

**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.

*4 foot 1300 Series A2 biological safety cabinet with one-piece, stainless steel interior and optional electric stand*

# 1300

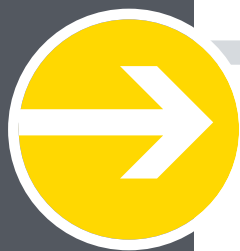
## Series A2

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

### More Flexibility for Added Convenience

One-piece stainless steel interior is now available as an alternative to our coated interior cabinets. Select either the manual or electric adjustable stand for increased flexibility.

**Now available** in 3 foot and 5 foot widths and choice of 8 inch or 10 inch work aperture.

### 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.



#### Two Choices of Cabinet Interior

*The 1300 Series A2 biological safety cabinet is available with a coated cabinet interior which provides a glare-free working environment, or with a seamless one-piece side and rear wall stainless steel interior configuration.*

### 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.

*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.*



## 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

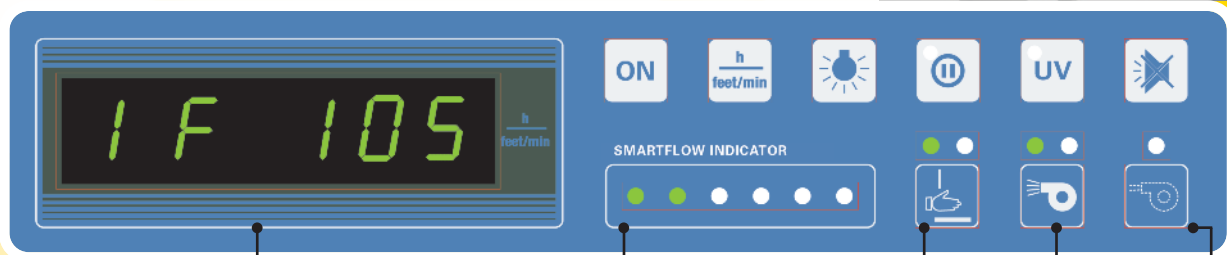
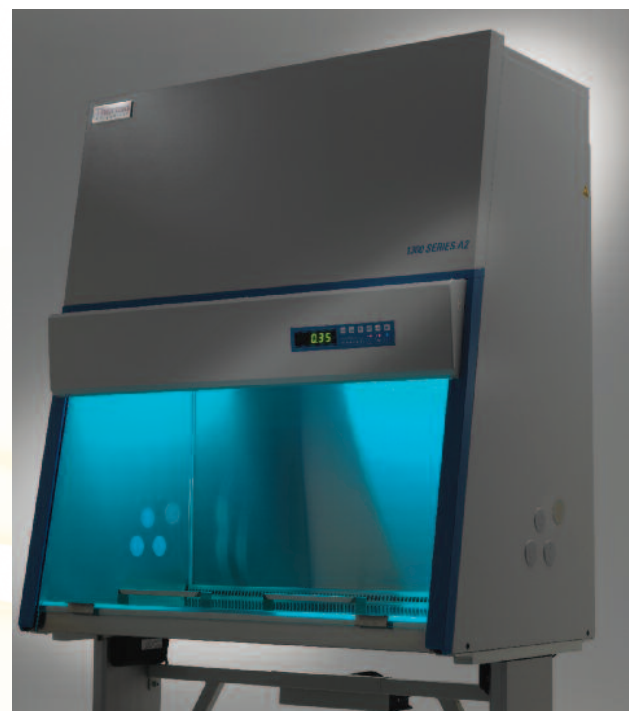
Fan control and power supply can be replaced independently of the DC motor with no need for disruptive decontamination of the cabinet. All cabinet components, including HEPA filters, are easily accessible from the front to allow for rapid service and minimal work disruption. The SmartClean window design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



**NEW!** Efficiency-enhanced Thermo Scientific  
1300 Series Class II, Type A2 Biological Safety Cabinets

# The difference is measurably **greener**

1300 SERIES A2

The **NEW 1300 Series A2 with 8-inch window aperture** delivers all of the industry-leading features of our 10-inch models

## **PLUS –**

- **20% longer life for HEPA filters**  
Save expense and maintenance time
- **Lower noise emittance**  
With noise levels as low as 62 dBA, operators enjoy greater comfort and safety
- **Reduced power consumption**  
Requires only 180 watts (4 foot model), for significantly lower operating costs



*Thermo Scientific biological safety cabinets are available in the broadest selection of energy saving models for any application or budget. Visit [www.thermoscientific.com](http://www.thermoscientific.com) to learn more about the independent validation of our energy saving calculations.*

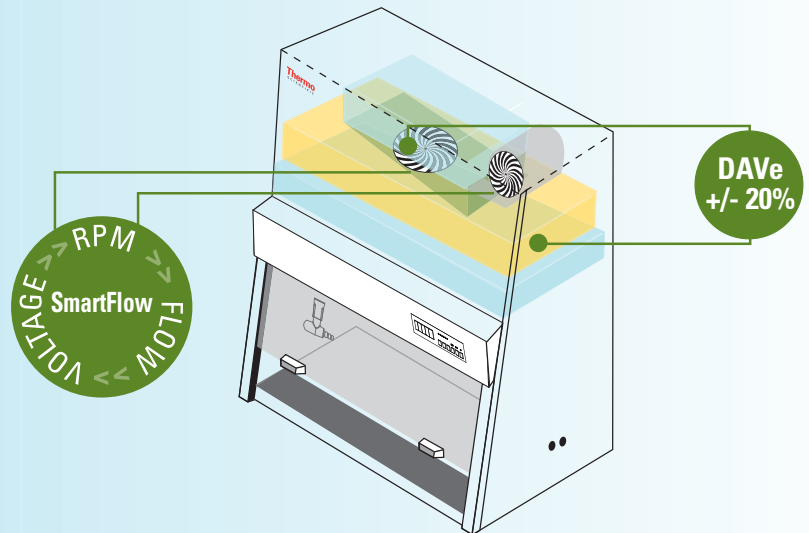
# Independent **Safety** Systems for Unmatched **Security**

## **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

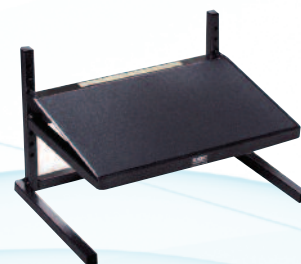
	Part No.	Description
Country configurations	1910280	UK line cord and receptacle kit, factory installed (230V only)
	1910313	UK line cord and RCD (GFCI) receptacle kit, factory installed (230V only)
	1910281	Australia line cord and receptacle kit, factory installed (230V only)
	1910282	China line cord and receptacle kit, factory installed (230V only)
Base stands	1911400	Manual adjustable stand for 3 foot cabinet
	1911302	Manual adjustable stand for 4 foot cabinet
	1911401	Manual adjustable stand for 5 foot cabinet
	1911303	Manual adjustable stand for 6 foot cabinet
	50117449	Electric adjustable stand for 3 foot cabinet (230V)
	50109314	Electric adjustable stand for 4 foot cabinet (230V)
	50117450	Electric adjustable stand for 5 foot cabinet (230V)
	50109325	Electric adjustable stand for 6 foot cabinet (230V)
	50119096	Electric adjustable stand for 3 foot cabinet (120V)
	50119126	Electric adjustable stand for 4 foot cabinet (120V)
	50119127	Electric adjustable stand for 5 foot cabinet (120V)
	50119128	Electric adjustable stand for 6 foot cabinet (120V)
	1911409	Rolling castor stand for 3 foot cabinet
	1911322	Rolling castor stand for 4 foot cabinet
	1911410	Rolling castor stand for 5 foot cabinet
	1911346	Rolling castor stand for 6 foot cabinet
UV options	1911319	UV light option for 3 foot or 4 foot cabinet, factory installed
	1911368	UV light option for 5 foot or 6 foot cabinet, factory installed
Disinfection	50114036	Fumigation sealing kit
Utilities	1911308	Combustible gas valve
	1911309	Non-combustible gas valve
	1911310	Vacuum valve
	1911311	Water valve
User convenience equipment	1911313	Stainless steel armrest (set of two)
	1911413	IV bag holder kit with 6 hooks (for 3 foot cabinet only)
	1911312	IV bag holder kit with 12 hooks (for 4 foot, 5 foot, and 6 foot cabinet)
	191127	Adjustable footrest
	1910038	Base stand hanging shelf
	1910083	Interior tubing retainer clips (6 per kit)
	1910112	Replacement SmartPort grommets (4 per kit)
	1911320	Floor anchoring brackets
	ERG-CR-2330	Thermo Scientific Ergolign saddle stool
Exhaust options	1911316	Thimble duct exhaust transition for 3, 4 and 5 foot cabinet
	1911317	Thimble duct exhaust transition for 6 foot cabinet
	1910185	Alnor exhaust alarm, qualified install



Electric adjustable stand



Manual adjustable stand



Footrest

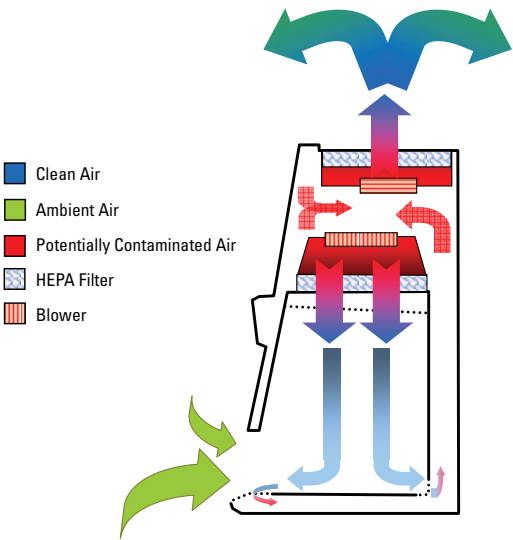


Our 1300 Series A2 packages feature everything required to get started, including cabinet, manual adjustable height stand, factory installed UV light and one set of armrests.

Packages		230V Models		120V Models	
	Size	8-inch Work Aperture	10-inch Work Aperture	8-inch Work Aperture	10-inch Work Aperture
SmartCoat Interior	0.9 m / 3 foot	1391	1331	1340	1321
	1.2 m / 4 foot	1396	1386	1395	1385
	1.5 m / 5 foot	1373	1381	1351	1369
	1.8 m / 6 foot	1398	1388	1397	1387
One-piece stainless steel interior	0.9 m / 3 foot	1393	1333	1342	1323
	1.2 m / 4 foot	1336	1376	1335	1375
	1.5 m / 5 foot	1367	1383	1353	1371
	1.8 m / 6 foot	1338	1378	1337	1377
Cabinets Only		230V Models		120V Models	
	Size	8-inch Work Aperture	10-inch Work Aperture	8-inch Work Aperture	10-inch Work Aperture
SmartCoat Interior	0.9 m / 3 foot	1390	1330	1339	1320
	1.2 m / 4 foot	1326	1356	1325	1355
	1.5 m / 5 foot	1372	1380	1350	1368
	1.8 m / 6 foot	1328	1358	1327	1357
One-piece stainless steel interior	0.9 m / 3 foot	1392	1332	1341	1322
	1.2 m / 4 foot	1306	1346	1302	1345
	1.5 m / 5 foot	1366	1382	1352	1370
	1.8 m / 6 foot	1308	1348	1307	1347

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

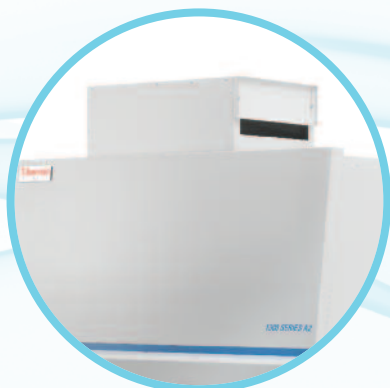
The 1300 Series A2 features HEPA-filtration with recirculation of the air inside the work chamber, creating a near particle-free environment – ideal for most microbiological and tissue culture applications. The 1300 Series A2 may be exhausted to the outside of the building using the optional thimble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



Stainless steel armrests



UV light options



Thimble duct exhaust transition

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



	Model		1300 Series A2			
	Size / Width		0.9 m / 3 foot	1.2 m / 4 foot	1.5 m / 5 foot	1.8 m / 6 foot
Dimensions	Exterior Dimensions WxHxD	inches	39.4 x 61.8 x 31.5	51.2 x 61.8 x 31.5	63 x 61.8 x 31.5	74.8 x 61.8 x 31.5
		mm	1000 x 1568 x 800	1300 x 1568 x 800	1600 x1568 x 800	1900 x1568 x 800
	Interior Dimensions WxHxD	inches	35.4 x 30.7 x 24.8	47.2 x 30.7 x 24.8	59.1 x 30.7 x 24.8	70.9 x 30.7 x 24.8
		mm	900 x 780 x 630	1200 x 780 x 630	1500 x 780 x 630	1800 x 780 x 630
	Shipping dimensions¹ WxHxD	inches	43.7 x 68.1 x 36.4	55.5 x 68.1 x 36.4	67.3 x 68.1 x 36.4	79.1 x 68.1 x 36.4
		mm	1110 x 1730 x 925	1410 x 1730 x 925	1710 x 1730 x 925	2010 x 1730 x 925
	Working height of front window		Choice of 8" or 10" (203 mm or 254 mm)			
	Maximum opening height of front window	inches (mm)	21 (535)			
Weight	Net weight	lbs (kg)	375 (170)	441 (200)	507 (230)	617 (280)
	Shipping weight¹	lbs (kg)	419 (190)	496 (225)	573 (260)	694 (315)
Electrical Data	Voltage	V	Choice of 120 or 230			
	Frequency	Hz	50/60			
Filter Specification	H14 HEPA EN 1822, 99.995% MPPS					
Certification	NSF/ANSI 49, UL, CE					
Ergonomics and Utilities	Lighting power	fc (lx)	>100 (1100)	>120 (>1200)	>120 (>1200)	>120 (>1200)
	SmartPort		Two 3" (76 mm) plugged cable ports, one on each side wall			
	Receptacles		120V: 2 GFI Duplex 230V: two standard single receptacles. Located on rear wall, right and left sides.			
	Service valves		Up to 6 total (Three on each side wall)			
8-inch work aperture specifications	Sound pressure level	dB (A)	<62	<62	<64	<64
	Energy consumption, operating set point²	W	150	180	280	360
	Energy consumption, reduced flow mode	W	70		120	
	Normal Heat Output in operation mode (non-vented)	BTU/hr (W)	512 (150)	614 (180)	955 (280)	1228 (360)
	Reduced Flow Heat Output (lights off, non-vented)	BTU/hr (W)	239 (70)		410 (120)	
	Exhaust / Inflow air volume	cfm (m3/h)	207 (351)	276 (468)	344 (585)	413 (702)
	Exhaust volume requirement, thimble connection	cfm (m3/h)	269 (457)	358 (609)	448 (761)	537 (913)
10-inch work aperture specifications	Sound pressure level	dB (A)	<63	<63	<65	<65
	Energy consumption, operating set point²	W	170	200	310	400
	Energy consumption, reduced flow mode	W	70		120	
	Normal Heat Output in operation mode (non-vented)	BTU/hr (W)	580 (170)	683 (200)	1058 (310)	1366 (400)
	Reduced Flow Heat Output (lights off, non-vented)	BTU/hr (W)	239 (70)		410 (120)	
	Exhaust / Inflow air volume	cfm (m3/h)	258 (439)	344 (585)	431 (732)	517 (878)
	Exhaust volume requirement, thimble connection	cfm (m3/h)	336 (571)	448 (761)	560 (951)	672 (1141)

<sup>1</sup> Export packaging dimensions and weight upon request

<sup>2</sup> Clean filters, fans operating at nominal set point, interior lighting activated

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