



INTELLIGEN® MINI AND IMPACT® MINI PHOTOCHEMICAL DISPENSE AND FILTRATION

Advanced two-stage technology delivers ultimate defect reduction in point-of-use photochemical dispense and filtration performance

Ultimate Defect Reduction

The IntelliGen® Mini dispense system with an Impact® Mini disposable filter provides the industry's best filtration and dispense solution.

The IntelliGen Mini dispense system enables the use of filtration retention ratings to 10 nm. The system's patented two-stage dispense technology separates the filtration rate from the dispense rate to allow ultrafiltration and ultimate dispense repeatability.

The addition of fill rate control and real-time pressure control maximizes filter performance and prevents microbubble formation even in the most sensitive photochemicals.

Building on Entegris' industry-proven technology, the IntelliGen Mini dispense system uses a brushless DC motor with closed-loop control to deliver extreme repeatability at dispense rates down to 0.1 mL/sec. Combined with two-stage technology, this means unsurpassed accuracy and repeatability without the variations that result from down stream filtration.



Two-Stage Advantage

Highly Repeatable Dispense

During dispense the filter is isolated from the dispense chamber to minimize pressure changes that affect repeatability.

Constant Pressure Filtration

Using the feed pump and pressure transducer to provide real-time pressure control, fluid passes through the filter at the optimum rate for a given chemical and pore size.

Features	Benefits
Patented two-stage technology	Separation of filtration rate from dispense rate prevents with constant pressure filtration microbubble formation and allows ultrafiltration of even the most sensitive photochemicals
Impact Mini 10 nm and 20 nm	Cleanest, most efficient filtration media available Ultra-low (<15 cc) hold-up volume to reduce chemical waste and system startup time Reduces opportunities for nucleation sites that can lead to microbubble formation
Closed-loop motor control	Delivers extreme repeatability at dispense at rates down to 0.1 mL/sec
Compact, modular design	Dramatic size reduction from previous generation (>50% size reduction) Perfect for in-field retrofits and easy in-field maintenance

Specifications

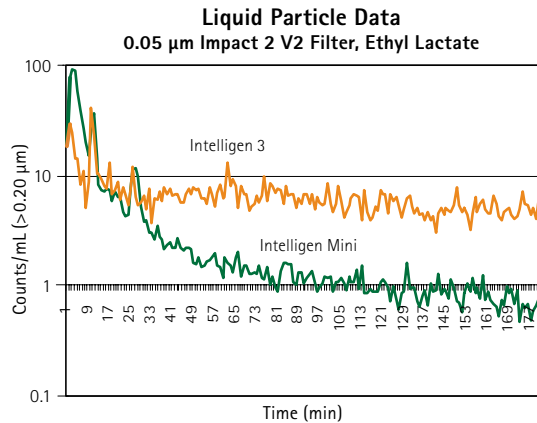
Dispense Performance

Dispense repeatability:	<0.02 mL 3 sigma
Dispense volume:	0.1–10.0 mL in 0.001 mL increments
Dispense rate:	0.1–3.0 mL/sec in 0.001 mL/sec increments
Viscosity range:	1–100 cP

Filtration Performance

Retention rating:	20 nm retention ratings
Compatibility:	PGMEA, PGME, NMP, Ethyl lactate, MMP and cyclohexanone. Not recommended for use with photochemicals containing aromatic hydrocarbons.
Wettability:	Spontaneously wets in Butyl acetate, PGMEA, PGME, Ethyl lactate, MMP, ECA, NMP and other photochemical solvents.
Hold-up volume:	<15 cc
Filter changeout:	Entegris Connectology® connection allows rapid filter changeout with no tools in less than one minute.

Performance Data



In side-by-side testing with the IntelliGen 3 dispense system, the IntelliGen Mini dispense system demonstrated both rapid priming and an order of magnitude reduction in liquid particle counts.

Ordering Information

The IntelliGen Mini dispense system with Impact Mini disposable filters is available in a wide range of configurations to match your specific installation needs. Contact Entegris for fluid fitting, track interface and filtration requirements.

Impact Mini Filter

Part Number	Description
AMAX 200 K1	Impact Mini Filter, 20 nm
AMAZ 200 K1	Impact Mini Filter, 0.05 µm
AMAV 200 K1	Impact Mini Filter, 0.1 µm

For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit www.entegris.com and select the Customer Service link for the center nearest you.

Terms and Conditions of Sale

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit www.entegris.com and select the Legal Notices link from the footer.

Entegris®, the Entegris Rings Design®, IntelliGen®, Impact® and Connectology® are registered trademarks of Entegris, Inc.

ENTEGRIS, INC.

Corporate Headquarters | 129 Concord Road | Billerica, MA 01821 USA
Customer Service Tel. +1 952 556 4181 | Customer Service Fax +1 952 556 8022
In North America 800 394 4083 | www.entegris.com