



Biological safety cabinets

# Protection and convenience

1500 Series A2 Biological Safety Cabinet

# Sample protection and user safety

## Containment, comfort and convenience



The Thermo Scientific™ 1500 Series Class II, Type A2 biological safety cabinets combine exceptional protection, energy efficiency and user convenience for today's modern laboratory. The cabinet is designed to offer excellent personal and product protection from biological hazards and contamination. It can be connected to an external exhaust to allow work with volatile toxic chemicals that are sometimes used in the cabinet.

The touchscreen displays the health status of the cabinet, provides performance and background data and gives the possibility to program the UV light at the end of the work period.



#### Containment

- Dual blower system enables a higher degree of personal and product protection compared to the traditional, single blower biological safety cabinet design<sup>1</sup>
- Thermo Scientific<sup>™</sup> SmartFlow<sup>™</sup> Plus technology automates airflow compensation
- Digital Airflow Verification (DAVe<sup>™</sup> Plus) alerts user to out-of-tolerance airflows that could compromise product and operator protection
- H14 HEPA filters remove airborne contaminants
- Tactile window mechanism provides positive confirmation that the correct working height is selected for the sash window



#### Comfort

- Increased light intensity with LED lighting for a brighter work environment
- Low noise level enhances user focus
- 10° sloped front for exceptional comfort and ergonomics
- Spacious work area with comfortable armrests



#### Convenience

- 7-inch touchscreen graphical user interface displays safety and performance data
- Our patented Thermo Scientific SmartClean design<sup>2</sup> enables users to easily lower the window, helping provide convenient access to the work area for thorough cleaning
- Thermo Scientific SmartClean front window design to improve access to the work area for cleaning
- Thermo Scientific™ SmartPort™ design provides contained passage of tubing and cables into the work area
- Programmable UV light enables timed disinfection cycle run

# 7-inch touchscreen for operation information

## Product status, analysis and UV light programming



The unit is in working mode, with glass sash in its working position, and both the downflow and inflow air speeds at operational speeds. The white outline around the fan logo at the bottom means the blowers are all on.





Clear visual and audible alarms are emitted from the device if the downflow, inflow, or other parameters are not at operational settings and the operator is at risk of exposure to biohazardous materials. Tapping the 'Health Status Good' icon (the green heart) will tell you more about the status of the unit—(1) the total accumulated operating hours of the unit, (2) the total UV work hours and the UV bulb install date, and (3) the filter running time, estimated residual lifetime of the HEPA filter, and the filter install date.

## Advanced features for user comfort



7-inch touchscreen interface

1-piece grade 304 stainless steel or Thermo Scientific SmartCoat interior

**SmartPort convenience** 

(not available for cat. no. 1574 and 1579)

**Sloping front sash** 

10-inch front opening

**Optional hanging shelf** 

Adjustable stand

Optional Thermo Scientific Ergolign saddle stool

## **Energy efficiency**

- DC motors offer low energy consumption
- Night Set-Back Mode reduces airflow to 30% during low-usage periods
- LED lighting
- Programmed UV auto-start and UV disinfection cycle duration

## **Specifications**

	Size / Width		4-foot	6-foot	
	Exterior dimensions W x H x D	mm/in	1300 x 1568 x 800 / 51.2 x 61.8 x 31.5	1900 x 1568 x 800 / 74.8 x 61.8 x 31.5	
	Interior dimensions W x H x D	mm/in	1200 x 780 x 630 / 47.2 x 30.7 x 24.8	1800 x 780 x 630 / 70.9 x 30.7 x 24.8	
Dimensions	Shipping dimensions <sup>1</sup> W x H x D	mm/in	1410 x 1730 x 925 / 55.5 x 68.1 x 36.4	2010 x 1730 x 925 / 79.1 x 68.1 x 36.4	
	Working height of front window	mm/in	250 / 10	250 / 10	
	Maximum opening height of front window	mm/in	535 / 21	535 / 21	
Weight	Net weight	kg/lbs	200 / 441	280 / 617	
vveigni	Shipping weight <sup>1</sup>	kg/lbs	225 / 496	315 / 694	
Electrical	Voltage	V	20	30	
data	Frequency	Hz	50 / 60		
Filter specification			H14 HEPA EN 1822, 99.995% @ MPPS, 99.999% at @ 0.3 μm		
Certification			NSF/ANSI 49, UL, CE		
	Lighting power	W	20	40	
	Average illumination	Lx	800 (SST) 900 (SmartCoat)	950 (SST) 1050 (SmartCoat)	
Ergonomics	SmartPort access <sup>2</sup>		Two 3" plugged cable ports, one on each side wall		
	Receptacles		Two standard single receptacles, located on rear wall, right and left sides		
	Service valves		Up to 6 total (3 on each side wall)		
	Sound pressure level	dB (A)	<63	<65	
	Energy consumption, operating set point <sup>3</sup>	W	200	400	
10-inch	Energy consumption, night set-back mode	W	70	120	
front opening	Heat output, operating mode (non-vented)	BTU/hr (W)	683 (200)	1366 (400)	
	Heat output, night set-back mode (lights off, non-vented)	BTU/hr (W)	239 (70)	410 (120)	
	Exhaust/inflow air volume	cfm (m³/h)	344 (585)	517 (878)	
	Exhaust volume, thimble ducted	cfm (m <sup>3</sup> /h)	448 (761)	672 (1141)	

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

<sup>&</sup>lt;sup>2</sup> Not available for catalog numbers: 1574 and 1579

 $<sup>^{\</sup>rm 3}$  Clean filters, fans operating at nominal set point, interior lighting activated

#### Ordering information

Bundle packages	Electrical configuration	Size	Certification	Cat. No. adjustable height stand	Cat. No. fixed height stand / casters
1500 Series Class II, Type A2 biological	_ China	4 ft.	NSF	1574-A	1574-AC
safety cabinet with one-piece stainless		6 ft.	NSF	1579-A	1579-AC
steel interior, UV light, armrests, and		4 ft.	NSF	1574-A-GP	1574-AC-GP
a stand.		6 ft.	NSF	1579-A-GP	1579-AC-GP
1500 Series Class II, Type A2 biological safety cabinet with <b>SmartCoat interior</b> ,		4 ft.	NSF	1584-A	1584-AC
UV light, armrests, and a stand.		6 ft.	NSF	1589-A	1589-AC

#### You can also build your own 1500 Series A2 BSC, by starting with these cabinet-only part numbers:

Individual cabinets	Electrical configuration	Size	Certification	Cat. No. 10-inch front opening
1500 Series Class II, Type A2 biological	Claire	4 ft.	NSF	1546
safety cabinet with one-piece stainless steel interior		6 ft.	NSF	1548
1500 Series Class II, Type A2 biological	China	4 ft.	NSF	1556
safety cabinet with <b>SmartCoat interior</b>		6 ft.	NSF	1558

#### Packages are also available with inner receptacles and power cords that are commonly used in Asia:

Bundle packages	Electrical configuration	Size	Certification	Cat. No. adjustable height stand	Cat. No. fixed height stand / casters
	Korea	4 ft.	NSF	1584-F	1584-FC
	Notea	6 ft.	NSF	1589-F	1589-FC
1500 Series Class II, Type A2 biological	Southeast Asia —	4 ft.	NSF	1584-G	1584-GC
safety cabinet with <b>SmartCoat interior</b> , UV light, armrests, and a stand.		6 ft.	NSF	1589-G	1589-GC
	le eli e	4 ft.	NSF	1584-M	1584-MC
	India	6 ft.	height stand s   NSF 1584-F 1   NSF 1589-F 1   NSF 1584-G 1   NSF 1589-G 1   NSF 1589-M 1   NSF 1574-F 1   NSF 1579-F 1   NSF 1579-G 1   NSF 1574-M 1	1589-MC	
	Korea	4 ft.	NSF	1574-F	1574-FC
1500 Series Class II, Type A2 biological	Notea	6 ft.	NSF	1579-F	1579-FC
safety cabinet with one-piece stainless	Southeast Asia	4 ft.	NSF	1574-G	1574-GC
steel interior, UV light, armrests, and	and Hong Kong	6 ft.	NSF	1579-G	1579-GC
a stand.	India	4 ft.	NSF	1574-M	1574-MC
	IIIuia	6 ft.	NSF	1579-M	1579-MC

## **Factory-installed accessories**

Accessory	Description	Cat. No.
UV light option	UV light option for 4 foot cabinet	141055-BSC
	UV light option for 6 foot cabinet (order 2x)	141055-BSC*

<sup>\*</sup> Order two.

#### Field-installed accessories

Accessory	Description	Cat. No.
Stands	Manual adjustable stand for 4 foot cabinet, provides work surface height of 760 to 965 mm adjustable in 55 mm increments	1911302
	Manual adjustable stand for 6 foot cabinet, provides work surface height of 760 to 965 mm adjustable in 55 mm increments	1911303
	Electric adjustable stand for 4 foot cabinet (230V), work surface height adjustable from 750 mm to 950 mm	50109314
	Electric adjustable stand for 6 foot cabinet (230V), work surface height adjustable from 750 mm to 950 mm	50109325
	Rolling caster 4-foot, reduced-height stand, provides work surface height of 720 mm	CIC0005751-CMC
	Rolling caster 6-foot, reduced-height stand, provides work surface height of 720 mm	CIC0005749-CMC
	Rolling caster stand for 4 foot cabinet, provides fixed work surface height of 752 mm	1921302
	Rolling caster stand for 6 foot cabinet, provides fixed work surface height of 752 mm	1921303
	Thimble duct exhaust transition for 4 foot cabinet	1911316
Exhaust transitions	Thimble duct exhaust transition for 6 foot cabinet	1911317
ti ai isitioi is	Alnor exhaust alarm for 1300 Series A2 biological safety cabinets, qualified install only	1910185
	Interior tubing retainer clips (6 per kit)	1910083
	Hanging shelf for base stand	1910179
	Stainless steel armrest (set of two)	1911313
User	Adjustable footrest	191127
convenience	Replacement SmartPort grommets (4 per kit)	1910112
equipment	Ergolign saddle stool, 23 inch to 30.5 inch adjustable seat height	ERG-CR-2330
	IV bag holder kit with 12 hooks (for 4 foot and 6 foot cabinet)	1911312
	Padded armrest 316 SS (set of 2 metal armrests plus gel inserts)	50156438
	Replacement gel pads for padded armrest (2 pcs.)	50156437
Alternate drain valve	Stainless steel ball valve (replaces standard non-corrosive PVC drain valve)	249098
Sidewall	Combustible gas valve	1911308
	Non-combustible gas valve	1911309
utilities	Vacuum valve	1911310
	Water valve	1911311
Rear cover	Rear cover kits for 4 foot 1500 A2 cabinet	1915468
kits*	Rear cover kits for 6 foot 1500 A2 cabinet	1915368

<sup>\*</sup> Rear cover can also be factory-installed.

## Thermo Fisher SCIENTIFIC



1910179 hanging shelf for base stand



ERG-CR-2330 Ergolign saddle stool



191127 optional adjustable footrest



Fixed height stand with casters



Stainless steel armrests



UV light





Learn more at thermofisher.com/1500bsc

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