

AD-16 SERIES

HIGH PRECISION DISPENSING SYSTEM

Features & Benefits

- Suitable for cell phone manufacturing, repeatability accuracy 0.02 mm, modular design
- Minimum dispensing dot size: 0.5 mm (0.02")
- Up to 15,000 dots per minute can be dispensed with dot size less than 1 nanoliter
- X/Y axis can travel at up to 1200 mm/s
- Linear motors integrated with a cast frame provide proven stability during operation
- Dual valves configuration is available as an option for tuning with different glues and applications independently

Product Description

AD-16 Series fluid dispensing system is applicable for SMT underfill, encapsulation, LTS, TIM, flux, semiconductor package, wafer bond etc.

AD Series Strengths:

- Highly accurate linear motor gantry
- Closed loop control to ensure dispensing volume consistency
- Built-in vision system
- Available with all standard valves including Jetting and Auger valves
- Flexible design, easy to upgrade or equip with different valves
- Barcode scanner to automatically load the correct dispensing program



4 way tilt option



Dual valves option





Specifications:

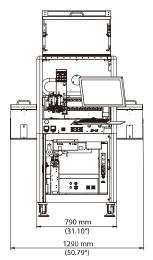
stem Specifications	AD-16 Series Fluid Dispensing System
Board Handling	
Standard Work Area	Single valve X 400 × Y 500 × Z 30 mm (X 15.75" × Y 19.68" × Z 1.18")
	Dual valves X 340 × Y 500 × Z 30 mm (X 13.39" × Y 19.68" × Z 1.18")
Maximum Components Height	\pm 30 mm (\pm 1.18") from PCB
Acceleration	2 g
PCB Edge Clearance	≥3 mm (≥0.12")
PCB Clearance Topside	30 mm (1.18")
Max. Conveyor Width	450 mm (17.71")
Min. Conveyor Width	60 mm (2.36")
Fluid Volume	30 cc
Fluid Level Sensor	Automatic monitor
Intelligent Automatic Nozzle Cleaner	Non-contact vacuum nozzle cleaning
Transmission system	
Conveyor Quantity	1 pair
Conveyor Type	Thermostable ESD belt
Process Flow	L to R (Standard), R to L (Optional)
Conveyor Height	900 ± 20 mm (35.43" ± 0.79")
Conveyor Speed (XY)	2 – 13 m/min
Conveyor Width Adjustment	Automatic (motorized)
Width Adjustment Speed	250 mm/min
Max. Loading	4 kg/m (even distribution)
Vision System	
Resolution	1296 x 966 px
Pixel Size	3.75 x 3.75 μm
Light Source	LED coaxial light source and ring light source
XYZ Axis Configuration	
No. of Valves	Single valve
	Dual valves (option)
Motor	X – Y linear module and Z servo motor
Maximum Speed	1200 mm/s
Accuracy	0.025 mm (0.001")
Repeatability	± 0.01mm (± 0.0004")
Facility	
Standard Footprint	L 790 × W 1600 × H 1600 mm (L 31.10" × W 62.99" × H 62.99")
Weight	700 kg
Motor Power	DC 24 V 69 W × 2
Air Requirement	0.6 Mpa
Extraction	≥ 6.5 kg
Input Power	AC 220 V 50/60 Hz 10 A
Tota l Power	2 KW
Interface	
Controller	IPC and motion control card
Software	Anda user interface software with Windows OS
Programming	On–line vision programming

Standard Features

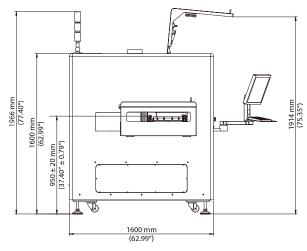
- Computer control, Windows OS
- CCD visual positioning system
- Linear motor and servo driver
- Inline CCD visual programming or gerber upload
- UPS and voltage stabilizer
- ESD grounding point
- CE certified

Optional Features

- Heated valves for viscosity control
- 35 degree tilt and 360 degree rotation
- PCB heater enhances material flow for underfill applications
- Precision weight measurement ensures accurate volumetric dispensing
- Multiple valves available: Pneumatic Jet Valve, Slide Valve and Screw Valve
- Laser height detection to calibrate Z axis automatically for component deformation
- Dual valves



Front View



Side View