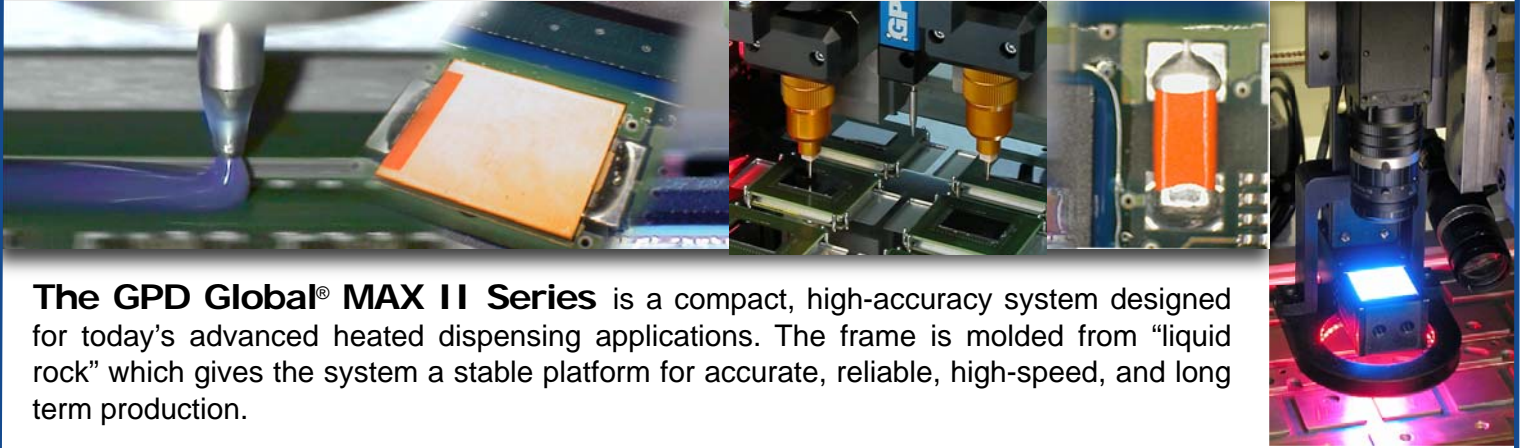


# GPD MAX II Series

## Heated Dispense System Overview

- Compact Footprint
- Unibody Frame
- Heat Capability
- PCD Continuously Volumetric Pump
- Accuracy of  $\pm 0.001''$  (0,025 mm)
- Functional Work Area 14.1" x 12" (358 mm x 305 mm)
- Full View Illumination
- Linear Speed of 30"/sec (762 mm/sec)
- Smart Path **Underfill** Pattern Optimization



The GPD Global® MAX II Series is a compact, high-accuracy system designed for today's advanced heated dispensing applications. The frame is molded from "liquid rock" which gives the system a stable platform for accurate, reliable, high-speed, and long term production.

The MAX II Series is available with one or two dispense pumps depending on the process requirements. For applications such as underfill, the PCD continuously volumetric dispense pump simplifies the dispense process by dispensing fluid in a truly volumetric mode. This truly volumetric method simplifies the programming, setup, and calibration process. On-the-fly adjustable flow rates make optimization of products with large and small components a snap. For underfill or other application with timed multiple pumps, the exclusive FLOWare® software incorporates smart path analysis that selects an optimized dispense path for minimum delays between multiple pass components. The inline systems may have up to three heated zones, each capable of handling a substrate up to 358 mm x 305 mm (14.1" x 12") and heat temperatures up to 150° C.

Innovative "Full View" camera illumination improves die alignment and reliability. Multi-colored dies can now be found with a single illumination source. The Full View feature incorporates multi-color, on-axis illumination and low angle dark-field light. Any combination of the illumination source may be used.

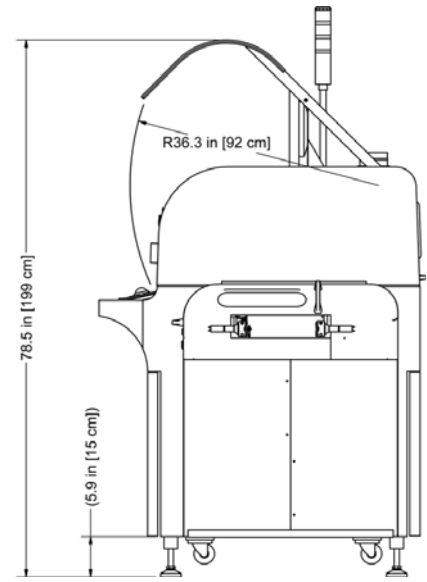
Other available process optimizing features of the MAX II Series include an optimized transport system with soft touch control, closed-loop process calibration of individual components, substrate temperature monitoring at the pre-heat station, and non-contact laser surface sensing. These features, coupled with a host of standard MAX Series features such as compatibility with GPD's LX and Micro-Dot auger pumps, Automatic XYZ calibration (no operator intervention required), Taper-Lock™ mounting hardware, needle and nozzle cleaners, computer-controlled syringe air pressure, Contour Mapping™, and FLOWare® operating software, make the MAX II the choice for premium production performance.



**GPD Global**®

# MAX II Series Standard Features

- PCD Continuously Volumetric Dispense Pump
- High Speed, GPD Cyclops™ Vision
- Full View Illumination
- Needle Cleaner
- Automatic Backlit XYZ Calibration
- Tool-less Taper-Lock™ Mounting Hardware
- FLOWare® Software with Smart Path Optimization
- Computer Controlled Syringe Pressure
- Closed Loop Process Control
- Soft-Touch Optimized Conveyor Transport
- Heat & Vacuum Control Module
- Pre-Heat Temperature Monitor
- Network Ready



## MAX II Series Heated Dispensing

### Dimensions

Workarea (X, Y, height)

2 valve stations . . . . . 12" x 12" x 3.25" (305 mm x 305 mm x 83 mm)

1 valve station . . . . . 14.1" x 12" x 3.25" (358 mm x 305 mm x 83 mm)

Footprint . . . . . 53" W x 47" D x 75.3" H (135 cm x 119 cm x 191 cm)

### Performance

Accuracy\* . . . . . ±0.001" (±0.025 mm)

\*with system mapping over standard work area

Repeatability (per axis) . . . . . ±0.0006" (±0.0152 mm)

### Capacity

Heat limits . . . . . Ambient to 150° C ±3° C (Ambient to 302°F ±5° F)

Dispense valves . . . . . Up to 2

### Power

230 Volts AC frequency 50-60 Hz

Maximum 20 amps @ 230 Volts

*GPD Global recommends use of dedicated, external circuit breaker/fusing. Alternately, use properly rated branch fusing.*

### Air

Pressure (clean dry air) . . . . . 80 psi (552 kPa)

Flow rate (maximum) - add flow for each vacuum system present:

machine . . . . . 4 CFM @ 87 psi (113 l/min @ 600 kPa)

nest vacuum . . . . . 4 CFM @ 50 psi (113 l/min @ 345 kPa)

optional preheat vacuum . . . . . 4 CFM @ 50 psi (113 l/min @ 345 kPa)

optional postheat vacuum . . . . . 4 CFM @ 50 psi (113 l/min @ 345 kPa)

Air fitting thread\* . . . . . 1/4" NPT

\*customer supplies connection hardware

### Ventilation

Exhaust ports\*, up to 3 . . . . . 4" (101.6 mm)

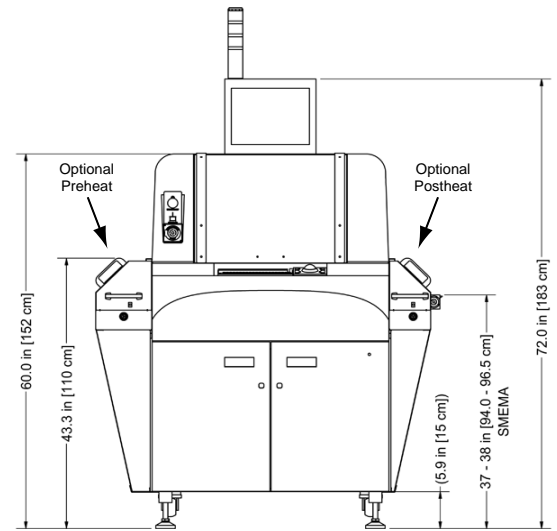
\*customer supplies ducting to exhaust ports; the number of ports is configuration dependent (pre-heat, nest, post-heat)

Ventilation flow rate . . . . . 250 CFM (7,079 l/min) per port

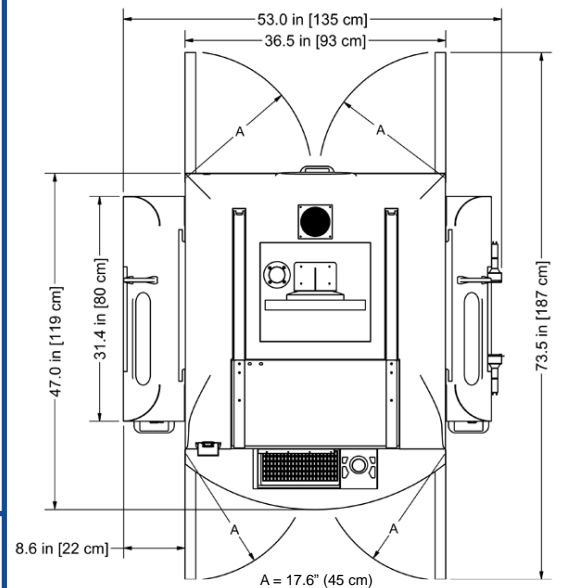
### Crating Specifications

Weight, crated . . . . . 2400 lbs (1089 kg)

Dimensions, crated . . . . . 51"W x 63"D x 72"H to 70"W x 63"D x 72"H  
(130 cm W x 160 cm D x 183 cm to 178 cm W x 160 cm D x 183 cm H)



All vertical dimensions can be adjusted (together) +/- 1.00" (+/- 2.54 cm).



Standard direction of flow is Left-to-Right, however, Right-to-Left is configurable at time of order.



### Headquarters

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