Technical Information

Technical Specifications

The Controller

The Microlab 600 Controller integrates a streamlined user interface with a large touch screen display. Dilutions, dispenses, titrations and more are visually displayed in real-time with just the touch of a button.

A Hardware Key unlocks the Advanced functionality inluding Wizards and Custom Methods. The Hardware Key also provides an upgrade path for the syringe pump and controller to the most current firmware.

Controller Specifications

Specifications	Microlab 600 Controller
Screen Size	5.7 inch (15cm diagonal)
Screen Resolution	640 (H) x 480 (V) pixels
Tilt Positions	5 positions from 90° to flat
Mounting Options	On top of the Syringe Pump, Bench Top, or Wall Mount
Program Memory	2 GB (With Advanced Upgrade)
Communication Type	Ethernet, 10/100 BASE-T
Power Rating	24VDC, 2.5A
Dimensions	2.25 x 6.5 x 7 inch (57.2 x 165.1 x 177.8mm) in down position
Weight	1.9 lbs (0.86 kg)

1. Touch Screen
2. Screen tilts for viewing comfort
3. Hardware Key
4. Ethernet
5. Device Expansion
6. Host USB
7. Slave USB
8. Power Cord jack

The Syringe Pump

The Microlab 600 is available as a single or dual syringe system. The high torque, precision stepper motors provide unsurpassed positional accuracy across the full range of Hamilton syringes from 10 µL to 50 mL.

1. High Torque Valve Motors
2. Precision Syringe Drives with 48,000 step resolution over 60 mm
3. Lighted Power and Prime Buttons
4. Independent Left and Right Trigger Ports
5. Fanless Heat Vent
6. 24 Volt Power Input
7. CAN Daisy Chain Input/Output
8. RS-232 Console Port
9. Power over Ethernet (PoE)
10. TTL Input/Output

Syringe Pump Specifications

Specifications	Microlab 600 Syringe Pump
Accuracy	+/- 1%
Precision	+/- 0.2%
Flow Rate	0.003 - 6000 µL/second (depending on the syringe that is selected)
Syringe Resolution	0.002% of the nominal syringe volume
Compatible Syringes	10, 25, 50, 100, 250, 500 µL, 1, 2.5, 5, 10, 25, and 50 mL
Fluid Path	Borosilicate, PTFE, CTFE
Communication Type	Ethernet, 10/100 BASE-T
Communication Protocol	.NET 2.0 Application Programming Interface (API)
Pump Memory	One method stored in non volatile memory
Calibration	Factory tested and traceable to N.I.S.T. standards
Certifications	CE, CSA
Power Rating	24 VDC, 2.5A
Dimensions	7 x 5.5 x 10.5 inch (177.8 x 139.7 x 266.7 mm)
Weight	13 lbs (5.9 kg)