

MULTIPLEX

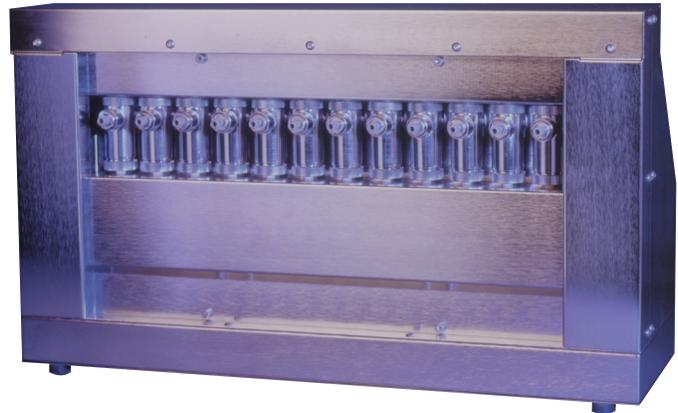
MULTIPLE CHANNEL LIQUID DISPENSING

FEATURES AND BENEFITS

- repeatability of 0.1% CV
- multiple fluid channels driven by a single motor drive
- pulse-free linear dispense profile
- independent channel enable/disable
- digitally programmable for dispense volume and rate
- adjustable 40,000:1 resolution
- bi-directional flow
- ceramic piston/cylinder design
- self-priming
- universal (industry standard) fluid fitting
- chemically inert wetted components
- interchangeable pump modules
- quick changeover

TYPICAL APPLICATIONS

- diagnostic reagent striping
- microtiter plate dispensing
- contact lens manufacturing
- blood collection tube dispensing
- form fill and seal applications
- gel caps manufacturing
- bottle and vial filling
- sterile filling
- syringe filling
- and many more



large frame 12 channel multiplex actuator
66.2cm x 23cm x 41cm



ISO 9001 CERTIFIED
ISO 13485 CERTIFIED



IVEK CORPORATION • 10 FAIRBANKS ROAD • NORTH SPRINGFIELD • VERMONT • 05150 • USA
TEL: (01) 802-886-2238 • FAX: (01) 802-886-8274 • TOLL FREE IN NORTH AMERICA: 800-356-4746

IVEK'S Multiplex dispensing system provides controlled multiple channel precision dispensing for applications where simultaneous delivery of fluid is desired. The system features a high-resolution servo controlled actuator that can control up to 12 ceramic pump modules at once. Each module is a positive displacement mechanism that includes precision ceramic pistons that are mated with ceramic cylinders. Standard clearances are tight enough to eliminate the need for secondary seals. Custom seals and clearances can be included, as each application requires. The individual piston/cylinder sets also include a separate ceramic rotary valve that is individually controlled in the system. The result is a three-piece pump module that can be individually enabled/disabled through the control of each rotary valve. This system can deliver volumes from the sub-microliter range up to 4 milliliters in a single stroke. All parameters are digitally selected through an RS232 computer signal or a touchscreen. This system features the ultimate in accuracy and repeatability, and the efficiently engineered design results in an economical per channel price.



small frame 8 channel multiplex actuator
41.8cm x 21.6cm x 33.5cm

VOLUMETRIC OUTPUT OF MULTIPLEX PUMP MODULES:

PUMP SIZE	CHAMBER CAPACITY	RESOLUTION
200	200 μ l	0.005 μ l
400	400 μ l	0.01 μ l
2000	2000 μ l	0.05 μ l
4000	4000 μ l	0.10 μ l
5000	5000 μ l	0.125 μ l



multiplex pump module

IVEK's ceramic piston/cylinder modules are extremely hard and resist abrasion, resulting in a system that exhibits little to no wear even after hundreds of millions of cycles. In addition, the ceramics are compatible with most acids and bases. The natural crystalline structure of the ceramics displays zero porosity, which insures zero retention and carry-over of one biological fluid to the next.

PRECISION ENGINEERED FLUIDIC SOLUTIONS SINCE 1979

IVEK Corporation is committed to quality and customer support. Our product has always been relied upon for critical applications and our policy states customer satisfaction as the number one priority. As our customer you will experience exceptional performance and reliability for your most demanding applications. IVEK Corporation is ISO 9001 and ISO 13485 certified.



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