



# MYM

Laboratory & Medical Supply, Inc.



## POINTE 180 III

### Features

**Bichromatic Photometer:**

Differential wavelengths to correct imperfections in test tubes or square cuvettes and to help remove interfering substances. Six standard filters with two optional filters (340-700nm)

**Temperature controlled cuvette:**

Constant 37° C cuvette and cuvette well when optional tube or square cuvettes modes are used.

**Internal Temperature control:**

The analyzer monitors the incubator and cuvette temperatures. The temperatures are automatically corrected and the actual temperature in degrees (C) is displayed on the screen.

**Lamp Saver Feature:**

The instrument automatically shuts off the lamp if the instrument has not been used for 15 minutes. This feature can preserve the lamp for up to two years, depending on the actual usage.

**QC Tracking Feature:**

The instrument software can store control values and create Levy-Jennings plots.

**Work list and Patient reports:**

The instrument can create, stored and print work list and patient reports to on-board thermal printer to external printer and PC.

**Different Cuvette modes:**

The analyzer flowcell is removable to allow use of round 12 mm glass tube or 1 cm square cuvettes.

**Flip-up display:**

Large 240 x 128 pixel graphical display.

**Preprogrammed Chemistry Procedures:**

Optimized parameters for Pointe Scientific reagents are preprogrammed. 120 open channels.

**Kinetic Plots:**

Shows kinetic plots in real time.

**Maintenance Free:**

The analyzer does not require any scheduled maintenance procedures.



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### Specification

Model Name:	Pointe 180 II
Spectrophotometer type:	Filter
Optical Configuration:	Single beam with continuously rotating filter wheel. Monochromatic or bichromatic reading 8 filter positions.
Usable Spectral Range:	330 to 770 nm
System Procedures:	Open and Stored Menu.
Calculating Modes:	Absorbance, Single Standard (differential samples) Factor Mode (differential samples) Multi Standard Mode (up to 7 standards) Multi Standard % Mode (up to 7 standards) Kinetic Mode (consecutively, or simultaneously (Batch)) By factor or standard. Fixed Time Kinetic By factor or standard. Index Mode.
Channels:	120 open
Source of Radiation:	Tungsten Halogen, 10 watt, with automatic lamp saver.
Selection of Wavelength:	By Filter.
Filter Type:	4-cavity interference, long-life ion beam-assisted deposition.
Wavelength accuracy:	$\pm 3$ nm
Filter location:	After sample (heat absorbing filter before sample).
Filter selection:	Automatic by software or via keyboard.
Wavelengths:	340, 405, 505, 545, 580, 630, nm supplied standard, others optional.
Half bandwidth:	<10 nm
1/100 bandwidth:	14 nm at 340 nm.
False radiant energy ratio:	<0.001 at 340 and 405 nm.
Cuvette:	1 cm square, 12 mm round, flow through.

Type supplied:	Flow through.
Material:	316 stainless, borosilicate windows.
Geometry:	Cylindrical, 2.3 mm dia x 5 mm +/- 0.05 mm.
Illuminated Volume:	21 ul
Minimum read volume:	250 ul
Aspiration / purge:	Vacuum pump at 18 cm of Hg.
Valve:	Silicone pinch type
Cuvette Holder:	Thermostatically controlled compartment at 37°C.
Detector:	Gallium-Arsenide-Phosphide photoiode.
Display type:	240x128 graphic LCD w/backlight

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### Scale of Display:

Absorbance:	-0.5 to 3.5 (flow through mode) -0.5 to 2.5 (tube or 1 cm cuvette)
Concentration:	Maximum 999,999
Kinetic Results:	Abs/min with resolution of 0.0002 A/min
Zero Compensation:	Automatic
Range:	-0.5 to 2.5 absorbance

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### Signal Outputs:

Parallel:	Centronics/IBM-PC compatible
Serial:	RS-232 at 9600 baud, 8 data, 1 stop, no parity Bi-directional.

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Data input:	1) 20 key keypad, 2) PS2 101 keyboard (connector on back)
Spectrophotometric Inaccuracy Flow-through:	<0.5 % at 1 absorbance, 340/630 nm NADH Solution. <0.5 % at 2 absorbance, 340/630 nm NADH Solution. <0.5 % at 3 absorbance, 340/630 nm NADH Solution. <0.5 % at 1 absorbance, 405/630 nm PNP Solution. <0.5 % at 2 absorbance, 405/630 nm PNP Solution. <0.5 % at 2 absorbance, 405/630 nm PNP Solution.
Stability:	Better than 0.003 A/hr monochromatic after warmup.
Warmup time:	90 seconds photometric, 15 minutes for temperature compartment.
Electronics:	Z180 Microprocessor 18 MHz 128k EPROM.
Power:	Auto-Switching Power supply. Voltage source: 90-264 VAC Frequency: 50/60 Hz Power consumption: 60 watts Installation Category: CAT II Fuses: 2.5A/250V fast 5-20 mm glass fuse, 2.0A/250V Fast 5-20 mm Ceramic Fuse, (2) 6/10 250V slow blow 3AG Fuses
Dimensions and Weight:	40cm (L) x 37 cm (W) x 14 cm (H) lid closed (30 cm lid opened), 6.4 kg
Space Requirements:	10 cm clearance on all sides.

Environmental Conditions for Safe operation: Indoor Use Altitude up to 2000m.  
Temperature 5°C to 40°C (Although it may be safe to operate in these conditions, it may not be suitable for the performance of the user's tests.  
Humidity 85% for temperatures up to 30°C decreasing linearly to 50% humidity at 40°C.  
Mains supply voltage fluctuations not to exceed +/- 10% of nominal voltage.

Recommended Operating Temperature: 15-35°C

Recommended Operating Humidity: Between 10 and 85%, non-condensing