



Airstream® G4

Class II Type A2 Biological Safety Cabinets

The Leading Energy-efficient, Quiet, and Ergonomic Biosafety Cabinet in the World







USB Port and Zero Volt Relay Contact

- USB Port to send operational information to **Building Management System (BMS)**
- Zero Volt Relay Contact to turn ON/OFF exhaust blower and signal the building alarm

ESCO

SOCIDE * * P D 4



Centurion Touchscreen Controller

- 7" Capacitive Touch Screen, intuitive to use like phones
- Displays key safety information graphically on one screen
- Built-in guide to use the cabinet and respond to situations
- Centered and angled down for easy reach & viewing
- Datalogger to assist diagnostics and send info to BMS
- Optional: 21 CFR Part 11 Compliance



One-Piece Interior Wall -

- Double layer side walls with negative pressure
- Easy to reach service fixture and outlets
- Large radius corner for easy cleaning

Unique Stainless Steel (S-Series)and Glass Hybrid (E-Series) Wall

- Large corner radius for easy cleaning
- Easy to reach service fixture and outlets



Removable Paper Catch

- Easy-to-clean
- Optional pre-filter can be fitted



Raised Ergonomic Arm Rest

- Helps prevent grille blocking
- Comfortable working posture



Dished Work Tray

- Contains spillage
- Angled edge for easy cleaning
- V-shaped grille to prevent blocking
- Work tray holder for drain pan cleaning







UL 61010



safety

biohazard landfill

Prevents the plenum from becoming

Airflow Sensor

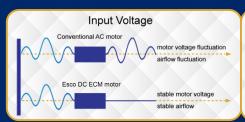
- Monitors real-time airflow for safety
- Alerts the user if airflow is insufficient

Energy-efficient DC ECM Blower

- The leading energy efficient Class II Type A2 Biosafety Cabinet in the world with 70% energy savings compared to AC motor
- Stable airflow despite building voltage fluctuations and filter loading
- Standby mode to further reduce power consumption by 60%









ULPA Filter

- 10x Filtration efficiency of HEPA filter
- Creates ISO Class 3 work zone instead of industry-standard ISO Class 5
- Same 10 years filter life and replacement cost as HEPA filters

Dynamic Chamber™

- Blower plenum and side walls are surrounded by negative pressure
- Prevents contaminants from escaping outside
- Steel plenum with Isocide™ coating, instead of flexible bag plenum, to prevent contamination leak



Positive pressure Negative pressure

User Modified Pass-Through / Cable Port

- 3" Port with ¼" hole on rubber membrane inside
- NSF-approved. Surrounded by negative pressure
- Allows cables and tubes to exit with fully closed sash

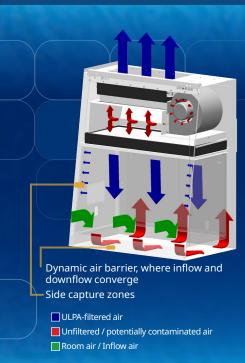


Angled Sash

10° angled front to optimize user comfort, reduce glare and maximize reach. into the work area

Standards Compliance and Certifications

Performance	Air Quality	Filtration	Electrical Safety	Electromagnetic Compatibility (EMC)
NSF / ANSI 49	ISO 14644.1, Class 3, Worldwide, US Fed Std 209E, Class 1 USA JIS B9920, Class 3, Japan	EN-1822 (H14), Europe IEST-RP-CC001, USA	UL 61010-1 3rd Ed, USA CSA22.2, No.1010-192, Canada IEC61010-1, Worldwide	EN IEC 61326-1 Group 1 / Class A



Cabinet Filtration System

- Ambient air is pulled through front grille to create inflow, without going into the work surface. Inflow is joined by half of the downflow, to create front air curtain that is fine-tuned to create a large performance envelope. The combined air stream travels through the back
- air column towards the blower.

Approximately 1/3 of the air in the common plenum is exhausted through the ULPA filter to the room. The remaining ¾ of the air is passed through the downflow ULPA filter and into the work area as a vertical laminar flow air to create

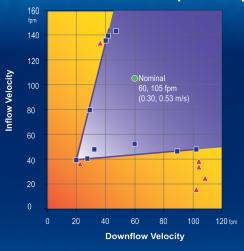
ISO Class 3 work surface and prevents cross contamination.

Near the work surface, the downflow

splits. About half goes to the front grille, and half goes to the rear grille. A small portion enters the the side capture zones to prevent dead air corners (small blue arrows).

The design was optimized to give large performance envelope, that provides operator and product protection at wide Inflow and Downflow variation from the Nominal point.

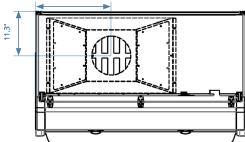
The Performance Envelope Concept



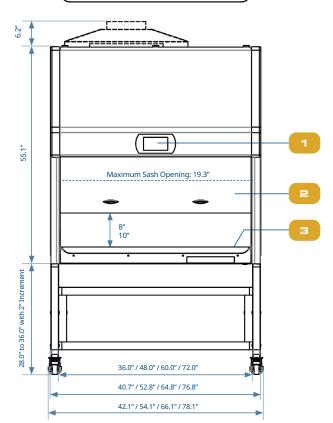
- Nominal Airflow
- Personnel / Product Protection
- Area of Personnel and **Product Protection**
- ▲ NO Personnel / Product Protection
- Area of NO Personnel and Product Protection

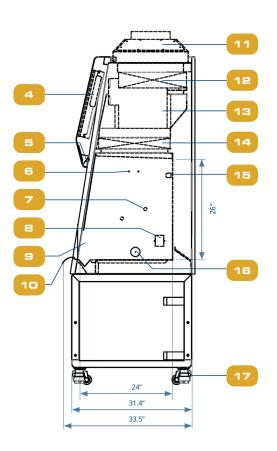
Engineering Drawing

17.2" / 19.0" / 22.8" /26.5"



- 1. Centurion 7" Touchscreen Control System
- 2. Tempered Glass Sliding Sash Window
- 3. Stainless Steel Dished Work Tray
- 4. Electrical/Electronic Panel
- 5. Dimmable LED lamp
- 6. Provision for IV Bar (Optional)
- 7. Service Fixture Retrofit Kit Provision
- 8. Electrical Outlet (Max. 5 Amp Total)
- 9. Stainless Steel Side Wall
- 10. Stainless Steel Curved Armrest
- 11. Exhaust Collar (Optional)
- 12. Exhaust ULPA (H14) Filter
- 13. DC-ECM Blower
- 14. Downflow ULPA (H14) Filter
- 15. UV Lamp
- 16. Cable Port
- 17. Caster wheel Leveling Feet Combo





Airstream® NS G4

			TECHNICAL SPE				
Model	Stainless Steel Side Walls	8" Sash Opening	AC2-3S9-NS G4 8" 2011429	AC2-4S9-NS G4 8" 2011403	AC2-5S9-NS G4 8" 2011431	AC2-6S9-NS G4 8" 2011433	
		10" Sash Opening	AC2-3S9-NS G4 10" 2011926	AC2-4S9-NS G4 10" 2011927	AC2-5S9-NS G4 10" 2011928	AC2-6S9-NS G4 10" 2011929	
	Glass Hybrid Side Walls	8" Sash Opening	AC2-3E9-NS G4 8" 2011421	AC2-4E9-NS G4 8" 2011423	AC2-5E9-NS G4 8" 2011425	AC2-6E9-NS G4 8" 2011427	
Nominal Size		3′	4′	5′	6′		
External Dimensions (W x D x H)			40.7" x 33.5" x 55.1"	52.8" x 33.5" x 55.1"	64.8" x 33.5" x 55.1"	76.8" x 33.5" x 55.1"	
Gross Internal Dimensions (W x D x H)			36.0" x 24.0" x 26.0"	48.0" x 24.0" x 26.0"	60.0" x 24.0" x 26.0"	72.0" x 24.0" x 26.0"	
Usable Work Are	a (W x D)		35.5" x 19.5"	47.5" x 19.5"	59.5" x 19.5"	71.5" x 19.5"	
Working Openin	g		8″/10″				
Maximum Openi	ing		19.3"				
Average Inflow \	/elocity		105 fpm				
Average Downflow Velocity			60 fpm				
	Inflow / Exhaust	8" Sash Opening	210 cfm	280 cfm	350 cfm	417 cfm	
	Without Ducting	10" Sash Opening	263 cfm	350 cfm	438 cfm	525 cfm	
		8" Sash Opening	333 cfm	442 cfm	554 cfm	663 cfm	
	Downflow	10" Sash Opening	333 cfm	442 cfm	554 cfm	663 cfm	
Airflow Volume	Required Exhaust	8" Sash Opening	230 cfm	310 cfm	369 cfm	459 cfm	
	with Optional Thimble Exhaust Collar	10" Sash Opening	362 cfm	382 cfm	463 cfm	559 cfm	
	Static Pressure	8" Sash Opening	0.06-0.10 in H ₂ O	0.10-0.14 in H₂O	0.10-0.14 in H ₂ O	0.18-0.22 in H ₂ O	
	For Optional Thimble Exhaust Collar	10" Sash Opening	0.08-0.12 in H ₂ O	0.12-0.16 in H ₂ O	0.14-0.18 in H₂O	0.20-0.24 in H ₂ O	
ULPA Filter Typical Efficiency			>99.999% at 0.1 to 0.3 micron, ULPA as per IEST-RP-CC001.3 USA >99.999% at MPPS, H14 as per EN 1822 EU				
Sound Emission	per NSF / ANSI 49*		55.8 dBA	59.5 dBA	59.8 dBA	62.8 dBA	
LED Lamp Light 1	Intensity		1260 lux (117 ft-cd)	1313 lux (122 ft-cd)	11216 lux (113 ft-cd)	1227 lux (114 ft-cd)	
	Main Body		1.2 mm (0.05") / 18 gauge EG Steel with Isocide™ Oven-Baked Epoxy-Polyester Anti-microbial Powder Coating				
Work Zone			1.5 mm (0.06") / 16 gauge, Stainless Steel 304, 4B finish				
Cabinet Construction	Stainless Steel		1.5 mm (0.06") / 16 gauge, Stainless Steel 304, 4B finish				
	Side Walls	Glass Hybrid (E Series)	6 mm (0.25") thickness UV-absorbing Tempered Glass				
	Sash Glass Materia	I	6 mm (0.25") thickness UV-absorbing Tempered Glass				
	Nominal Power Consumption (W)	8" Sash Opening	132	184	242	333	
		10" Sash Opening	148	180	255	338	
Electrical**	Heat Load (BTU / Hr)	8" Sash Opening	450	628	826	1136	
110-130 VAC, 50/60 Hz		10" Sash Opening	505	614	870	1153	
50/60 Hz	Cabinet Full Load Amps (FLA)	8" Sash Opening	15	15	15	15	
		10" Sash Opening	15	15	15	15	
Net Weight			448 lbs	540 lbs	668 lbs	796 lbs	
Shipping Weight			509 lbs	661 lbs	814 lbs	977 lbs	
Shipping Dimensions, Maximum (W x D x H)			47.2"x 33.5" x 76.8"	57.1" x 33.5" x 76.8"	67.7" x 33.5" x 76.8"	80.7" x 33.5" x 76.8"	
Shipping Volume			70.6 cu.ft	88.2 cu.ft	105.9 cu.ft	127.1 cu.ft	

Disclaimer: Technical Specifications may be subjected to further changes without prior notice.

*Noise reading in open field condition / anechoic chamber. Noise reading in normal room varies by room size, layout, and background noise, but may reach roughly 3-4 dBA above these values. **Electrical power consumption is an measurement of new unit with clean filter operated within nominal setpoint. Result per unit may vary.

Options and Accessories							
Exhaust Collar		ECO-F-LA2/AC2-3 G4 5171097	ECO-F-LA2/AC2-4 G4 5171098	ECO-F-LA2/AC2-5 G4 5171099	ECO-F-LA2/AC2-6 G4 5171100		
Exhaust Damper		DAMPER-10 5170104					
UV Lamp		UV-15A-L UV-30A-L 5170255					
IV Bar		IV-955 5170499	IV-1215 5170231	IV-1520 5170500	IV-1870 5170501		
Electrical Outlet	GFCI	EO-GFCI 5170071					
Coming Fintennes	US SF-Universal-20 mm	SF-2U22 5170504					
Service Fixtures	Copper Piping for SF	CU-Pipe 5170026					
Support Stand	Telescoping Stand with Caster Wheels	STA-3A0 5131340	STA-4A0 5131341	STA-5A0 5131427	STA-6A0 5131389		
	Motorized Stand Height with Levelling Feet	SPML-3A2 5131503	SPML-4A2 5131504	SPML-5A2 5131505	SPML-6A2 5131506		
	Motorized Stand Height with Levelling Feet and Seismic Bracket		SPML-4A2-SB 5131403	SPML-5A2-SB 5131443	SPML-6A2-SB 5131404		
	Motorized Stand Height with Caster Wheels	SPMC-3A2 5130093	SPMC-4A2 5130047	SPMC-5A2 5130100	SPMC-6A2 5131141		
	Motorized Stand with Castors Cradle		SLC-4A2 G4 with 20" piston 5131441	SLC-5A2 G4 with 20" piston 5131447	SLC-6A2 G4 with 20" piston 5131440		
Pipette Storage Shelf		5260327					
Arm Rest Padding		MEWREST 5170127					
Foot Rest		FT-REST 5170492					
Laboratory Chair		ME-LD-AR360 1150006					
IQOQ Protocol		9010179					













ECO-F-LA2/AC2-4 G4







IV Bar with 6 Hooks



EO-GFCI

SLC



SF-2U



STA



SPML



SPMC



Seismic Bracket



FT-REST **MEWREST**



IQOQ



Life Science Tools









Chemical Research



Ducted Fume Hoods



Pharma Compounding





Medical (IVF)









Bioprocessing











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