

IntelliJet Jetting System

Advanced semiconductor dispensing applications require a combination of speed and precision to achieve maximum throughput and yield. The piezo-driven IntelliJet® Jetting System with Readiset® Jet Cartridge, is the world's premier high-frequency jet for achieving consistent, precise dispensing of a wide variety of fluids, with ultra-fast jetting speeds up to 1.8 million dots per hour and a maximum frequency of 1000 Hz. Quickly advance UPH by adding a second IntelliJet to your Vantage® or Forte™ Series dispensing platform.

Overall Jetting Effectiveness

The IntelliJet Jetting System:

- Dual-simultaneous jetting on the Vantage, Forte, and Spectrum® II Series dispensing platforms
- Readiset Jet Cartridge for quick, easy cleaning and replacement – saves time and money
- Market-leading piezo stack longevity and warranty with actuator reliability lasting up to six times longer than other jets on the market
- Integrated self-calibration adjusts for consumable wear and setup-to-setup variations for consistent performance
- An advanced valve design built on decades of jetting experience across a wide range of applications

*IntelliJet valves and Readiset jet cartridges are covered by US Patents 9,346,075; 9,808,826 and 10,646,893 and other patents granted or pending in the US, Asia and Europe.



Easy to Use

With the patented Readiset Jet Cartridge, maintenance and cartridge changeover is quick and easy. The Readiset cartridge is removed from and re-installed into the jet body in seconds, minimizing dispenser downtime. Each IntelliJet jetting system includes two Readiset Jet Cartridges, so one can be used in production while the other is cleaned. The system is so simple to use that you can learn and be ready, set, and jetting in less than 10 minutes.

Fast

Jetting up to 5,000 dots over a 10-second interval and up to a maximum frequency of 1000 Hz enables higher flow rates and line speeds than ever before. Wafer-level package underfill can be completed in a quarter of the time while achieving consistent and reliable small dots.

Reliable

As dot sizes shrink, higher frequencies are required to maintain desired flow rates. This leads to rapid wear of jet actuators and consumable parts. Running at maximum frequency and duty cycle, current jets can expend their entire one-billion-cycle life in only seven weeks, but the IntelliJet system has been tested to last up to six times as long.

Integrated Solution

Self-calibration features integrated into the jet and dispensing platform further account for setup variation and wear of consumables over long production runs. Coupled with ASYMTEK's patented closed-loop process controls, target dispense weight is automatically maintained. As part of the Vantage, Forte, and Spectrum II dispensing platforms, the IntelliJet system produces consistent and reliable high yield across multiple production lines and long production runs.

Decades of Experience

With decades of jetting experience and thousands of jets currently in production, Nordson is committed to providing innovative solutions for all dispensing needs. Our global support network, including state-of-the-art application development labs, provides world leading know-how and application expertise.

Diverse Applications

- Wafer-level packaging
- Underfill on high-density boards
- Camera module assembly
- Medical reagent dispensing

Actuator and Cartridge Details

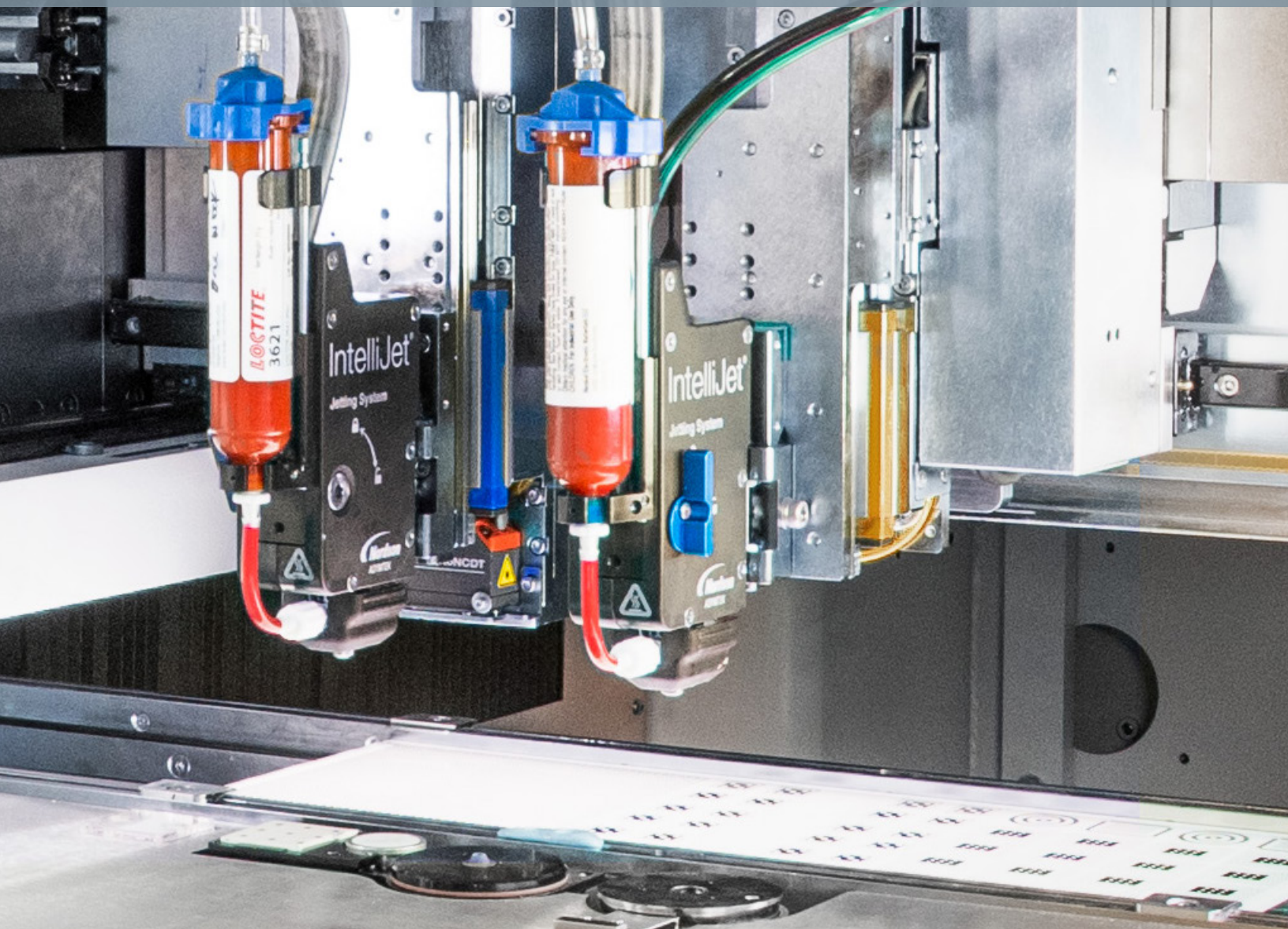
Size	33W x 120H x 89D mm
Reservoir sizes	3 cc, 5 cc, 10 cc, 30 cc, 2.5 oz, and 6 oz
Maximum duty cycle	5000 dots/10 second interval
Maximum cycle frequency	1000 Hz
Valve cooling pressure	138 kPa (20 psi)
Maximum heater set point	100° Celsius
Cartridge changeover time	~30 seconds
Readiset Jet Cartridge types and sizes	<ul style="list-style-type: none"> • Standard cartridge • Stinger tip cartridge <i>Available in a range of sizes for target dot weights</i>
Consumable parts	Readiset Jet Cartridge and fluid feed tube
Platform compatibility	<ul style="list-style-type: none"> • Vantage Series • Forte Series • Spectrum II platforms

Dual-Simultaneous Jetting for Increased UPH

Vantage and Forte Series Dispensing Platforms

Run two IntelliJet Jetting Systems on the dual-valve-ready Vantage or Forte Series dispensing platforms. With dual-simultaneous dispensing, two identical valves dispense repeated patterns of the same fluid simultaneously.

Vantage Series with Dual-IntelliJet Jetting



The Best Just Gets Better

Dual-simultaneous jetting is ideally suited for applications with multi-up, panelized, or patterned parts with consistent spacing. Dispense time is at least 2X faster with dual-simultaneous dispensing when compared to single-jet dispensing, resulting in higher units-per-hour without having to purchase an additional dispensing system.

Forte Series with Forte MAX Dual-IntelliJet Jetting



When Every Second Counts

ReadiSet Jet Cartridge

The IntelliJet Jetting System incorporates the patented 2-piece ASYMTEK ReadiSet Jet Cartridge for fast, simple cleaning and maintenance. The ReadiSet cartridge allows you to fine-tune the jetting process and reduce your cost-of-ownership through minimal maintenance downtime and consumable cost.





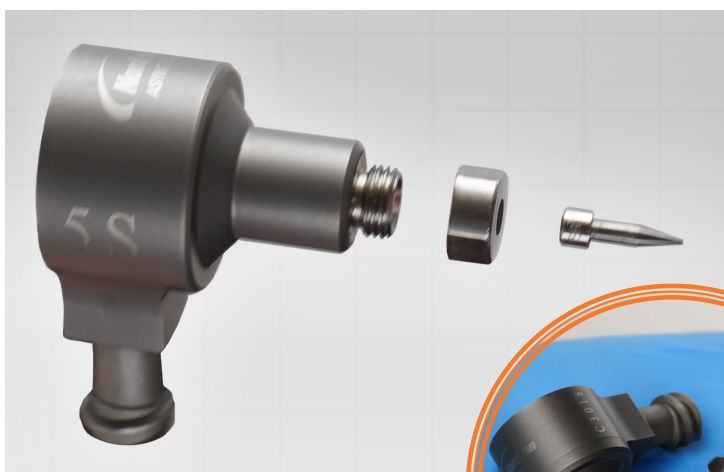
Standard RediSet Jet Cartridge

Form fits function with the 2-piece RediSet Jet Cartridge that features a fully visible fluid path, is ultrasonic compatible, and offers easy access for efficient day-to-day cleaning.

Replace entire cartridges, entire sub-assemblies, or piece parts as needed.

Effortless, Cost-Effective Maintenance

The RediSet Jet cartridge separates easily into two parts for cleaning in an ultrasonic bath with solvent or IPA. A wide range of cartridge sizes are available for 0.5 nL to 300 nL dot sizes.



RediSet Jet Cartridge with Stinger Tip

The RediSet Jet Cartridge with stinger tip includes all the benefits of the standard cartridge and improves access to substrates in the z axis, reduces satellites, and is compatible with tilt and rotate.

Save on maintenance cost with the efficient nozzle design that let's you replace just the nozzle tip — separate from the lower assembly.

Why Nordson Electronics Solutions?

Discover how Nordson's jetting solutions and outstanding global application support can help you optimize your operations.

We've earned the confidence of the world's largest electronics companies to support their high-volume dispensing processes.

We can help you succeed.

Contact us with your specifications, and we'll get to work on your solution.

For more information, visit our website to find your local regional office or representative.

We have several global locations to serve you.

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