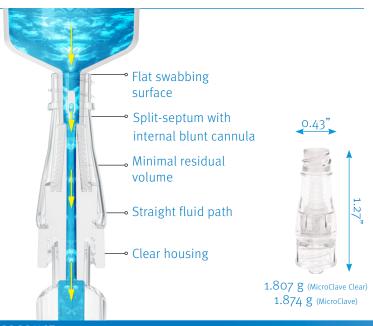
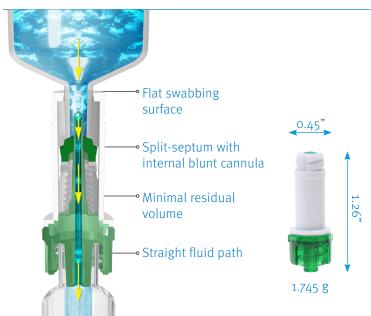
MicroClave® and InVision-Plus® Comparative Matrix

MicroClave by ICU Medical Inc.

In Vision-Plus by RyMed Technologies, Inc.





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PRODUCT PERFORMANCE	MICROCLAVE TECHNOLOGY	INVISION-PLUS TECHNOLOGY
Base Technology	Internal cannula and silicone compression seal split-septum. Internal cannula windows are exposed by the insertion of a male luer, and cannula enters the male luers internal space to achieve flow.	Internal cannula and silicone compression seal split-septum. Internal cannula windows are exposed by the insertion of a male luer, and cannula enters the male luers internal space to achieve flow.
Displacement	Neutral: o to -o.o1 mL -o.oo49 mL and -2.2 cm Published¹	Neutral: o to -o.o1 mL -o.oo43 mL and -1.9 cm Published¹
Residual Volume	o.o4 mL	o.o3 mL
Fluid Path	Straight through polycarbonate cannula.	Straight through polycarbonate cannula.
Moving Parts in Fluid Path	No	No
Number of Assembly Parts	3, of which 1 moves on luer access.	5, of which 3 move on luer access.
Fluid Residual External on Disconnect	Minimal	Minimal
Clamping Sequence	None required	None required
Flow Rate	165 mL/min	131 mL/min
Clear Available	Yes	Yes
Antimicrobial Available	Yes	Yes
Bacterial Transfer Performance	The least amount of bacterial transfer of any connector tested. ²	Exhibits a higher bacterial transfer rate than MicroClave. ²

Performance data on file at ICU Medical Inc. San Clemente, CA 92673. Reference ENG-433

 $In Vision-Plus \ and \ Ry Med \ are \ trademarks \ of \ Ry Med \ Technologies, \ Inc.$



Ryder M, James G, Pulchini E, Bickle L, Parker A. Presented at the Infusion Nursing Society Meeting, May 2011. Differences in bacterial transfer and fluid path colonization through needlefree connector-catheter systems in vitro.