

# User Manual IVGEL SPACE

*Thank you for purchasing an IVGEL unit and for trusting us.*

### *Safety instructions*

- Read the full instructions for use before working with the unit.

### *Power supply*

- This device operates with an electric current, which is why there is a risk of *electric shock*. Therefore, never work with wet hands.

### *Maintenance operations*

- Perform maintenance, inspection and repair operations in the unit will only be carried out by *qualified technicians*.
- Only people who have been instructed to work on the unit are allowed to use it.

In any cases where maintenance or repair is required, it is required before to:

- a) Disconnect the unit from the power source.
- b) Remove hazardous materials from the unit space.

## Unit Components

### *Structure*

- Filter unit structure is made of aluminum.
- Workspace casing is made of tempered glass (10 mm).

### *Fan*

- This unit consists of a centrifugal Fan model *DF280 LEMMENS* with variable power.
- This Fan ensures constant air flow despite an increasing pressure drop on the absolute filter. The flow rate is controlled by a *hybrid card* located in the control panel.

### *Pre-filter*

- A disposable pre-filter (in a cardboard) is installed in front of the Fan.
- The pre-filter material ensures maximum protection of the absolute filters.
- The life span of the pre-filter depends on the level of cleanliness of the unit's workspace.
- The recommendation is to replace it within a range of *2-6 months*.

### *Absolute filter*

- The units consist of an H.E.P.A filter with a 99.999% filtration efficiency for 0.3 [ $\mu\text{m}$ ] particles in integrity test.
- The filter structure ensures flow uniformity across the filter.
- The level of cleanliness the absolute filter guarantees is: ISO 5 according to International Standard ISO 14644.

### *Control Panel*

A flower control panel installed on the front of the unit allows: Flow rate settings, Filter pressure notifications, Filter life span notifications, Next test date notifications etc.

*For instructions on operating the Control Panel, see Appendix.*

## Working principle

- IVGEL is a unit where the air flow is vertical down.
- This unit is designed to:
  - ✓ Prevent contaminated air from entering the workspace.
  - ✓ Maintain complete sterility in the workspace.
- The unit structure ensures positive air pressure in the workspace environment, thus ensuring the necessary level of cleanliness.
- The level of cleanliness obtained in the unit is ISO 5 according to International Standard ISO 14644.

## Principle

Air sucked from the room, pass through the pre-filter then compressed by the FAN into the workspace through the Absolute Filter (H.E.PA).

*This creates a sterile workspace for user needs.*

## Control Panel

*The unit has a "flower" control panel. Here are the button features and the display that appears on the display panel:*



**Activation:**

1. Mount the unit on a work surface or horizontal stand.
2. Clean the work surface.
3. Connect the unit to 220 V electrical outlet.
4. Turn on the unit.
5. Turn on the fluorescent light.
6. The unit data will appear on the display, wait for data stabilization.
7. Wait about 15 minutes for ideal work space cleaning.
8. You can start working.

**Note:** *In case of restart after a long pause, wait 2-3 hours before use, In order to achieve the required level of cleanliness.*

**Technical Data**

	<i>IVGEL 9 SPACE</i>	<i>IVGEL 12 SPACE</i>	<i>IVGEL 16 SPACE</i>	<i>IVGEL 18 SPACE</i>
External dimensions [mm]	600/930/1015	600/1223/1015	600/1573/1015	600/1825/1015
Internal dimensions [mm]	590/885/650	590/1190/650	590/1556/650	590/1792/650
Weight [kg]	80	100	130	150
Absolute Filter	M-14-500-895-250-A-P	M-14-500-1200-250-A-P	M-14-500-1550-250-78-A-P	M-14-500-895-250-A-P (X2)
Pre-Filter	W-04-20/24/1-C	W-04-20/24/1-C	W-04-20/24/1-C	W-04-20/24/1-C (X2)
Fan	DF280			
Lighting [Ref]	LED-SP-60-8W	LUM-ECL-LED-90-12W	LUM-ECL-LED-90-12W	LUM-ECL-LED-SP-150-20W
Input [V]	220			
Current consumption [A]	max 2.5			
Card	CON-PAN-16			

### *Maintenance:*

#### *Pre- filter:*

- The pre-filter should be replaced once every 2-6 months, depending on the workspace.

#### *How to change?*

1. Stand on a stable stands to access to the top of the unit.
2. Remove the old pre-filter and replace it by a new one of the same model.

#### *HEPA filter:*

- The absolute filter is replaced only by a technician's recommendation.
- Replacement of the filter will only be performed by a qualified technician.


#### *Routine check:*


A test should be performed once every 6 months by a qualified technician.

## Appendix – Control Panel

### COMMAND KEY

- **On/Off** Switch on or off the equipment, (more precisely ventilation) and all the functions. Also allows you to exit a menu or cancel an action


-  **Standby:** Switching from normal to standby mode and vice versa.

-  Used to navigate through the menu, select a choice or scroll through the alphabet.

Note: **Pressing the 2 buttons simultaneously for 2s resets the system].**




Enter button. Enables you to enter a menu, a submenu or to validate an action or a choice.

-  **Lighting:** Main lighting on / off.

- **UV** On / Off of the UV lamp (programmable ignition duration), (**depending on the model proposed**).

- **Free contact:** Opens and closes a free contact on the power card intended to connect an accessory (Solenoid valve, electrical outlet, etc.)

### PUT INTO OPERATION :

If a password has been programmed (modifiable in the menu), you must enter it and validate each digit with the key .

The screen displays "Wait".

To turn off the hood, perform the reverse procedure:  
Press the ON / OFF button.



If no password has been programmed (factory setting: 0001), the device will stop immediately.


If a password has been programmed (modifiable in the menu), you must enter it beforehand.





### STANDBY :


Between 2 uses, it is strongly advised not to turn off the ventilation of the station, which would result in breaking the cleanliness of the work volume. It is recommended to keep the hood on standby, i.e. a minimum ventilation flow is maintained. The cleanliness of the work volume is thus maintained.

To enter standby mode, press the button  for 2 seconds. Sleep mode is engaged as soon as the moon becomes dark and the light goes out. In standby mode, the lighting can be switched on again if necessary. After a few seconds, the flower logo will appear in standby mode and the air flow will automatically decrease to the programmed value.

If no password has been programmed, the device will stop immediately.

If a password has been programmed (factory setting: 0001) you must type it beforehand. You can change it in the Menu (in the "STANDBY LOCK" section).



To switch from standby mode to working mode, press the button  for 2 seconds until the moon becomes clear. As soon as the hood returns to normal mode, the message "correct flow" is displayed.



### VARIOUS FUNCTIONS :

**Lighting:** Press the light button to turn it on or off. When the lights are on, small rays appear on the screen logo.



**UV (according to the models):** Press the UV button to turn the UV lamp on or off. The UV lamp can only be turned on in standby mode. If the device is in normal mode, the message “Standby mode for UV” appears



When the UV lamp is on, small rays appear on the screen logo. The UV lamp switches off automatically after the programmed duration (factory setting: 30 minutes). Can be modified in the "UV duration" section of the user menu.

**Free contact:** Press the “Free contact” button to close or open the free contact (solenoid valve, electrical outlet, etc.)

#### ALARMS :

« Clogged filter»

This alarm is triggered when the service life of the filter is less than 10%. Quickly plan to change the absolute filter(s).

« Speed too low» or « Speed too high:

Means that the speed is outside the defined range. Check that nothing is blocking the air circulation in the substation.

#### **Ventilation fault:**

The fan has a malfunction or is no longer regulated by the card. It is advisable to carry out a complete restart (see paragraph “malfunction”).

#### **Provide control :**

The check date has been passed. Contact our services to organize the intervention of one of our technicians.

### ***MALFUNCTION:***

If the device has malfunctions, it is advisable to perform a complete system restart according to the following procedure:

#### **The procedure is as follows:**

Turn off the hood on the control panel (ON / OFF key - Password 0001).

Disconnect electrically.

Reconnect.

Switch the hood back on (ON / OFF button - Password 0001).

## PARAMETERS :

### Air Flow:

Displays the flow rate in m<sup>3</sup> /h and the type of fan.



### Pressure:

Displays the pressure in Pascal.



### Next checkup:


Displays the date of the next check.





**Time counter:**

Displays the total operating time of the hood in hour (normal operation and standby).

**UV Time:**

Displays how long the UV lamp is set to be on for each use. The factory setting is 30 min, to change the duration, press on  and save the desired duration.

**New UV tube (depending on equipment):**

Displays the remaining life of the UV lamp. When changing the UV lamp, it is necessary to reset the counter: press on  and enter: press on  and enter the password 2375.



**Date & Hour:**

Allows you to set the date and time by pressing ←

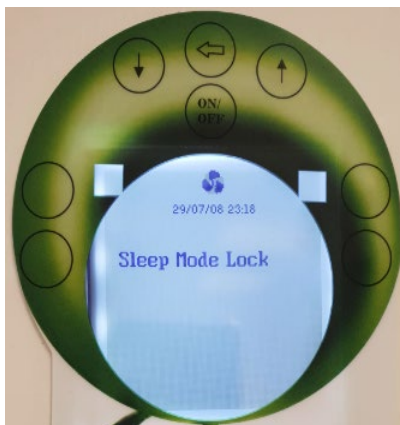
**Menu language:**

To change the menu language push on ← then select the desire language:  
French, English, Czech, Portuguese, Dutch, Castilian and Hebrew.

**Sleep mode lock:**

Factory setting: 0000. Allows you to protect normal standby / on with a password.

To change a password: enter the old password and then the new one.



**On/Off lock:**

Factory setting: 0001. Protects the complete shutdown of the hood by promoting standby (manufacturer's recommendation to keep the air flow clean in the working volume).

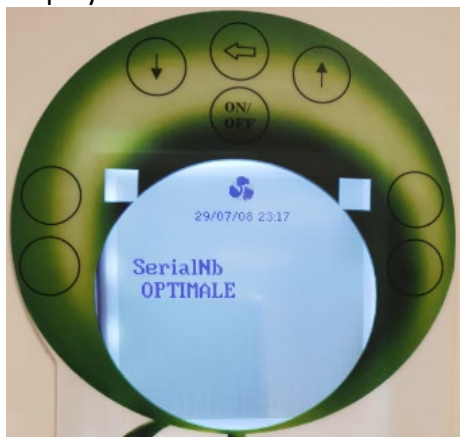
To change the password: enter the old password and then "0000" as the new password.

**Imperial unit:**

Display yes or no (Y / N).

**Serial NB:**

Display the serial number or the identification of the hood.





**Window Lock:**

Password to open the window as much as possible.

