

# Fast & Flexible Dual Plate Dispenser



## KDS UltraSpense 2000

### Plate Dispenser

UltraSpense 2000 is the answer to the increasing demand for an automated yet affordable dispenser for 96 and 384 well microplates. High accuracy and precision dispensing into deep well or low profile microplates, coupled with low dead volume and easy programming makes UltraSpense 2000 the ideal solution for virtually all dispensing applications. Dispense a wide range of solvents, acids, bases and other aggressive liquids with confidence through the completely inert liquids path. Optimize performance for a wide viscosity range through the adjustable pump speed. UltraSpense is very fast and accurate; dispense 100  $\mu$ l into each well of a 96 well plate within 14 seconds with better than 0.5% C.V. precision.

### Features

- Height-adjustable manifold
- Deep-well, standard & low-profile microplates can be used
- Pump-back capability and low dead volume
- User selectable volumes
- Programmable: flexible dispensing patterns, start and stop position, and omitted columns
- Automatic, repeatable, precise dispensing
- Long life piston pump
- No required calibration or maintenance intervals
- Easy operation and programming
- Completely inert liquid path - only PTFE, PVDF, glass and ceramic contact liquid
- Single and dual plate high speed dispensing: < 14 seconds for a 96-well plate; < 20 seconds for a 384-well plate
- User dialog in four languages

### Benefits

- Accommodates low profile through deep well microplates
- Multiple formats with one system - 96 Well/384 Well Microplates
- Minimizes reagent loss
- Saves reagent waste
- Optimize expensive reagent usage
- Minimize assay errors; maximize reproducibility
- No required service or calibration intervals
- High precision over life time and low operating cost
- Repeated assays or dispensing profiles are only programmed once, saving time and money
- Compatible with a wide range of solvents, acids, bases and other aggressive liquids
- Maximize productivity and throughput
- Standardize on one piece of equipment in all your labs to produce consistent results everywhere

### Applications

- Low Volume dispensing
- Protein Crystallizations
- Assay Development
- Primary Screening
- Secondary Screening
- Compound Storage

### Specifications

Volume Range	5 $\mu$ l to 2.5 ml
Volume Increments	5 $\mu$ l standard, others selectable
Accuracy	+/- 1.5% (mean volume/column)
Precision	+/- 0.5%
Dead Volume	< 2.5 ml
Start/End Position	Programmable
Column Exclusion	Programmable by Column
Dispensing Speed 96 well plate	14 sec., 100 $\mu$ l/well
Dispensing Speed 384 well plate	20 sec., 20 $\mu$ l/well
Computer Interface	RS-232
Number of Plates	1 or 2
Plate Formats	96 and 384 well; Low profile to deep well
Number of Stored Programs	15
Dimensions (W x D x H) (440 x 550 x 220 mm)	11.0 x 16.1 x 10.6 in
Weight	24 lbs (11 kg)
Power Supply	85 - 260 VAC 47 - 440 Hz, 70 Watts max.
Environmental	Humidity 5 to 90% non-condensing
Maximum Altitude	2000 m
Temperature	5 to 40°C