Thermo Scientific 1300 Series A2

Class II, Type A2 Biological Safety Cabinets

Good for you
good for the environment

Thermo
SCIENTIFIC

Thermo Scientific 1300 Series A2

Enjoy best-in-class performance and value

Superior Containment

Unique airflow design maximizes safety

Extremely Comfortable

Ergonomic design simplifies ease of use

Added Convenience

Choice of configuration increases flexibility

Optimizing Safety and Efficiency

Laboratories today are facing new challenges. Safety and reliability continue to be paramount. Yet, there is growing need for improved energy efficiency, simpler operation and less maintenance.

Our Thermo Scientific 1300 Series A2 Class II, Type A2 biological safety cabinets provide best-in-class safety, ergonomics and energy efficiency for today's most demanding laboratory applications.

1300 Series A2

The Thermo Scientific 1300 Series A2 is backed by our global reputation and commitment to provide the safest and most reliable biological safety cabinets available.

We have decades of market leadership in biological safety cabinets, as well as a full suite of laboratory solutions – all with unmatched quality and world-renowned service and support.

Ergonomic Design for Ease-of-Use

Ergonomic Design Enhances Safety

Sloped Front
Cabinet front is sloped 10° for enhanced comfort and reduced operator fatigue.

Reduced Noise Level
Lower noise level enhances the attention and allows user to focus on work without distraction.

Spacious Work Area
The large, unobstructed work surface increases productivity and safety.

Single-Piece Work Tray
The flat, single-piece stainless steel work tray supports ease of cleaning.

Comfortable Armrest
Armrests sit just above the intake grill to enable farther reach inside the cabinet while maintaining safe airflows.

All models of the Thermo Scientific 1300 Series A2 have been fully tested and verified to meet NSF/ANSI 49 for Class II, Type A2 conditions.

Easy-to-Access Control Panel and Performance Data
The large control panel displays valuable safety and performance data, and is within easy view and reach from a seated position. The intuitive interface delivers a constant read-out of downflow and inflow velocities and overall cabinet performance status.

Ease-of-Use for **Enhanced Safety**

An efficient working environment can eliminate expensive disruptions to lab procedures. Our Thermo Scientific 1300 Series A2 delivers easy-to-use features that enable you to perform your best work – productively and safely.

SmartClean™ Window Design

To reduce risk of sample contamination, our patented window design easily lowers for thorough cleaning of the window's inner surface. This unique design protects the operator by maintaining inflow even when the window is lowered.

Easy Servicing

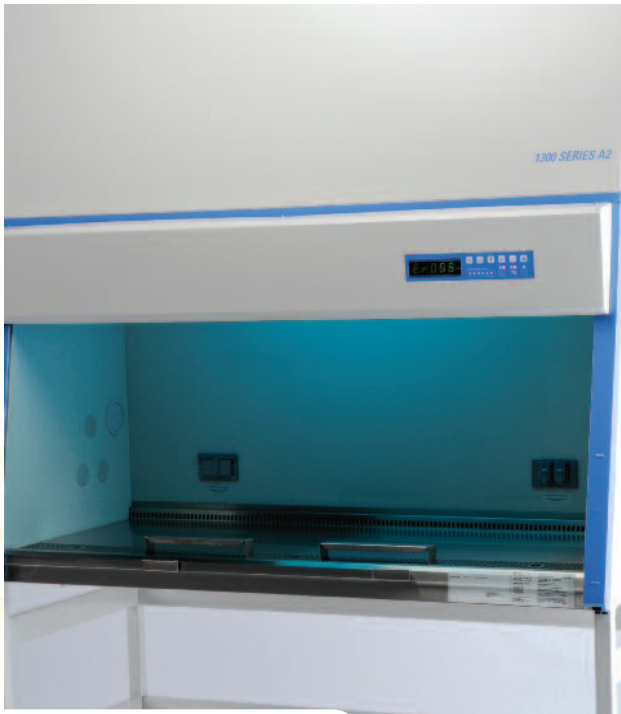
Fan control and power supply can be replaced independently of the DC motor with no need for disruptive decontamination of the cabinet. All cabinet components, including HEPA filters, are easily accessible from the front to allow for rapid service and minimal work disruption. The SmartClean window design simplifies access to the downflow filter during annual certification.

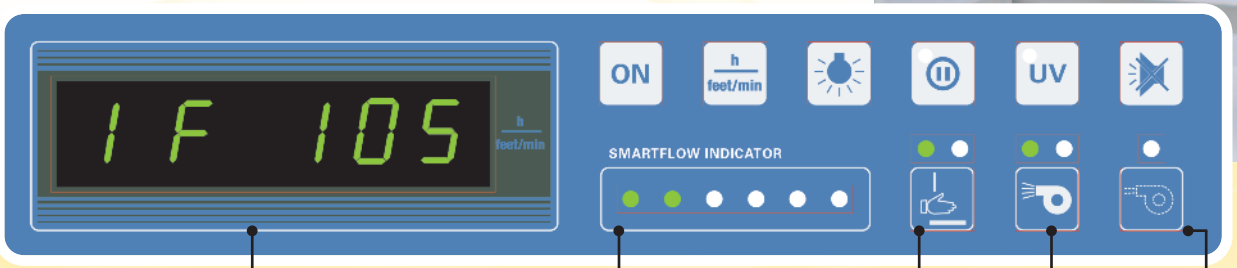
Exceptional Safety

Smooth components are used throughout the cabinet, virtually eliminating the risk of injury during routine cleaning, servicing and maintenance procedures.

Worry-free Decontamination

The easy to use, optional UV light is programmable from 30 minutes to 24 hours in 30-minute increments, extending bulb life and saving energy.





Hour Counter & Airflow Read-Out:
Clearly displays critical safety and real-time performance data including inflow and downflow velocities and hours of operation

SmartFlow Indicator:
Visually demonstrates power and capacity to maintain protection

Front Window Status:
Visual and audible alarm indicates whether front window is in correct working position

Operating Speed Airflow Indicator:
Audible and visual alarms indicate when airflow is safe or restricted

Energy-Savings Airflow Indicator:
Displays reduced speed operation when front window is closed

Good for you, good for the environment

Thermo Scientific 1300 Series A2 features advancements in brushless DC motor technology for dramatically improved energy efficiency, safety performance and reliability. We pioneered the use of brushless DC motors in our biological safety cabinets in 2002, and now use them across our full line.

DC motors —

- *reduce energy costs*
- *increase reliability*
- *reduce air conditioning costs*
- *optimize environmental protection*

Thermo Scientific biological safety cabinets are available in the broadest selection of energy saving models for any application or budget. Visit ***www.thermo.com/bsc*** *to learn more about the independent validation of our energy saving calculations.*

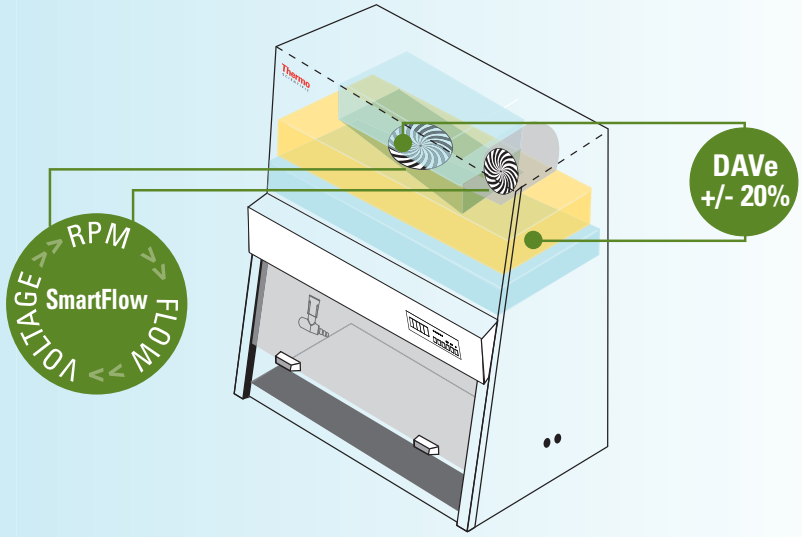
Independent **Safety** Systems for Unmatched **Security**

SmartFlow™ maintains a safe working environment.

The 1300 Series A2 employs a unique airflow system that raises safety and containment to a new level. Independent supply and exhaust blowers automate balancing of downflow and inflow/exhaust velocities to ensure continuous safe working conditions. Our smart DC motors monitor and control fan speed in real-time to maintain user protection at the access opening, even as the filters load or the line voltage fluctuates.

Digital Airflow Verification (DAVe) validates product and personnel protection.

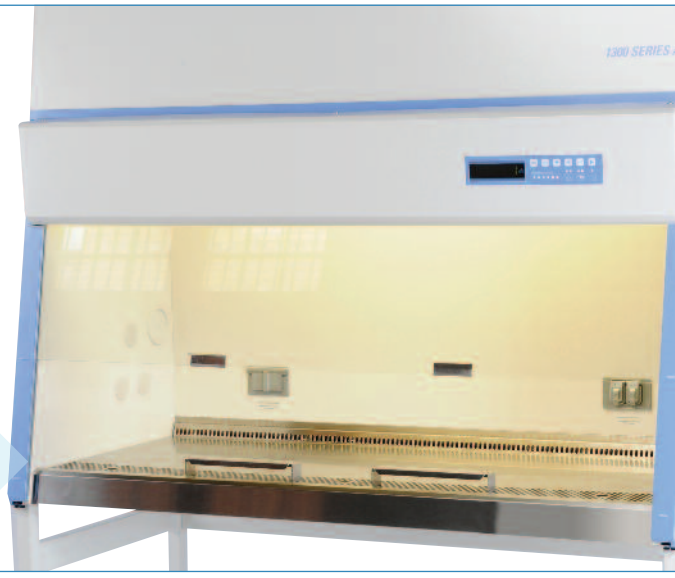
Independent pressure sensors detect changes in pressure across the exhaust and downflow plenums. An alarm signals when a 20% change in inflow/exhaust or downflow occurs to alert the user if safety is compromised. Airflow velocities are displayed on the control panel for monitoring and recording.



Night-set-back mode saves energy while maintaining a clean work area.

When the front sash is closed, our intelligent speed control automatically reduces blower speed to 30%, extending HEPA filter life and ensuring a sterile working environment even when the cabinet is not in use.

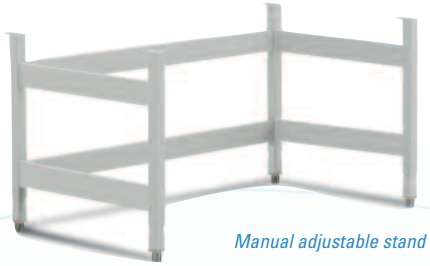
This reduced flow mode uses <70W (4 foot cabinet) to operate, and is >75% more energy efficient than similar features on other biological safety cabinets.



Ordering Information for Options and Accessories

Part No.	Description	Application	Additional Comments	Factory Installed
1911302	**Manual adjustable stand for 4 foot cabinet**	Provides comfortable work surface height of 30" (750 mm) to 38" (950 mm) adjustable in 2" increments for seated or standing applications.	*This accessory is included in the 1300 Series packages.*	
1911303	**Manual adjustable stand for 6 foot cabinet**			
50109314	**Electric adjustable stand for 4 foot cabinet (230V)**	Provides infinite adjustability for comfortable work surface height of 30" (750 mm) to 37" (950 mm)		
50109325	**Electric adjustable stand for 6 foot cabinet (230V)**			
1911322	**Rolling castor stand for 4 foot cabinet**	Provides comfortable fixed work surface height of 34" (860 mm) for seated applications.	*Designed for limited mobility of the cabinet for cleaning purposes.*	
1911346	**Rolling castor stand for 6 foot cabinet**			
1911319	**UV light option for 4 foot cabinet**	Provides safe and easy method for cabinet disinfection.	*This accessory is included in the 1300 Series packages.*	•
1911368	**UV light option for 6 foot cabinet**			•
1911313	**Stainless steel armrest (set of 2)**	Provides ergonomic forearm support and extended reach inside the cabinet with less airflow disruption.	*This accessory is included in the 1300 Series packages.*	
1911308	**Combustible gas valve**	Rated for combustible gas dispensing inside the cabinet chamber.	*The service valve for standard applications offers a long stem pipe fitting and is appropriate for side access media services.*	
1911309	**Non-combustible gas valve**	Rated for non-combustible gas dispensing inside the cabinet chamber.		
1911310	**Vacuum valve**	Rated for routing vacuum inside the cabinet chamber.		
1911311	**Water valve**	Rated for water dispensing inside the cabinet chamber.		
1911312	**IV bag holder kit with 12 hooks**	Provides bar and hooks to hang IV bags near the interior ceiling of the cabinet.		
191127	**Adjustable footrest**	For ergonomic foot and posture support during seated use.		
1911316	**Thimble duct exhaust transition for 4 foot cabinet**	Allows the biological safety cabinet to be connected to an external exhaust for the removal of volatile toxic chemicals or radionuclides used in the cabinet.	*The thimble duct exhaust connection is the method recommended by NSF/ANSI 49 for externally exhausting the Class II, Type A2 biological safety cabinet.*	
1911317	**Thimble duct exhaust transition for 6 foot cabinet**			
1910185	**Alnor exhaust alarm**	Required by NSF for all Class II, Type A2 BSCs that are thimble-ducted.	*Qualified install.*	

Electric adjustable stand

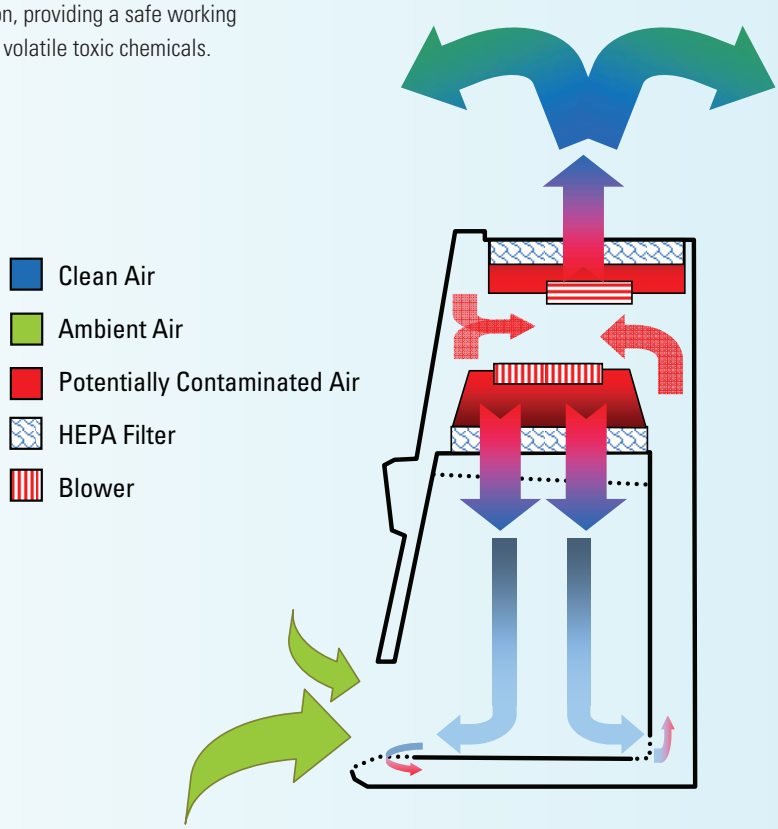


Manual adjustable stand

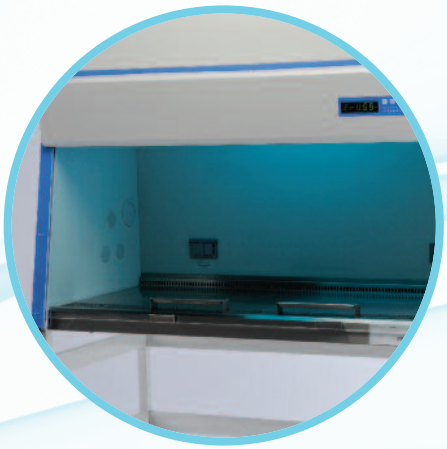
Foot rest

1300 Series A2: Designed for Class II, Type A2 applications

The 1300 Series A2 features HEPA-filtration with recirculation of the air inside the work chamber, creating a near particle-free environment – ideal for most microbiological and tissue culture applications. The 1300 Series A2 may be exhausted to the outside of the building using the optional thimble exhaust connection, providing a safe working environment when working with minute quantities of volatile toxic chemicals.



Stainless steel armrests



UV light options

Thimble duct exhaust transition

ORDERING INFORMATION

Thermo Scientific 1300 Series A2
Class II, Type A2 Biological Safety Cabinets

Specifications and Ordering Information		4 ft models	6 ft models
Standard Model	Coated interior walls, cabinet only	**1354**	**1359**
Standard Package	Includes coated interior cabinet walls, manual adjustable height stand, factory installed UV light, and one set of armrests	**1384**	**1389**
Electrical Requirements		230V, 50Hz	230V, 50Hz
Dimensions	Exterior Dimensions H x W x D inches (mm)	61.8 x 51.2 x 31.5 (1568 x 1300 x 800)	61.8 x 74.8 x 31.5 (1568 x 1900 x 800)
	Interior Dimensions H x W x D inches (mm)*	30.7 x 47.2 x 24.8 (780 x 1200 x 630)	30.7 x 70.9 x 24.8 (780 x 1800 x 630)
	Working Height of Front Window inches (mm)	10 (254)	10 (254)
	Maximum Opening Height of Front Window inches (mm)	21 (535)	21 (535)
	Shipping Dimensions H x W x D inches (mm)	68.1 x 55.5 x 36.4 (1730 x 1410 x 925)	68.1 x 79.1 x 36.4 (1730 x 2010 x 925)
Weight	Net Weight lbs (kg)	375 (170)	507 (230)
	Shipping Weight lbs (kg)	430 (195)	584 (265)
	Maximum Load of One-Piece Work Tray lbs (kg)	110 (50)	110 (50)
Ventilation System	Exhaust/Inflow Air Volume CFM (m^3/h)	342 (582)	513 (872)
Heat Emission	Heat Emission at 25°C Ambient BTU/hr (kW)	683 (0.2)	1366 (0.4)
Filter Specification	Supply/Exhaust Air Filter	H14 HEPA EN 1822 99.995% at the most penetrating particle size (mini-pleated)	
Performance	Certification	NSF/ANSI 49, UL	NSF/ANSI 49, UL
	Sound Pressure Level dB (A)	< 63	< 65
	Lighting Power (fc)	>120	>120
Electrical Data	Power Consumption, Operating Set Point (kW)	0.2	0.4
	Current Consumption (Amps)	1.2	1.9
	Branch Circuit Protection	T 15 Amp fuse or Class B 15 Amp circuit breaker is required. The local electrical regulations in the country of use as well as the relevant connection conditions must be observed.	
Supply Management	Receptacles	The receptacles have a load capacity of up to 5 A and are protected with T 5 A fuses. When all receptacles are in use simultaneously they must not exceed the maximum total load capacity of 5 A.	
Features	Access Ports 0.94" (24 mm) diameter	6 (3 on each side)	
	Service Valves	Up to 6 (installed through side wall access ports)	
	Receptacles (Rear Wall)	Two single, left and right side	

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