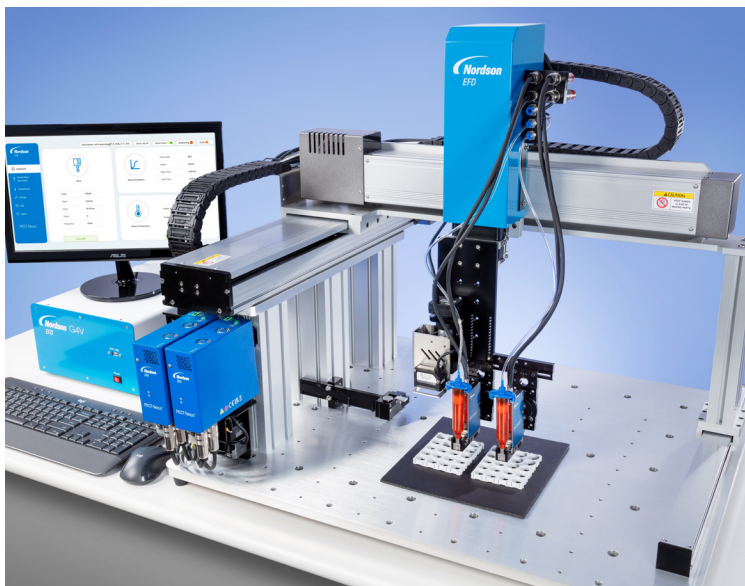


# GVPlus Series Automated Dispensing Systems

Heavier tooling support simplifies setup, improves dispensing repeatability



The GVPlus Series solution offers dual mounting flanges with additional arm support, reducing vibration and improving throughput.



Engineering enhancements to the GVPlus solution enable the product to provide positioning accuracy and deposit placement repeatability at  $\pm 0.008$  mm /  $8 \mu\text{m}$ .

| Part #  | Description                    |
|---------|--------------------------------|
| 7366458 | 3-axis GVPlus robot            |
| 7361240 | Laser B upgrade kit            |
| 7364992 | Laser C (confocal) upgrade kit |

**Note:** Order laser separately.



more info

Nordson EFD's GVPlus Series gantry automation systems are engineered for life sciences and electronics manufacturing applications. The GVPlus systems offer lower production, material, and ownership costs. These goals are met using a combination of advanced dispensing software, cameras, and new tool mounting features.

Proprietary DispenseMotion™ software and an integrated CCD smart vision camera make EFD automated systems quick to set up and easy to program. The system delivers  $8 \mu\text{m}$  positional repeatability ( $\pm 0.008$  mm). This powerful combination of precision and repeatability is best-in-class for fluid deposit applications.

The GVPlus automation solution is constructed with dual mounting flanges and added arm support. These features enable manufacturers to use heavier tooling and reduce vibration during production, improving quality and throughput. An extension bracket is included to simplify tooling setup processes.

The GVPlus Series can also be equipped with various laser options to improve process capability by automatically adjusting the dispensing gap and other post dispense verification using AOI software.

## Features

- Vision-guided DispenseMotion software for simplified setup and programming
- Dual mounting flanges and dual supports for heavier tooling capability
- CCD smart vision camera operates on challenging surfaces like glass, mirrors, and non-transparent plastics
- True, three-dimensional motion control, with laser capabilities to automatically adjust for part thickness variations

## Benefits

- Market-leading dimensional positioning accuracy and deposit placement repeatability at  $\pm 0.008$  mm /  $8 \mu\text{m}$
- Heavier tooling capability reduces vibration, improves durability, and simplifies tooling setup
- Improved process control and data collection via AOI and laser
- Unlimited workpiece payload, providing a full range of application choices



## Specifications

| Item                             | Specification   |
|----------------------------------|---|
| Number of axes                   | 3   |
| Maximum working area (X / Y / Z) | 400 / 400 / 100 mm (16 / 16 / 4")   |
| Tool payload                     | 3.0 kg (6.6 lb)   |
| Weight                           | 73 kg (160.9 lb)  |
| Dimensions                       | 1007.5 <sub>w</sub> x 760.0 <sub>H</sub> x 710.5 <sub>D</sub> mm (40 <sub>w</sub> x 30 <sub>H</sub> x 28 <sub>D</sub> " ) |
| Maximum speed* (XY / Z)          | 500 / 320 mm/s (20 / 13"/s)   |
| Drive system                     | 5-phase micro-stepping motor  |
| Memory capacity                  | PC storage  |
| General purpose I/O              | 8 inputs / 8 outputs (16 / 16 optional)   |
| Input AC (to power supply)       | 100–240 VAC (±10%), 50/60 Hz, 20 A maximum, 380 W   |
| Repeatability**                  | ±0.008 mm/axis  |
| Vision                           | CCD smart camera  |
| DispenseMotion software          | Included  |
| Tip detection                    | Optional  |
| Laser height detection           | Optional  |
| Approvals                        | CE, UKCA, RoHS, WEEE, China RoHS  |
| Warranty                         | 1 year, limited   |

\*Actual travel speed depends on the dispensing path and workpiece / tool payloads.  
\*\*Repeatability results may vary depending on the method of measurement.

## Laser Comparison

| Item                             | Laser B (IL-030)   | Laser C (CL P030)      |
|----------------------------------|--|------------------------|
| Reference (measurement) distance | 30 mm (1.18")  | 30 mm (1.18")          |
| Measurement range                | ±15 mm (±0.59")  | ±5 mm (±0.20")         |
| Laser class                      | 1  | 1                      |
| Spot diameter                    | 200 x 750 µm   | ø38 µm                 |
| Linearity                        | ±5 µm  | ±0.72 µm               |
| Repeatability                    | 1 µm   | 0.25 µm                |
| Sampling rate                    | 0.33 / 1 / 2 / 5 ms  | 0.1 / 0.2 / 0.5 / 1 ms |
| Surface                          | All except reflective, transparent, and translucent surfaces | All                    |

## Free Process Evaluation

Contact Nordson EFD to configure an automated dispensing system that meets your specific needs, with:

- A complimentary process evaluation by experienced fluid dispensing experts
- Samples processed for customer evaluation and approval prior to purchase

## Smart Vision

- Precise repeatability with powerful CCD camera
- Higher product quality and throughput

The GVPlus Series systems include a CCD camera that converts pixels to digital values to deliver precise, high-quality images even when used on challenging surfaces like glass, mirrors, plastics, and non-transparent clear surfaces. The software confirms workpiece presence and placement and automatically adjusts as in-process variations occur.



EFD

For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to [www.nordsonefd.com](http://www.nordsonefd.com).

### Global

800-556-3484; +1-401-431-7000  
[info@nordsonefd.com](mailto:info@nordsonefd.com)

### Europe

00800 7001 7001  
[infoefd.europe@nordsonefd.com](mailto:infoefd.europe@nordsonefd.com)

### Asia

China: +86 (21) 3866 9006; [china@nordsonefd.com](mailto:china@nordsonefd.com)  
India: +91 80 4021 3600; [india@nordsonefd.com](mailto:india@nordsonefd.com)  
Japan: +81 03 5762 2760; [japan@nordsonefd.com](mailto:japan@nordsonefd.com)  
Korea: +82-31-736-8321; [korea@nordsonefd.com](mailto:korea@nordsonefd.com)  
SEAsia: +65 6796 9522; [sin-mal@nordsonefd.com](mailto:sin-mal@nordsonefd.com)

©2024 Nordson Corporation 110524