

Appendix A

Specifications

Table A-1 Operational Specifications

Conditions	Specifications
RI Range	1.00 to 1.75 RIU
Measurement Range	5×10^{-3} RIU maximum FS (SENS = 1, SF = 1) 5×10^{-8} RIU minimum FS (SENS = 1024, SF = 100)
Flow Rate	0.03 to 10 mL/min
Noise ¹	$\leq 2.0 \times 10^{-8}$ RIU, (TC = 1, SF = 80, SENS = 64, THF at 24 °C with restrictor coil)
Drift [*]	2.5×10^{-7} RIU/hr (static with THF) TC = 1, SF = 20, SENS = 32
Sensitivity Settings	1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024
Time Constant Filter Settings	0.2, 1, 3, 10 seconds
Analog Outputs	-2.0 V to +2.0 V
Temperature Control	Internal oven: 30 to 50 °C (86 to 122 °F) External column heaters: <ul style="list-style-type: none"> • Ambient to 150 °C (302 °F), steel • Ambient to 80 °C (176 °F), plastic

¹ After a minimum one hour warmup time

Table A-2 Integrator Output

Sensitivity Setting	Output (V)
1	1
2	2
4	2
8	2
16 to 1024	2

Table A-3 Optical Component Specifications

Conditions	Specifications
Light Source	Light emitting diode (LED)
Flow Cell	Fused quartz
Cell Volume	10 μ L
Pressure Limit	100 psi
Fluidic Path Materials	316 stainless steel, Dynasil [®] , Suprasil II [®] , PTFE, Kalrez [®] , quartz

Table A-4 Environmental Specifications

Conditions	Specifications
Operating Temperature	15 °C to 32.2 °C (59 °F to 90 °F)
Operating Humidity	20 to 80%, noncondensing
Shipping and Storage Temperature	-40 °C to 70 °C (-104 °F to 158 °F)
Shipping and Storage Humidity	0% to 90%, noncondensing

Table A-5 Dimensions

Conditions	Specifications
Height	8.2 in. (20.8 cm)
Length	19.8 in. (50.3 cm)
Width	11.2 in. (28.4 cm)
Weight	21.7 lbs. (9.7 kg)

Table A-6 Electrical Specifications

Conditions	Specifications
Line Frequency	50 Hz, 47 to 53 Hz 60 Hz, 57 to 63 Hz
Fuse Rating	F 2 A, 250 Vac
Power Consumption	140 VA (Nominal)

Table A-7 Power Source Specification

Nominal Voltage
100 to 240 V, 50/60 Hz