

## PRODUCT DATA SHEET

### ■ MAC 10® LEDC Fan Filter Introduction

#### A Second Generation FFU

The MAC 10® LEDC features the most control options and the most versatile control system available on the market today, while topping the industry in energy efficiency. The MAC 10 LEDC comes standard with the filter integral with the unit housing. Roomsideremovable filters, motor/blower, and now controls are available.

#### Typical Applications

The MAC 10® LEDC FFUs are primarily used in critical environments requiring clean air solutions. These include cleanrooms, pharmaceutical compounding, semiconductor and microelectronic manufacturing, and healthcare facilities.

#### A Green Product Solution

The MAC 10® LEDC comes equipped with an electronically commutated (EC) motor with internal microprocessor that offers high performance and delivers long motor life with energy consumption rates as low as 90W @ 90 fpm. Utilizing ENVIRCO's experience in FFU development, the LEDC also features low sound levels of 52 dBA.

The MAC 10® LEDC FFU can help provide opportunities to earn LEED\* points with its many energy-saving features.

*Note: LEED (Leadership in Energy and Environmental Design) is the rating system of US Green Building Council by which building designs are certified.*

#### Multiple Housing Styles

The MAC 10® LEDC comes in four different style configurations to fit the needs of the clean space.

**STD** - Standard Filter: filter replaced from above ceiling

**RSR** - Roomsideremovable Filter: filter replaced from below ceiling

**RSRE** - Roomsideremovable Motor and Filter: filter and motor replaced from below ceiling

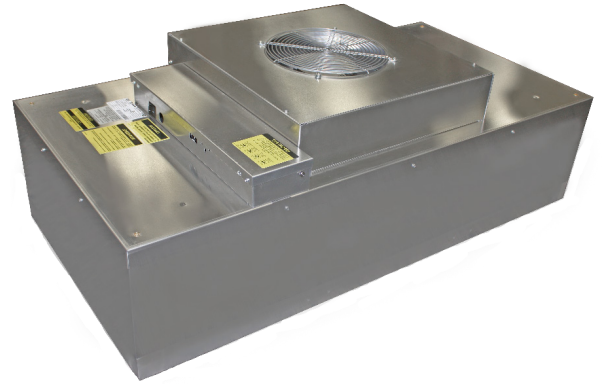
**RSRC** - Roomsideremovable Motor, Filter, and Control: filter, motor, and control card replaced from below ceiling

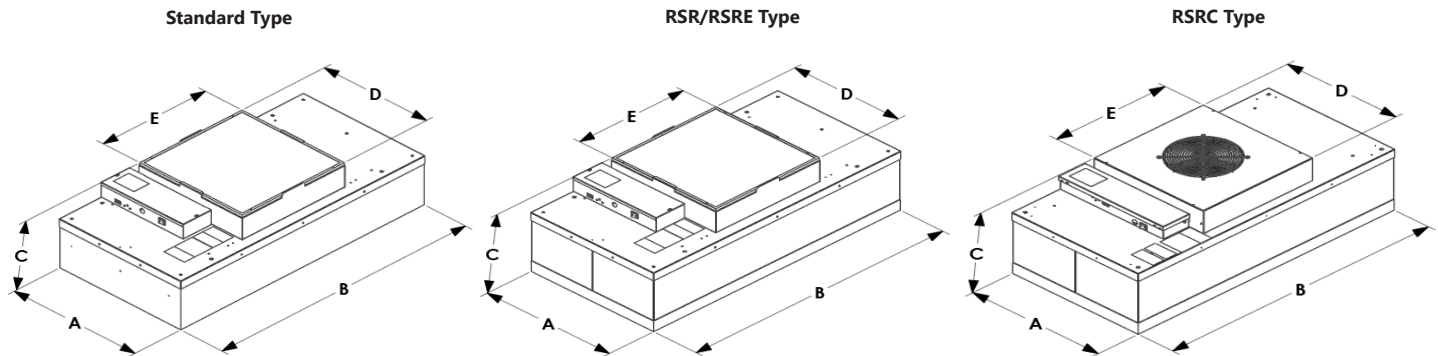
#### ■ Standard Features

- Universal Control Card
  - Network speed control, MODBUS RTU
  - Manual speed control, on-board potentiometer
  - Analog speed control, remote 0-10V
- Electronically Commutated (EC) brushless motor, torque programmed
- HEPA filter: 99.99% efficient @ 0.3 micron, 53mm pleat depth
- 1.0 in. wg (200 Pa) of external static capability
- Backward-inclined centrifugal fan (excludes 2x2)
- Mill finished aluminum exterior
- Walkable plenum (excluding prefilter), rated to 250 lbs.
- Washable MERV 4 pre-filter (STD, RSR/E only)
- Finger guard pre-filter standard on RSRC
- Roomsideremovable 3/8" challenge ports for convenient HEPA filter testing (excluding STD)
- Available in 2x2, 2x3, and 2x4 sizes
- cUL listed (115V, 208-240V, 277V) with standard UL 900 filter, file number E152685 (UL507)
- Manufactured to IEST recommended practices

#### ■ Optional Features

- Ducted inlet connection (shipped loose)
  - 8" (203 mm)
  - 10" (254 mm)
  - 12" (305 mm)
  - 14" (356 mm)
- Powder coat white paint or stainless steel housing
- CE certified on 230V units
- Filter Efficiencies: HEPA 99.995% or ULPA 99.9995% at MPPS
- Other filter options: PTFE, Energuard, 70mm, 100mm
- 3/4" knife edge: permits easy placement in gel track ceiling grid system (available on RSR, RSRE, and RSRC units only)
- Quarter turn latch screen (standard on RSRC)
- Indicator light feedback: Unit running and/or filter change indicator
- Continuous filter pressure monitoring
- Infrared Control option
- MERV 8 pre-filter available (shipped loose)
- Surface mount adapters available (shipped loose)
- 1" Insulation option
- Custom sizes available
- IBC and OSHPD Certification (OSP-0634-10), additional hardware required



**PRODUCT DATA SHEET**
**■ MAC 10® LEDC Dimensions & Performance**


Nominal Unit Size	Active Filter Face Area (Sq. Ft.)	Min. CFM	Max. CFM	Watts @ Max. CFM	dBa @ Max CFM	CFM @ 90 FPM	Watts @ 90 FPM	Sound dBA @ 90 FPM	Unit Weight	Dimensions AxBxCxDxE (mm)
2x4 LEDC Standard	7.2	200	950	250	66	650	90	52	66	23.63" x 47.63" x 14.32" x 20" x 20" (600 x 1200 x 364 x 508 x 508)
2x3 LEDC Standard	5.3	160	650	150	55	470	65	47	52	23.63" x 35.63" x 14.32" x 20" x 20" (600 x 905 x 364 x 508 x 508)
2x2* LEDC Standard	3.5	160	410	145	50	315	85	46	41	23.63" x 23.63" x 14.32" x 23.25" x 16" (600 x 905 x 364 x 591 x 406)
2x4 LEDC RSR/RSRE	5.3	200	850	240	62	477	65	47	71	23.63" x 47.63" x 16.42" x 20" x 20" (600 x 1210 x 417 x 508 x 508)
2x3 LEDC RSR/RSRE	3.8	160	650	150	51	340	45	43	54	23.63" x 35.63" x 16.42" x 20" x 20" (600 x 905 x 417 x 508 x 508)
2x2* LEDC RSR/RSRE	2.3	140	350	130	50	210	50	46	44	23.63" x 23.63" x 16.42" x 23.25" x 16" (600 x 600 x 417 x 591 x 406)
2x4 LEDC RSRC	5.3	200	850	240	62	477	65	47	71	23.63" x 47.63" x 15.94" x 20" x 20" (600 x 1210 x 405 x 508 x 508)
2x3 LEDC RSRC	3.8	160	650	150	51	340	45	43	54	23.63" x 35.63" x 15.94" x 20" x 20" (600 x 905 x 405 x 508 x 508)
2x2* LEDC RSRC	2.3	140	350	130	50	210	50	46	44	23.63" x 23.63" x 15.94" x 23.25" x 14" (600 x 600 x 405 x 591 x 356)

\* All 2x2 units will be built with a forward curve fan.

**Notes:**

Performance tested in accordance with the (ANSI/AMCA 210-07), (ANSI/ASHRAE 51-07) test standards for Certified Aerodynamic Performance Rating. Max CFM rating based on free air volumes @ high speed motor setting. 90 fpm values based on active filter face area. BTU = Watts x 3.413

**MAC 10® LEDC Electrical Info:**

MAC 10® LEDC 115V, 50/60HZ 1 Phase = 2.9 F.L.A., 208-240V 50/60HZ 1 Phase = 1.6 F.L.A., 277V 60 HZ 1 Phase = 1.4 F.L.A