Unity™ Basic Series

Automated Dispensing Systems

Redefining tabletop automation



Nordson® Unity Basic Series system is specifically designed and configured for precise hot melt dispensing using Nordson Unity dispensing systems.

An easy-to-use Teach Pendant or a PC-based vision-guided teaching system makes the Unity Basic Series system simple and intuitive to set up and program. True three-dimensional motion control allows easy programming of dots, lines, circles, arcs, and compound arcs.

A variety of platform sizes makes them an ideal solution for batch processing of critical hot melt dispensing applications.

The Unity Basic Series system can work either as a standalone dispensing system or as a key station that is easily integrated into automated production lines.

Features

- Simplified setup and programming via intuitive iconbased Teach Pendant
- Optional simple camera and UNITYMotion[™] software make setup and programming intuitive
- X/Y/Z tip location alignment sensor available
- Reinforced X axis (on Unity 4X) increases system rigidity and improved accuracy

- Upgradable to enhanced CCD vision camera with vision based bead compensation
- On-screen preview of the dispensing path facilitates programming
- Easy-to-use .dxf file conversion to program path
- Wide range of work envelopes
- Available in platforms ranging from 200 x 200 mm to 620 x 500 mm

Benefits

- Easy-to-use visual programming means operators learn quickly
- Faster cycle and batch times
- Easy integration into any manufacturing operation
- Reduced production, material, and ownership costs
- Consistent adhesive volume output of changing viscosity materials (with enhanced CCD vision option)
- Automated tip alignment saves reprogramming time



Unity™ Basic Series Automated Dispensing Systems

Specifications

Item/Model	Unity [™] 3	Unity [™] 4	Unity TM 4X	Unity [™] 5	Unity [™] 6
Number of Axes	3 axes				
Maximum Working Area (X/Y/Z)	300/300/100 mm (12/12/4 in.)	400/400/100 mm (16/16/4 in.)	400/400/100 mm (16/16/4 in.)	500/500/150 mm (20/20/6 in.)	620/500/150 mm (24/20/6 in.)
Workpiece Payload	10 kg (2 lb)	10 kg (2 lb)	10 kg (21 lb)	8 kg (18 lb)	10 kg (21 lb)
Tool Payload	5 kg (11 lb)	5 kg (11 lb)	8 kg (17.7 lb)	3.5 kg (7.7 lb)	5 kg (11 lb)
Maximum Speed (per second)	800/320 mm (31/13 in.)	800/320mm (31/13 in.)	800/320 mm (31/13 in.)	500/320 mm (2/ 13 in.)	800/320 mm (31/13 in.)
Unit Weight	39.5 kg (87 lb)	44.5 kg (98 lb)	45.5 kg (100.3 lb)	47 kg (107 lb)	50 kg (110.2 lb)
Dimensions WxHxD	490x517x645 mm (19x20x25 in.)	590x617x645 mm (23x24x25 in.)	590x617x705 mm (23x24x28 in.)	690x717x815 mm (27x28x32 in.)	810x717x815 mm (32x28x32 in.)
Drive System	3-phase micro stepping motor				
Memory Capacity	100 programs 500~50,000 points/program				
Data Storage	CF card, USB				
General Purpose I/O	8 inputs/8 outputs (16/16 optional)				
Drive Method	PTP and CP				
Dispensing Controller	External				
Power Supply	Auto-switching, 100–240 VAC, 200-320 W				
Interpolation	3 axes (3D space)				
Repeatability	±0.02 mm				
Working Temperature	10–40 °C (50–104 °F)				

^{*}A smaller Unity 2 robot is also available. Ask your Nordson representative for more information.

Available Options

- Teach Pendant
- Simple Vision Kit
- CCD Vision Kit
- Tip Alignment Kit
- Tip Height Detection Kit





Optional Teach Pendant



Optional Simple Vision Kit



Optional CCD Vision Kit

For more information, speak with your Nordson representative or contact your Nordson regional office.

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