



## Modular UDF Concept for Operating Theatres and Cleanrooms

This modular solution for operating theatres with unidirectional flow (UDF) provides several benefits:

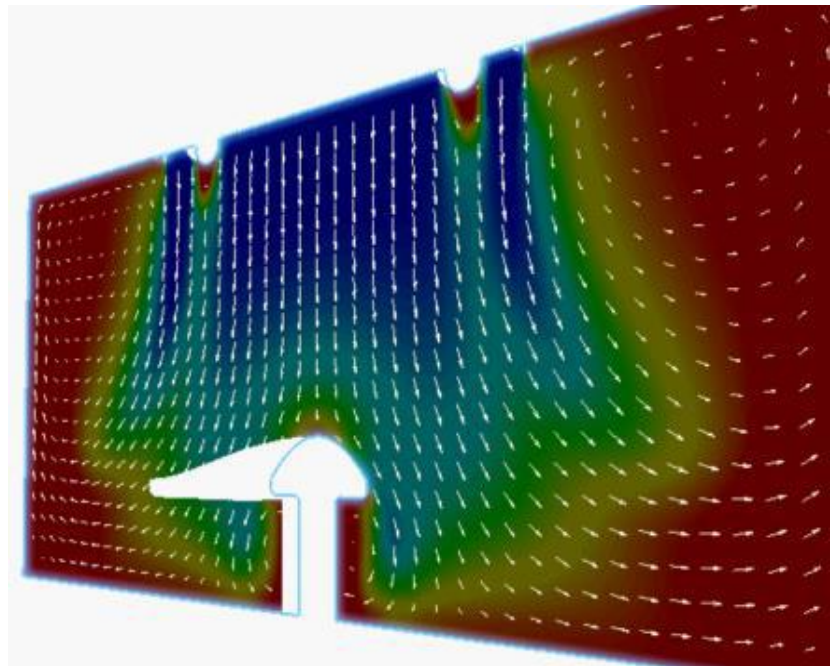
- noise reduction;
- variable temperature regulation;
- air humidification optimized to specific surgical needs; and
- specific air volumes tuned to specific operation parameters.

The **FlexiPlenum (FIP)** system helps to minimize the risk of infections by providing users more control over the necessary air flow in operation theatres.

The implemented CG screens which provide total coverage and uniform homogeneous air for the clean zones gives users control of air disbursement. By delivering ultra clean air, the risk of contaminated air is minimized. The air is distributed in a parabolic manner with low velocity and minimal turbulence.

There are a range of modules available in several sizes and types to conform with individual operating theatre needs.

- **Standard** (double layer CG screen) for 1 zone
- **Variable Air Control** (double layer CG screen in mid-section and single CG screen on outer edges) providing 2 zones control of airspeed

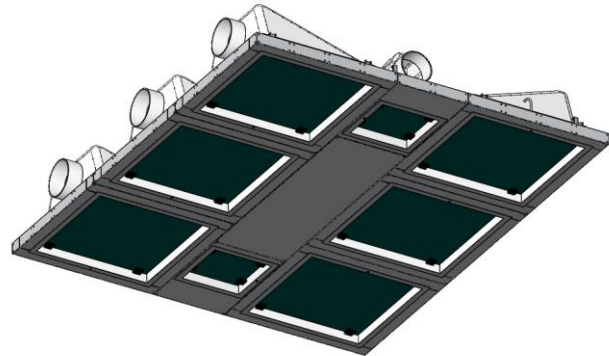




## SPECIFICATIONS

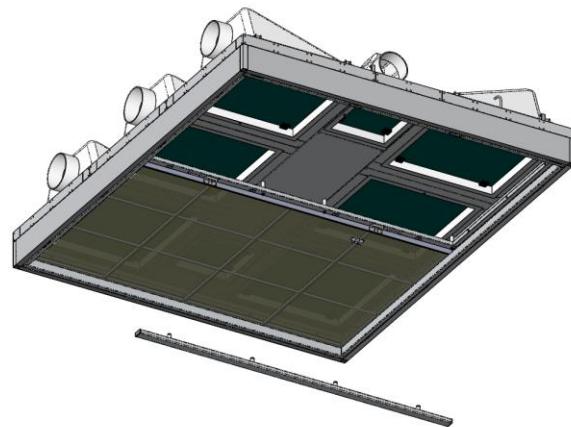
### HEPA Filters

High efficiency HEPA filters (H13 and H14) are installed above the modular plenum and CG screen. Filters can be accessed/serviced from above the ceiling (clean area) via the demountable CG screen.



### CG Screen

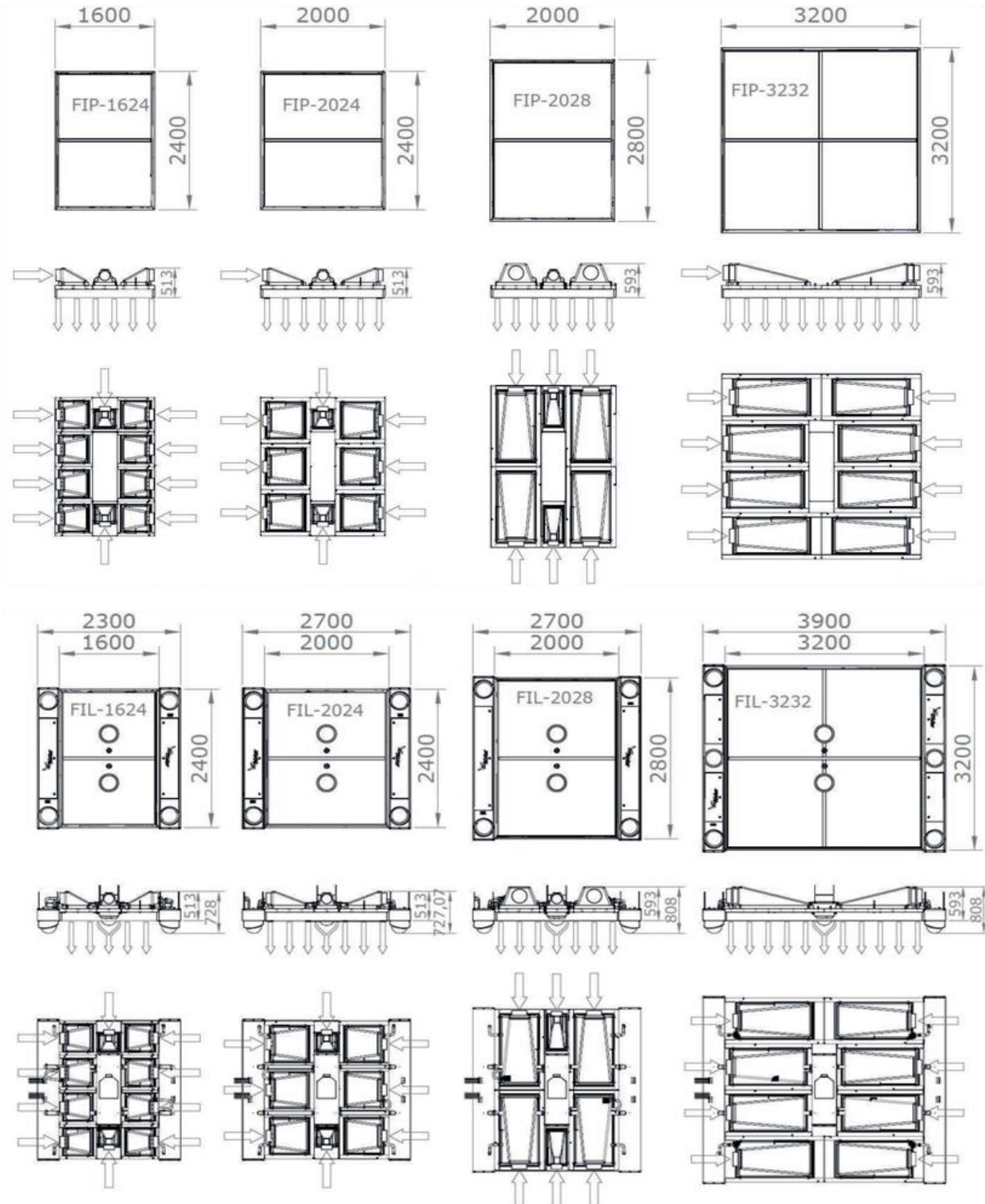
The **CG Screen** consists of a double layer of polyester monofilament mesh, is mounted in the overhead downflow plenum, and is easy to remove for access to the HEPA filters and/or LED lighting.



| MODEL    | LAMINAR FLOW DIMENSIONS |          |                     | Approx. Weight Kg | Required Air Flow m <sup>3</sup> /h |
|----------|-------------------------|----------|---------------------|-------------------|-------------------------------------|
|          | Width m                 | Length m | Area m <sup>2</sup> |                   |                                     |
| FIP-1624 | 1,6                     | 2,4      | 3,84                | 200               | From 3.000 to 5.400                 |
| FIL-1624 |                         |          |                     | 280               |                                     |
| FIP-2024 | 2                       | 2,4      | 4,8                 | 220               | From 3.200 to 7.000                 |
| FIL-2024 |                         |          |                     | 300               |                                     |
| FIP-2028 | 2                       | 2,8      | 5,6                 | 240               | From 4.000 to 8.200                 |
| FIL-2028 |                         |          |                     | 340               |                                     |
| FIP-3232 | 3,2                     | 3,2      | 10,24               | 280               | From 8.000 to 12.000                |
| FIL-3232 |                         |          |                     | 400               |                                     |



TECHNICAL DATA







## Turnkey Implementation

Hospitals have so many variables that interact with their existing systems that executing renovations in “Turnkey” fashion will minimize risks. It will also assist with meeting deadlines, accomplishing imposed requirements, and controlling costs and quality.

Implementation of the FIP solution includes:

- Consultation and advice
- Engineering services
- Supply and installation
- Project management
- Control and automation
- Validation
- Start-up
- Specialized training of users/staff



## Options and Accessories

### Validation Tests Inclusive:

- HEPA filter integrity (DOP Test)
- Determine airflow and refresh rate
- Particle count
- Pressure measurements (over and under)
- Visualization of air flow - smoke test (optional)
- Temperature test
- Humidity test
- Luminosity test
- Noise level test
- Microbiological check
- Airflow regulation (combined action with certified and approved installer)

### Plenum:

- Stainless steel
- Standard illumination inside the FlexiPlenum provides  $\geq 1,000$  lux at table height (1,2 meters)
- Adjustable illumination level (10-100%)
- Steel cover for the operating theatre lamp column

### Color Lights:

Optional colored LED lighting for endoscopy and laparoscopy use which improves the comfort of personnel's vision.