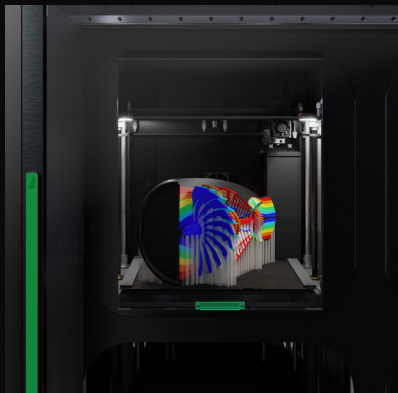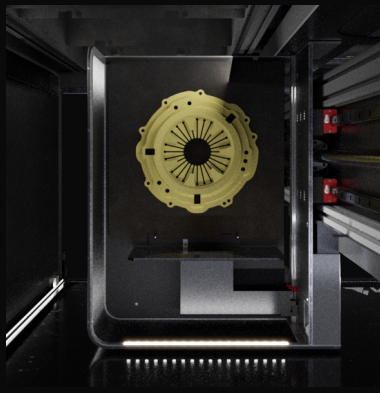# ARRAY
Product Sheet

High throughput and low cost industrial 3D printing.

ARRAY
Key Features

Large volume prints in up to 8 different materials.

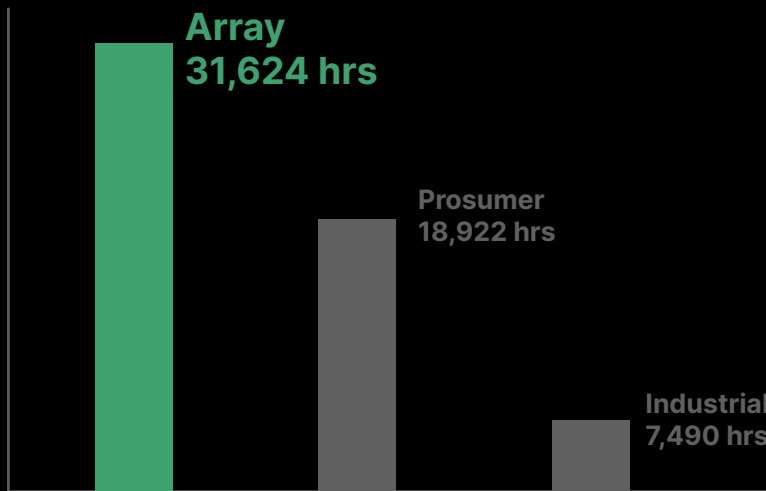**Automated systems increase throughput by up to 10 times.[1]**

Integrated storage cart maximizes printer uptime.

✓ Support for industrial materials including **PEEK, PEKK and Ultem 9085**

✓ **72+ hours of continuous** unattended operation[2]

✓ **95% more cost effective** on a per print basis[3]

✓ **Automated** print bed removal, changeover, and failure detection

✓ **Automated** material changover and runout detection with **Palette X**

Total Print Hours Per Year

↑58%

Throughput increase when compared to other similarly spec'd 3D printing solutions.[4]

Array 31,624 hrs

Prosumer 18,922 hrs

Industrial 7,490 hrs

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1. Research based on currently available commercial 3D printers with comparable specifications being run in normal operating conditions.
2. Continous runtime is measured as back-to-back print jobs, without print or material failure and/or print material changeover issues.
3. Relative total cost factors in material cost, labour, system depreciation over a 5 year period.
4. Based on a total matched investment of $60,000 or the price of equivalent Prosumer and Indsutrial 3D printing FFF systems.
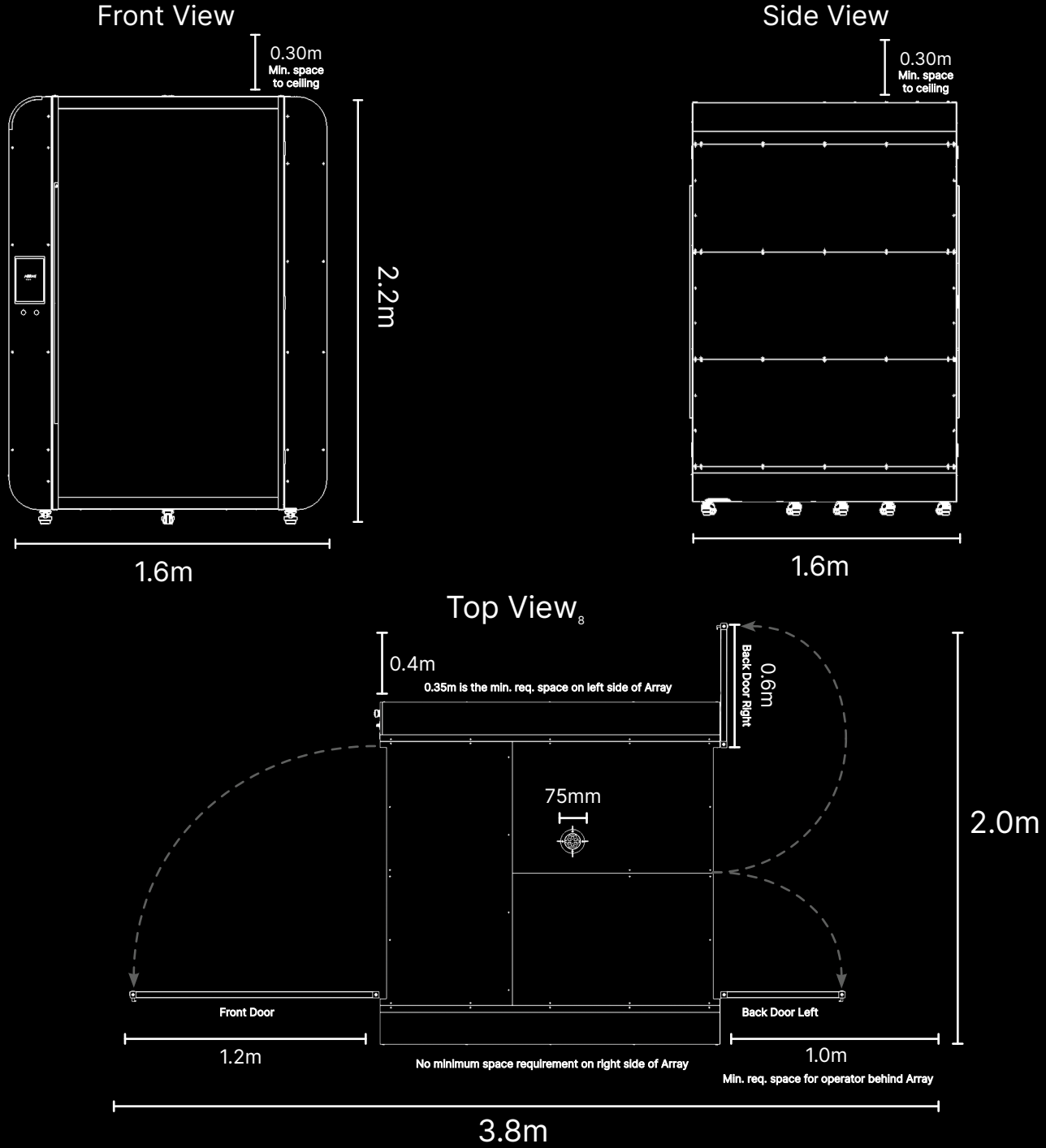
ARRAY
Specification Sheet

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[5]	0-120°C
Thermal Chamber[5]	0-80°C
Nozzle	0.4mm hardened steel nozzle
Max Nozzle Temp[5]	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 Changing	Automated with Array build plate changing robotics
Max Robotics Travel	100mm/s, 100mm/s, 100mm/s (X,Y,Z)
Available Print Materials[6]	Mosaic PLA, Mosaic PETG, Mosaic ABS, Mosaic Flex, Mosaic Aero, Mosaic Matrix, Mosaic Nylon 6, Mosaic FR-PC, Mosaic PP, Mosaic HIPS, Mosaic ESD PETG, Mosaic PEEK, Mosaic PEKK, Mosaic PEI 9085,
Material Type	Mosaic branded materials, other Mosaic Certified materials will also be supported
Material Bays	8 × 1500cc Material Pods Per Printer (12,000cc/Printer Total) 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	CE, RoHS. TUV Field Certification (USA) / SPE-1000 (Canada)
Warranty & Service[7]	1 Year for Array

ARRAY
Product Diagrams

Front View

0.30m
Min. space
to ceiling

2.2m

1.6m

Side View

0.30m
Min. space
to ceiling

1.6m

Top View[8]

0.4m

0.35m is the min. req. space on left side of Array

Back Door Right

0.6m

75mm

2.0m

Front Door

Back Door Left

1.2m

No minimum space requirement on right side of Array

1.0m

Min. req. space for operator behind Array

3.8m

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 HT configuration.
6. Industrial materials like Mosaic Peek, PEKK, and Ultem 9085 are only availble for print on the Array HT configuration. Limitations on print size for these materials apply, please contact sales@mosaicmfg.com to learn more.
7. See product warranty for full details, Array HT configurations include a 2 year warranty.
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.

Mosaic