



## Specifications

**For Aurora Scientific Model: 220A-4,-8,-12,-16/220A-V**

Model #	220A-4,-8,-12,-16	220A-V
Modules Included	All Models: MFC, Mixing, Final 220A-4: 1x 4-Vial Odor 220A-8: 2x 4-Vial Odor 220A-12: 3x 4-Vial Odor 220A-16: 4x 4-Vial Odor	4-Vial Odor add-on
Mass Flow Controllers [SCCM <sup>1</sup> ]	Odor: 0-100 Dilution: 0-1000 Exhaust: 0-1000	N/A
Total Flowrate Range [SCCM <sup>2</sup> ]	100-1000	N/A
Odor Vials	220A-4: 4 220A-8: 8 220A-12: 12 220A-16: 16	4
Odor Dilution Range [%]	0.1-10	N/A
Odor Pulse Delay [ms]	40	N/A
Odor Pulse Duration [ms]	30 - continuous	N/A
Communications	Ethernet	N/A
Final Valve Sync Output	BNC, TTL signal Hi: Final Valve Flows to Animal Lo: Final Valve Flows to Exhaust	N/A
Final Valve Trigger In	BNC, TTL signal triggers opening of Final Valve Hi: Final Valve Flows to Animal Lo: Final Valve Flows to Exhaust	N/A
DIO 1 Input	BNC, TTL Sequence Trigger	N/A
DIO 2 Output	BNC, Configurable by user: Sequence Sync Out or Vial Status	N/A
<b>General Specifications</b>		
Operating Temperature [°C]	0 - 40	
Power Required	In: 100-240 VAC, 50/60 Hz. @ 1.8A	48VDC supplied by 220A
Power Consumption [W]	15	10
Weight [kg]	220A-4: 4.6 220A-8: 6.2 220A-12: 7.8 220A-16: 9.4	1.6

<sup>1</sup> Standard Cubic Centimeters per Minute

<sup>2</sup> Standard Cubic Centimeters per Minute



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Dimensions [cm]	<p>MFC: 12L x 20W x 14H            4-Vial Odor: 18L x 15W x 15H            Mixing Valve: 4L x 15W x 5H            Complete Instrument:            220A-4: 31L x 20W x 15H            220A-8: 48L x 20W x 15H            220A-12: 65L x 20W x 15H            220A-16: 82L x 20W x 15H</p>	18L x 15W x 15H
<b>Software Specifications</b>		
Main Window	<p>Readouts: Flowrate, Vial Flow %, Odor Delivery Duration            Status LEDs: Flow, Odor, Purge and Animal, Vial Selection            Controls: Flow Odor To Exhaust, Purge, Deliver Odor to Animal, Stop Flow            Status line</p>	
System Configuration Window	<p>Vial list showing Odorant, Solvent and Concentration            Controls: Odor Flow Stabilization Delay, Total System Flow Rate            Load and Save Config file</p>	
Advanced Status and Control Window	<p>Displays graphical representation of the olfactometer's current state and allows manual control of flowrates and valves</p>	
Valve Check	<p>System check which cycles each valve sequentially</p>	
Sequencer Window	<p>Create challenge sequences, controls vial, delay time, delivery time            Allows sequence to be randomized. Load and Save sequence files.</p>	