

## Advanced Performance and Intuitive Operation



### FEATURES

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Control flow rates from 5  $\mu$ l/min to 221 ml/min

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Multi-size syringes from 0.5  $\mu$ l to 140 ml

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High resolution, chemically resistant color touch screen display

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RS232 computer connection, USB serial input, RS485 for networking pumps

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Vertical mounting to save space with automatically rotating display

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Optional multi-syringe rack for ten (10) 0.5  $\mu$ l – 20 ml syringes or six (6) 30 – 60 ml syringes

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### APPLICATIONS

- Microfluidics
- Drug Discovery
- Nanofluidics
- Flow Cytometry
- Mass Spectrometry
- Electrospinning
- Organic Synthesis
- Stereotaxic Injections



## Superior Flow Performance

Flow performance is optimized with a small step angle microstepping motor that drives a precision lead screw and pusher block.

Advanced microstepping techniques are employed to further reduce the step angle to eliminate flow pulsation. IBL syringe pump's accuracy is +/- 0.35% and has 0.05% reproducibility.

A wide dynamic flow range from 5 pl/min to 220.97 ml/min can be programmed into the pump.

Additionally, flow rates are user selectable with engineering units from ml, µl, nl, pl, and hours, minutes and seconds.

- One touch quick release pusher block is easy to use and is always engaged.
- Rubber pads retain syringe in place preventing accidental breakage of glass syringes.
- Curved syringe clamp design securely retains syringes, eliminating slippage of the syringe under high force applications with viscous fluids.
- Adjustable linear force, ensures the right force is applied for the various syringe sizes.

## Intuitive Run Screen

Combining multiple parameters simultaneously with internationally recognizable icons the IBL-200 dual syringe infusion pump to provide a new level of intuitive pump operation.



## IBL-200/300 Syringe Infusion Pump Specifications

Accuracy	• ± 0.35%
Reproducibility	• ± 0.05%
Syringes (min./max.)	• 0.5µl/140ml
Flow rate minimum (0.5µl syringe)	• 5pl/min
Flow rate maximum (140ml syringe)	• 220.97 ml/min
Display	• 4.3" WQVGA TFT color display with touch pad
Step rate minimum	• 27.5sec/µstep
Step rate maximum	• 26µsec/µstep
Pusher travel rate minimum	• 0.36µm/min
Pusher travel rate maximum	• 190.80mm/min
Linear maximum force	• 34kg (75 lb.) @ 100% force selection
Power	• 100-240VAC; 50/60Hz; 50W; 0.5A fuse
Dimensions	• 8.89 x 25.4 x 27.94cm (3.5 x 10 x 11")
Weight	• 4.9kg (10.75 lb.)