Nordson® Unity PURJet dispensing systems provide accurate dispensing of heated PUR adhesives in 30 mL syringes and 300 mL cartridges. Unity dispensers help extend the useful life of the syringe to maximize material use and minimize residual waste.

A variety of technologies combine to meet the stringent requirements for precise material dispensing in exacting processes of handheld/portable electronics manufacturing. This helps improve production and performance of applications including bonding, sealing, gasketing, encapsulation and attachment.

With a variety of systems and accessories, Unity solutions can be configured to meet specific requirements. When combined with the Unity tabletop automation, overall accuracy and functionality are enhanced by use of vision, linear encoded motion, and easy-to-use dispensing software that optimizes the process and motion control.

**Features**
- Patented jetting technology allows for consistent and accurate placement of adhesive without the need to adjust for change in the z height of the substrate.
- Non-contact dispensing applies adhesive accurately at high speeds
- Easily dispenses into small grooves and other challenging geometries
- Dispenses discrete dots of adhesive than can be overlapped to create a precise bead of material
- Capable of continuous cycles at 150 HZ

**Benefits**
- No need to maintain a constant dispense gap, thereby eliminating the need of height sensors and the process time to make the height measurements
- Pneumatic modules deliver consistent dispensing and clean cutoff for beads
- Accommodates a wide variety of hot melt materials including polyurethane (PUR)
- Optimizes adhesive wetting of substrates for improved strength and impact resistance
- Dual heating zones with precise temperature controls in the PURJet 300 preserve adhesive life by maintaining a lower temperature in the cartridge while heating to the required application temperature in the manifold and module
- Use of 300 ml cartridge in the PURJet 300 allow for less frequent fluid package changeover, reducing labor and packaging costs
- Increases operation efficiency with optional disposable barrels, eliminating time spent cleaning and refilling syringes
Unity™ PURjet™ 30 and 300 Dispensing Systems

Specifications

Unity controller
- Operating air pressure: 4-8 bar (60-120psi)
- Weight: 7.2 kg (15.9 lb)
- Dimensions (W x D x H): 264 mm (W) x 152 mm (D) x 264 mm (H)

Unity PURJet 30 applicator
- Weight: 1.6 kg (3.4 lb)
- Adhesive viscosity: Varies depending on nozzle size and flow rate
- Solenoid valve air flow: 15 scfm minimum

Unity PURJet 300 applicator
- Weight: 3.36 kg (7.4 lb)
- Adhesive viscosity: Varies depending on nozzle size and flow rate
- Solenoid valve air flow: 15 scfm minimum

Electrical Specifications

Unity controller
- Supply voltage: 200-240 VAC, 1 phase, 50/60 Hz, 290 W
- Heating zones: One (applicator), 1200 W maximum
- Control temperature range: 51–232 °C (125–450 °F)
- Control temperature stability: 0.5 °C (1°F)

Unity PURJet 30 applicator
- Supply voltage: 200-240 VAC, 1 phase, 50/60 Hz, 250 W (supplied from controller)
- Sensor type: 120 ohm nickel or 100 ohm platinum

Unity PURJet 300 applicator
- Supply voltage: 200–240 VAC, 1 phase, 50/60 Hz, 400 W (supplied from controller)
- Applicator manifold: 200–240 VAC, 1 phase, 50/60 Hz, 400 W (supplied from controller)
- Applicator heater block: 200–240 VAC, 1 phase, 50/60 Hz, 250 W (supplied from controller)

Available Options

- Pre-warmers
- Variety of Unity tabletop automations
- Modules/nozzles: 0.004” and 0.007”
- Unity tabletop automation system
- Unity HiTemp™ disposable syringe barrels for PUR and other high temperature materials available from Nordson EFD, call 1-800-556-3484 for more information

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