



The Megalam ES is an innovative HEPA filter employing state-of-the-art ePTFE media for life science applications requiring periodic oil aerosol filter scan testing. It protects products, processes, and people in regulated cleanroom environments from fine airborne particulates. The HEPA filter can be configured to meet many sizes and performance needs. Megalam ES offers:

- **Strength and durability**

In contrast to the fragility of some HEPA media filters, the Megalam ES utilizes ePTFE media which is physically robust, greatly reducing the possibility of damage during transport, handling, and installation. Reduce the risks of inadvertent contamination and unplanned cleanroom downtime with the Megalam ES.

- **Energy savings**

The filter has lower initial airflow resistance compared with traditional glass fiber HEPA filters, which translates to lower production costs, reduced carbon footprint, and more sustainable cleanroom operation.

- **Resistance to premature oil loading**

Contrary to traditional ePTFE medias, the Megalam ES uses technologically advanced grades of media that are tolerant of thermal oil aerosols, thereby prolonging the functional life of the filter and ensuring extended regulatory compliance of the cleanroom.

- **Heavy-duty, lightweight anodized aluminum frame**

The frame corners of the filter are secured with Camfil's exclusive Klip-Lok™ mechanism for high strength, ease of installation, long-term unit durability, and corner integrity.

- **Thermoplastic resin media separators**

The media pleat spacing is uniform, resulting in a rigid, self-supporting, continuous filter pack with low resistance to airflow.

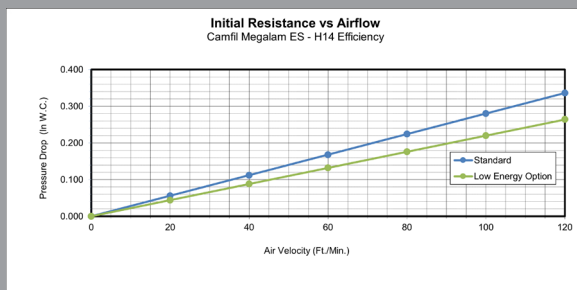
- **Security**

Each Megalam ES is tested for global efficiency and leaks using Camfil's Auto-Scan automated leak detection system. Each filter has a mechanically printed, serialized, bar-coded label which includes actual airflow, global efficiency, and initial airflow resistance.

- **Customization**

Available in particle capture efficiency of 99.995% @ MPPS (H14 per EN 1822) or Type K per IEST-RP-CC001. Standard and low energy pleat pack configurations available, and sizes up to 48" x 48", or up to 72" in length with a maximum width of 36".

The Robustness You Want, The Reliability You Need.



Data from H14 Efficiency

Performance

Part Number	Description All H14 99.995% @ MPPS	Model	Width x Length x Height (actual), in inches)		Initial Resistance (inches of w.g.)	Shipping Weight
855161796	S3524.00-24.00-1-03-00-00-00-0	Standard	24" x 24"	3.00"	0.28"	11lbs
855161797	S3524.00-48.00-1-03-00-00-00-0		24" x 48"			19 lbs
855161798	S3524.00-24.00B8-14-00-00-00-0	Low energy	24" x 24"	3.54"	0.22"	11 lbs
855161799	S3524.00-48.00B8-14-00-00-00-0		24" x 48"			19 lbs

Data Note:

Maximum operating temperature of 160°F (70°C).

Maximum relative humidity of 99%.

Camfil recommends a typical filter change out pressure of two times the initial pressure.

Actual final change out pressure value may vary depending on application and certification procedures.

Shipping weight based on single packs.

Specification

1.0 General

1.1 Air filters shall be high-efficiency, individually tested, and certified panel filters consisting of an aluminum enclosing frame, low-outgassing sealant, continuous thermoplastic resin pleat separators, and polymeric media with dual-functional filtration layers.

1.2 Sizes shall be as noted on drawings or other supporting materials.

2.0 Construction

2.1 Filters shall be manufactured in a facility certified to the ISO 9001:2015 Quality Management System.

2.2 Filter media shall be a continuous pleat of glass microfiber, formed into a uniform pack depth of (45, 68)* mm.

2.3 Pleat spacing shall be maintained by continuous thermoplastic resin separators to prevent media-to-media contact and promote uniform airflow through the media pack.

2.4 The media pack shall be completely encapsulated in a low-outgassing, fire-resistant polyurethane sealant, creating a rigid, self-supporting pack.

2.5 The enclosing frame, made of anodized aluminum profiles, shall be joined with secure internal corner clips to form a rugged and durable enclosure. Overall dimensional tolerances shall be within +0, -1/8", and square within 1/4".

2.6 Unless otherwise noted, gaskets shall be low-outgassing, cleanroom-grade cellular urethane foam. Corners shall be continuously poured and jointless to form a leak-free, positive seal.

2.7 Filters shall be listed under Underwriters Laboratories UL 900.

3.0 Performance

3.1 The filter shall be identified with a machine-printed (not handwritten) label including the serial number, barcode, and actual tested efficiency, pressure drop, and airflow, according to IEST-RP-CC001, latest edition.

3.2 Camfil Megalam ES panels are listed by Underwriters Laboratories under UL 900. The manufacturer shall provide evidence of facility certification to ISO 9001:2015.

Items in parentheses () require selection.

The filter shall be Camfil Megalam ES or an approved equal.