

# Laminar Flow Cabinets

TION manufacture horizontal & vertical laminar flow cabinets in metal & polypropylene.



**Laminar Flow Cabinets create a secure and sterile working environment to protect sensitive laboratory processes using smooth, laminar flow air.**

Laminar flow cabinets (also referred to as cell culture hoods, tissue culture hoods, or laminar flow hoods) are self-contained laboratory enclosures equipped with HEPA or ULPA filters. Frequently used to work with semiconductor wafers, media preparation and particle-sensitive materials, these cabinets produce a stream of laminar flow air to shield workspace samples from contamination. In principle, laminar flow cabinets function similarly to Class II biosafety cabinets but do not provide operator protection.

## Key Benefits:

- Colour Touch-Screen
- ISO4 or ISO5 Standard
- Maximum Sample Protection
- Filter Replacement Alarm



### Accessible Design

Both benchtop and stand-mounted options are available.



### Energy Efficient Lighting

Sealed LED lighting offers eco-friendly, cost-effective 800 LUX illumination.



### Stainless Steel Worksurface

Easy-clean 304 stainless steel work surface comes equipped as standard. Upgradable to 316.



### Maximum Sample Protection

HEPA filtration system provides sterile, downflow air at ISO5/ Class100 or ISO4/ Class10 standards.

Call now on **+44 (0) 1223 790028** to place your order or email **support@tion.co.uk**

For further product details and to see more from our range, visit **www.tion.co.uk**

At TION, we offer two laminar flow cabinet models: **Essential and Pro**.

The Essential models are equipped with 5-inch touch screens and manufactured using mild steel. The Pro models are built using 100% virgin medical-grade welded polypropylene and come equipped with a 7-inch full-colour display.

## Essential Laminar Flow Cabinet: Metal (Vertical & Horizontal)



## Pro Laminar Flow Cabinet: Polypropylene (Vertical & Horizontal)

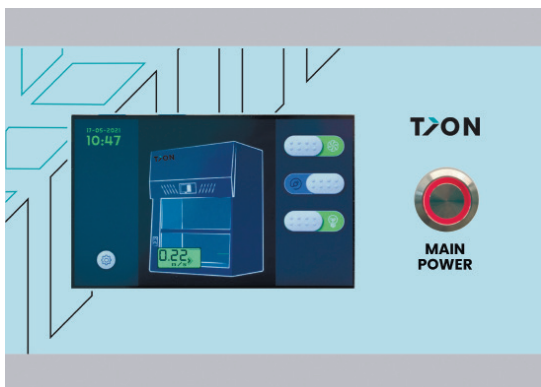


Features	Essential Laminar Flow Cabinet	Pro Laminar Flow Cabinet
Control Panel	5-inch touch screen	7-inch touch screen
Customisable Design	✓	✓
Metal Stand	✓	✓
Benchtop Mounting Available	✓	✓
Optional Sash	✓	✓
Multiple Filter Options	✓	✓
Filter Timer	✓	✓
Low Airflow Alarm	✗	✓
Low Airflow Internal Warning Light	✗	✓
Variable Air Volume (VAV) Control	✗	✓
Red Light Alarm	✗	✓
Full Polypropylene Build	✗	✓



The TION touch-screen control systems are manufactured in-house, providing our engineers with a greater degree of access and flexibility over the final product.

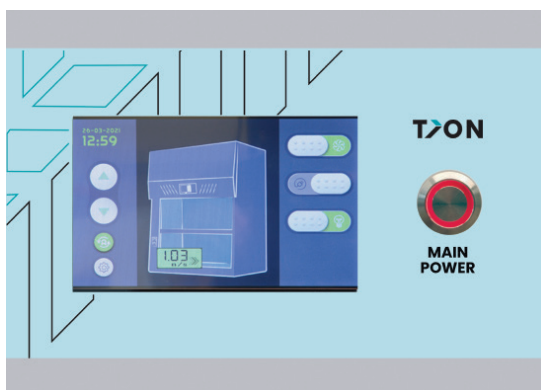
The software functions as a self-contained ecosystem, removing the breakdown costs associated with third-party solutions. Because we control the software development process, the requirement for manual buttons and switches are also reduced.



## Essential 5" Touch Screen Panel

As standard, the TION **Essential** metal cabinets include a 5" touch screen control panel that includes:

- 10 air velocity options
- On/off controls
- Lighting controls
- Glass panel



## Pro 7" Touch Screen Panel

The **Pro 7"** touch screen includes all the Essentials features in addition to the following:

- Airflow velocity display
- Low airflow alarm display
- Temperature & humidity
- Advanced calibration settings

## Pro Laminar Flow Cabinets

We manufacture our Pro laminar flow cabinets using 100% virgin, medical-grade welded polypropylene. This corrosion-proof material creates a lightweight design that's simple to adjust, allowing our solution designers to create fully bespoke cabinets. We also offer customisable gas taps, sash types, UV lighting and internal shelving. Please find the product specifications for our "Pro" laminar flow range listed below.

Spec/Model	LAF900-VP	LAF1200-VP	LAF1500-VP	LAF1800-VP
<b>Pro Model : Vertical Sash</b>				
External Dimensions (WxDxH)	900 x 850 x 1320 mm	1200 x 850 x 1320 mm	1500 x 850 x 1320 mm	1800 x 850 x 1320 mm
Workspace (WxDxH)	770 x 700 x 750 mm	1070 x 700 x 750 mm	1370 x 700 x 750 mm	1670 x 700 x 750 mm
Air Velocity	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM
Noise Level	<50dB	<50dB	<54dB	<54dB
Spec/Model	LAF900-HP	LAF1200-HP	LAF1500-HP	LAF1800-HP
<b>Pro Model: Horizontal Sash</b>				
External Dimensions (WxDxH)	900 x 930 x 1200 mm	1200 x 930 x 1200 mm	1500 x 930 x 1200 mm	1800 x 930 x 1200 mm
Workspace (WxDxH)	770 x 620 x 600 mm	1070 x 620 x 600 mm	1370 x 620 x 600 mm	1670 x 620 x 600 mm
Air Velocity	0.3 m/s, 60 FPM	0.4 m/s, 80 FPM	0.4 m/s, 80 FPM	0.4 m/s, 80 FPM
Noise Level	<50dB	<54dB	<54dB	<54dB
Production / Test Standard	ISO-14644-1, CE			
Workstation Cleanliness	Class-100 (FS 209E) ISO 4, ISO-14644-1			
Cabinet Material	Polypropylene			
Work Surface Material	304 Stainless steel			
Power Supply	110 / 220V, 50/60 Hz, Single phase			
Illumination	800 LUX LED lighting			
Filter Types	HEPA Filter Efficiency @ 99,9995% @ 0.3 Microns H14 (Optional ULPA filter)			

## Essential Laminar Flow Cabinets

The key difference between our Pro & Essential models lies in the touch-screen technology and building materials. The Essential range is built using high-grade cold rolled steel with a static powder coating on the surface. It also features a 5-inch touch-screen compared to the 7-inch on the Pro. Both models offer customisable gas taps, sash types, UV lighting and internal shelving.

Spec/Model	LAF900-VE	LAF1200-VE	LAF1500-VE	LAF1800-VE
<b>Essential Model: Vertical Sash</b>				
External Dimensions (WxDxH)	900 x 810 x 1350 mm	1200 x 810 x 1350 mm	1500 x 810 x 1350 mm	1800 x 810 x 1350 mm
Workspace (WxDxH)	770 x 660 x 750 mm	1070 x 660 x 750 mm	1370 x 660 x 750 mm	1670 x 660 x 750 mm
Air Velocity	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM
Noise Level	<50dB	<50dB	<54dB	<54dB
Spec/Model	LAF900-HE	LAF1200-HE	LAF1500-HE	LAF1800-HE
<b>Essential Model: Horizontal Sash</b>				
External Dimensions (WxDxH)	900 x 890 x 1250 mm	1200 x 890 x 1250 mm	1500x 890 x 1250 mm	1800 x 890 x 1250 mm
Workspace (WxDxH)	770 x 610 x 640 mm	1070 x 610 x 640 mm	1370 x 610 x 640 mm	1670 x 610 x 640 mm
Air Velocity	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM	0.3 m/s, 60 FPM
Noise Level	<50dB	<50dB	<54dB	<54dB
Production / Test Standard	ISO-14644-1, CE			
Workstation Cleanliness	Class-100 (FS 209E) ISO 4, ISO-14644-1			
Cabinet Material	High grade cold rolled steel and surface is static powder coated			
Work Surface Material	304 Stainless steel			
Power Supply	110 / 220V, 50/60 Hz, Single phase			
Illumination	800 LUX LED lighting			
Filter Types	HEPA Filter Efficiency @ 99,9995% @ 0.3 Microns H14 (Optional ULPA filter)			



## Discover

This includes an extensive breakdown of key project budgets, such as building specifications, processes, workflows, and the laboratory itself. We understand the importance of capturing project details early on to reduce the chance of price complications and extended timelines.



## Develop

During the development stage, you will collaborate and engage with core TION personnel and project stakeholders to develop a solution that's fit for purpose within your chosen space. Our aim is to alleviate any concerns or potential roadblocks and arrive at a final specification.



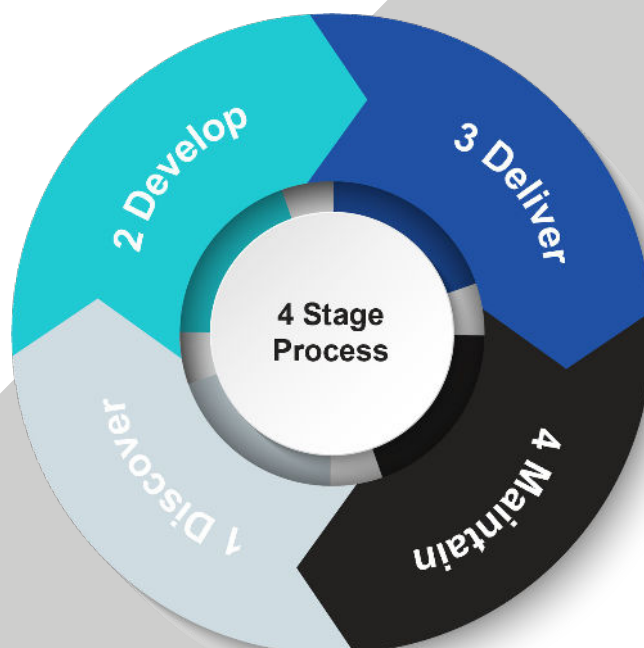
## Deliver

Deliver is where the rubber meets the road, and we transform your build space into a cutting-edge laboratory. Our delivery personnel will coordinate with your team to ensure that every step of the program is clear and delivered on time by working closely with on-site contractors.



## Maintain

Completing a project is really the first step. Ensuring reliability and consistency of communication following a project is paramount. Everything from asset registration, job logging, and PPM (Planned preventative maintenance) is covered by our methodology.





Contact us today for more information  
Call us on +44 (0) 1223 790028  
Email [support@tion.co.uk](mailto:support@tion.co.uk)  
Visit [www.tion.co.uk](http://www.tion.co.uk)