| Construction                              | Durable All Metal Motion Systems, aluminum outer chasis                                                                                                         |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Layer Resolution                          | 20-320 Microns                                                                                                                                                  |
| XYZ Resolution                            | 10μm, 4μm, 10μm (X ,Y, Z)                                                                                                                                       |
| Build Volume                              | 4 Modules of 14"x14"x14" (2744 cubic inches each)                                                                                                               |
| Build Speed                               | 100 mm/s                                                                                                                                                        |
| Build Plate                               | Spring steel build plate with various coatings, automatically changed via internal robotic system                                                               |
| Heated Bed <sub>5</sub>                   | 0-120°C                                                                                                                                                         |
| Thermal Chamber <sub>5</sub>              | 0-80°C                                                                                                                                                          |
| Nozzle                                    | 0.4mm hardened steel nozzle                                                                                                                                     |
| Max Nozzle Temp <sub>5</sub>              | 300°C-500°C                                                                                                                                                     |
| Fume Extraction                           | Integrated exhaust fan with HEPA filter; optional 3" external fume extraction hook-up (not included)                                                            |
| Print Modules                             | 4 x independent Element Array modules                                                                                                                           |
| Build Platform<br>Changing                | Automated with Array build plate changing robotics                                                                                                              |
| Max Robotics Travel                       | 100mm/s, 100mm/s, 100mm/s (X,Y,Z)                                                                                                                               |
| Available Print<br>Materials <sub>6</sub> | Mosaic PLA, Mosaic PETG, Mosaic Origin, Mosaic Matrix, Mosaic Soluble M1, Mosaic ABS, Mosaic Breakaway, Mosaic PEEK, Mosaic PEKK, Mosaic Ultem 9085, Mosaic ESD |
| Material Type                             | Mosaic Certified, other materials not supported                                                                                                                 |
| Material Bays                             | 8 × 1500cc Material Pods Per Printer (12,000cc/Printer Total)<br>32 × 1500cc Material Pods in Array (48,000cc/Array Total)                                      |
| Software                                  | Canvas Array, Canvas Teams                                                                                                                                      |
| Connectivity                              | WiFi, LAN (Ethernet)                                                                                                                                            |
| Operating Footprint                       | 1.6m x 3.2m x 1.6 m (5' 2" x 11' 2" x 5' 2" )                                                                                                                   |
| Power Required                            | 230V AC, 30A                                                                                                                                                    |
| Certifications                            | cTUVus, EN62368-1: 2014, EN55032: 2015, EMC, CE, RoHS                                                                                                           |
| Warranty & Service <sub>7</sub>           | 1 Year                                                                                                                                                          |

## **ARRAY**

## **Product Diagrams**



Note: All diagrams and technical specifications are approximate and subject to change.

5. High temperature beds, chambers and nozzles are only available on the Array XT configuration.
6. Industrial materials like Mosaic Peek, PEKK, and Ultem 9085 are only available for print on the Array XT configuration. Limitations on print size for these materials apply, please contact sales@m saicmfg.com to learn more.

7. See product warranty for full details.

8. Exhaust Coupler OD is 75mm for 3" pipes, with a vertical depth of 40mm. includes 4 x ø 5.3 mounting holes for M5 sized bolts.



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