

CamCleaner Vertical System accommodates:

(1) Prefilter, (16) Cylinder Filters and (1) Final Filter

1



Index

INDEX.....	2
READ BEFORE STARTING.....	3
SYSTEM IMAGE.....	4
SYSTEM INSTALLATION.....	5
MODULE CONNECTIONS.....	5
POWER INLET LOCATION.....	6
LOUVER OPERATION.....	7
MOTOR MODULE ACCESS.....	8
AIRFLOW CONTROLLER.....	9
DIFFERENTIAL PRESSURE GAGE.....	9
FILTER INSTALLATION.....	10
PREFILTER INSTALLATION.....	10
CYLINDER FILTER INSTALLATION.....	11
FINAL FILTER INSTALLATION.....	12
FEATURES.....	13
PERIODIC MAINTENANCE INSPECTIONS.....	14
WARRANTY.....	15

READ BEFORE STARTING

Read the instructions before starting!

The Camfil CamCleaner is a free-standing, mobile air cleaner designed for molecular and particulate contaminant control applications in heavy process industries. Typical applications include areas that may have corrosive gases and contain sensitive computer or electronic equipment, pulp and paper mills, photochemical facilities, steel mills, refineries or sewage treatment plants. The CamCleaner can also be used in archive and cultural heritage storage rooms, chemical handling locations and data centers.

3

Recommended placement of the system

The CamCleaner should be placed in a location that allows good air circulation for effective removal of gases. The inlets and outlets should have no obstructions that would prevent air from entering or exiting the CamCleaner. The CamCleaner is designed to be placed free standing in a room, up against a wall or corner walls. If corner wall placement is required the obstructed inlet can be closed.

Safety Instructions



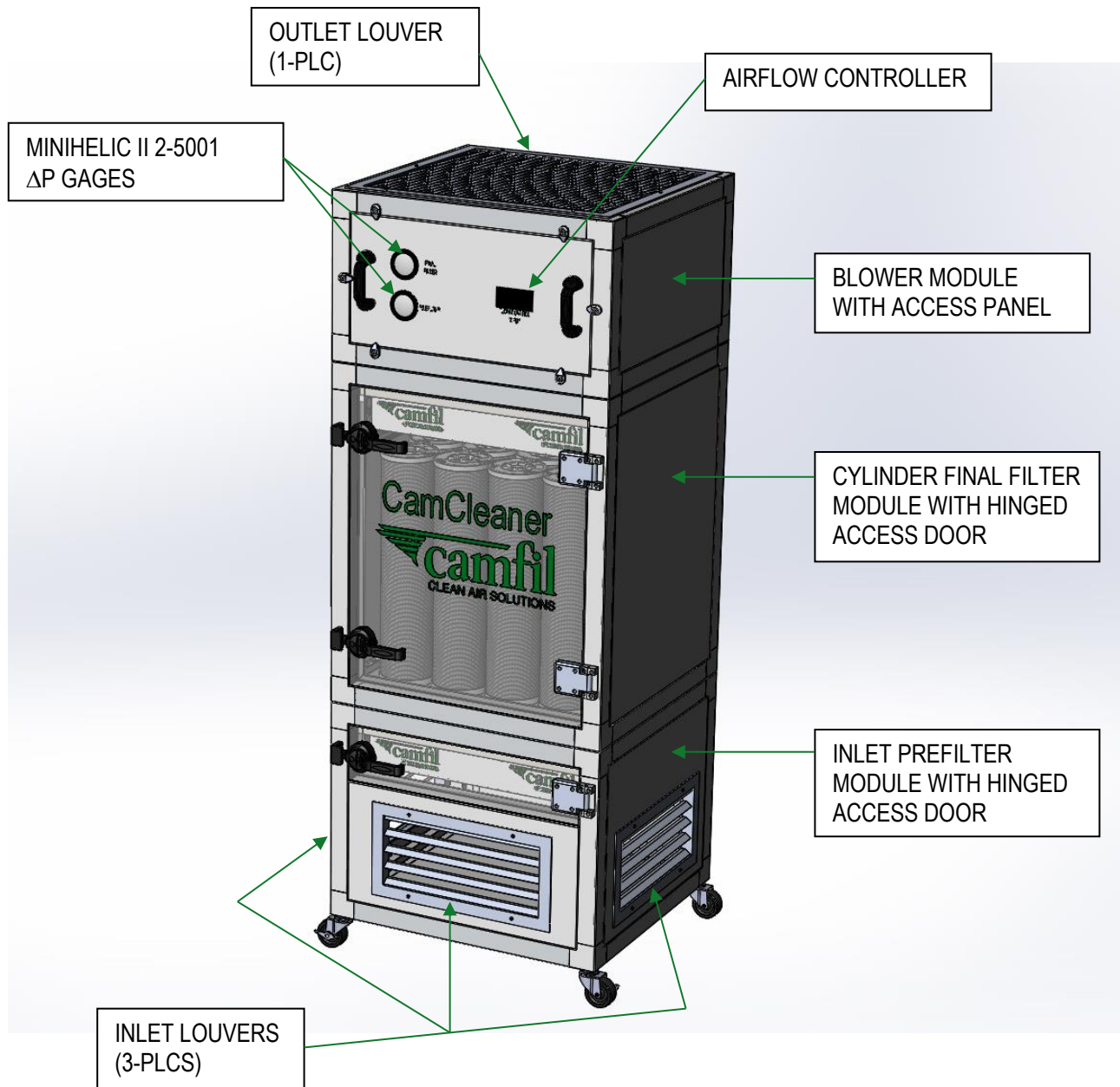
- Before starting to work on the system all safety and health protection decrees must be abided.
- Never drill, grind through, weld to or otherwise penetrate the interior or exterior of the filtration system.
- Check the system for any visible damages. If there are any visible damages inform your supervisor.

Technical Data

Standard Power Supply: 120VAC / 1PH, 50/60Hz
 Optional Power Supply: 240VAC / 1PH, 50/60Hz
 Maximum Power Consumption: 370 watts (120VAC); 1000 watts (240VAC)
 Rated AMP Draw (FLA): 4.4 amps
 Rated Flow: 1000 cfm
 Inlet Louvers – (3) & Outlet Louvers – (1)

There are no general rules for recycling of used filters. Different rules exist on local level in all countries. Please contact the recycling company in your district and ask how to handle used filters.

SYSTEM IMAGE



SYSTEM INSTALLATION

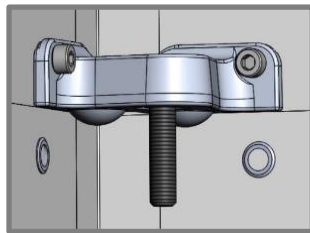
Upon receiving your CamCleaner, carefully unbox the equipment and stand upright, taking extra precaution not to damage the casters on the bottom. The CamCleaner arrives fully assembled and ready to use after installing the filters and connecting the power cable to the correct power source. Refer to system label for correct power supply voltage.

5

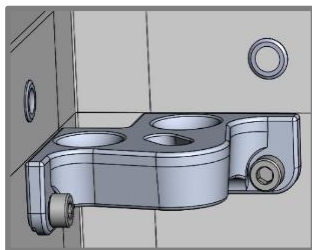
MODULE CONNECTIONS

Individual modules are connected by factory installed connectors located in the corners of each module for all CCV1000 systems. The module connectors consist of male and female halves, which are self-aligning and secured by a bolt and nut (included). Modules ship assembled from the factory based on order. If modules ever need to be separated, use a 6mm hex key to remove bolt from module connectors.

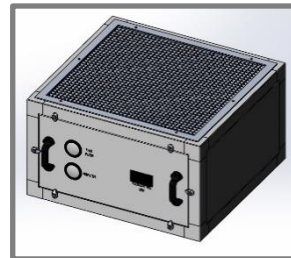
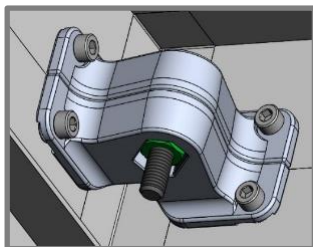
Male Connector



Female Connector

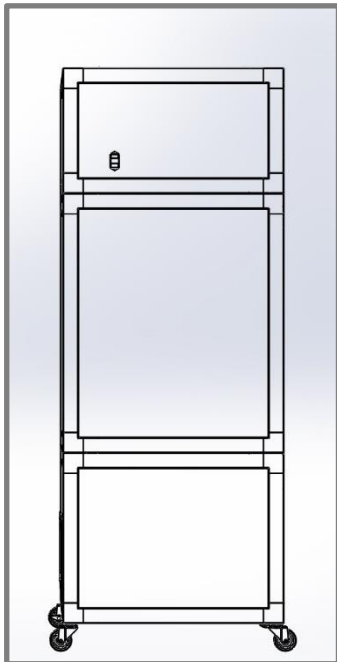


Connected



POWER INLET LOCATION


The power inlet supply is located on the back of the CamCleaner. The power supply is equipped with an ON / OFF switch and a fuse block that contains a 6.3 amp slow blow (time delay) fuse. The fuse block is located under the middle cover on the power supply inlet. *Note: Universal plug adapter supplied for units installed outside of the United States.*



Back Elevation View



6




200 Creekside Drive, Washington, NC 27889
Phone: 252-975-1141
MADE IN THE U.S.A.
CamCleaner

MODEL NO.: CC-V-1-FC-N-1
PART NO.: M21V1FCN1
SERIAL NO.: XXXXXX-X

VOLTAGE:	120
PHASE:	1
AMPS:	4.4
HZ:	50/60
WATTS:	370

← System Label →



200 Creekside Drive, Washington, NC 27889
Phone: 252-975-1141
MADE IN THE U.S.A.
CamCleaner

MODEL NO.: CC-V-1-FC-N-2
PART NO.: M21V1FCN2
SERIAL NO.: XXXXXX-X

VOLTAGE:	240
PHASE:	1
AMPS:	4.4
HZ:	50/60
WATTS:	1000

INLET LOUVER OPERATION

The supplied inlet louvers are fixed. The louvers come equipped with an internal damper. A small flat-blade screw driver can be inserted into the mechanism slot and rotated a quarter turn to open or close the damper.



OUTLET LOUVER OPERATION

The supplied outlet louver is equipped with directional louvers which can be manually adjusted to change the exhaust airflow direction.



MOTOR MODULE ACCESS



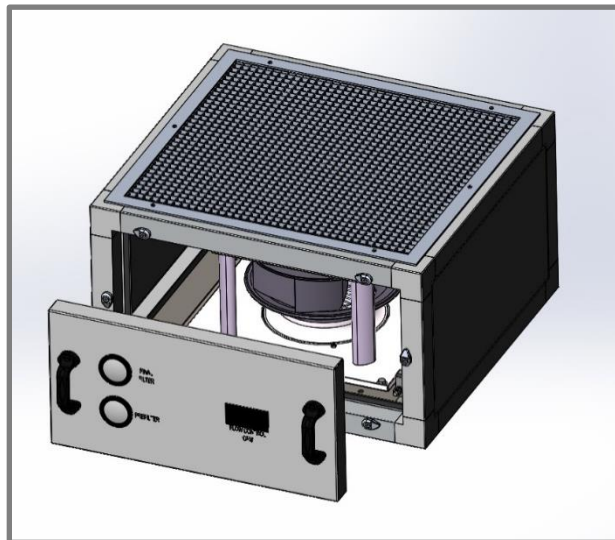
1 - Locate Motor Module Access Panel



2 - Loosen Panel Stops with 4mm Hex Key



3 - Rotate Panel Stops to Open Position



4 – Have an assistant grab both handles and pull the access panel out approximately 6-inches. **Warning!** Pulling the access panel out too far or dropping it will cause damage. Disconnect the gage tubing using the quick disconnects and the wiring to the controller. The panel can now be removed.

AIRFLOW CONTROLLER

The airflow controller is located on the blower module access panel and displays the current airflow as well as the airflow set point. No modifications to the airflow controller are required once you receive the CamCleaner. The current airflow reading will display "RED" in color if the airflow set point is not reached. Reasons for not being able to reach the airflow set point include but are not limited to: inlet obstructions, excessively dirty pre-filter/final filter, etc.



9

CHANGING THE AIRFLOW SET POINT: *(Pre-set from factory at 1000 CFM. Setpoint limits: 400 CFM to 1500 CFM)*

1. Ensure system is powered ON and locate the controller on the front of the CamCleaner blower module.
2. Press the up button until "oPER" is displayed, then press the right button until PRoG is displayed then press return.
3. "SP1" will be displayed then press the return button.
4. Press left/right buttons to change airflow setpoint.
5. Once desired airflow setpoint is displayed, then press the return button.
6. Airflow setpoint is now changed.
7. To return to operation, press the up button to reach "PRoG." Press right button until "oPER" displays then press return button until "RUN" displays. Press return again and unit will operate at desired air flow.

CHANGING THE ALARM PARAMETER SET POINTS:

1. Press up arrow until "oPER" displays.
2. Press right button until "PRoG" displays and press return. Press right button until "ALM.1" displays.
3. Press return to enter alarm setting functions.
4. Press right button until desired alarm point displays ("ALR.L" for low and "ALR.H" for high). Press return.
5. Set alarm value using left/right buttons and press return.
6. Alarm set point has now been changed.
7. To return to operation, press the up button to reach "PRoG." Press right button until "oPER" displays then press return button until "RUN" displays. Press return again and unit will operate at desired air flow.

SETTING CONTROLLER PASSWORD ACCESS:

1. Press up arrow until "oPER" displays.
2. Press right button until "INIt" displays and press return. Press right button until "I.PWD" displays. ("I.PWD" sets initialization password while "P.PWD" sets programming password)
3. Press return to enter "yES" to password query and press return.
4. Set password to any 4 digit numeric code. Press return.
5. To return to operation, press the up button to reach "PRoG." Press right button until "oPER" displays then press return button until "RUN" displays. Press return again and unit will operate at desired air flow.

DIFFERENTIAL PRESSURE GAGE

A total of two (2) minihelic differential pressure gages are installed to measure pressure drop across the prefilter and final filter. The differential pressure gages have a range of 0 to 1" w.g.. Please use the differential pressure gages to provide a visual indication of when the pre-filter and post filter require change-out.

FILTER INSTALLATION

Warning: Do not install or replace filters when system is powered ON. Do not operate without the proper filters installed.

PREFILTER INSTALLATION

Note: Only use nominal 4" depth frame prefilters.

1. Ensure system is powered OFF.
2. Located the Inlet Prefilter Module and open access door using the handle.
3. Locate 4" wide extrusion track; insert 4" prefilter into the track.
4. Close the module access door and secure door handle.
5. Reverse steps for removing prefilter. Do not remove prefilter while system is powered and in operation.
6. The CCV1000 requires one (1) prefilter.

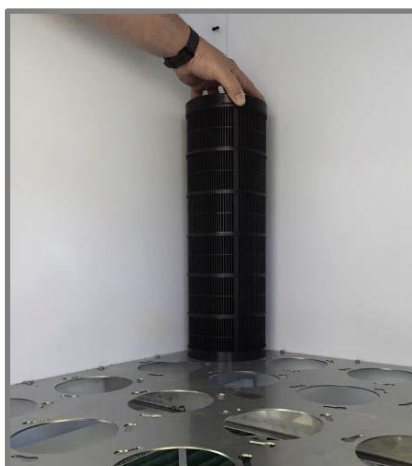
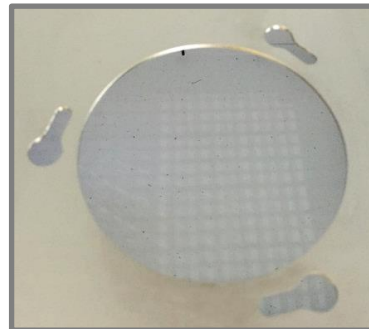


CYLINDER FILTER INSTALLATION

Cylinder Filter Installation (e.g. CamCarb CG)

6. Ensure system is powered OFF.
7. Located the Cylinder Final Filter Module and open access door using the handles.
8. Locate the cylinder holding frame mounted in the bottom of the cylinder module.
9. Insert cylinders into the holding frame starting with the back row first.
10. Cylinders have three stainless steel bayonet stubs that are inserted into the holding frame and secure the cylinders into place.
11. Align bayonet stubs with circular holes in holding frame and push gasket against holding frame.
12. While pushing gasket against holding frame, manually rotate the cylinder in a clockwise motion approximately $\frac{1}{2}$ " to secure into place - if cylinder fails to fully engage stops, use a 24mm socket or CamCarb cylinder installation tool.
13. Repeat steps for the remaining canisters until all holding frame slots are filled.
14. Close the module access door and secure door handles.
15. Reverse steps for removing the cylinder filters. Do not remove cylinder filters while system is powered and in operation.

11



FINAL FILTER INSTALLATION

Note: Only use nominal 4" depth frame final filter.

1. Ensure system is powered OFF.
2. Located the Cylinder Final Filter Module and open access door using the handles.
3. Locate 4" wide extrusion track towards the top downstream of the cylinders; insert 4" final filter into the track.
4. Close the module access door and secure the door handles.
5. Reverse steps for removing final filter. Do not remove final filter while system is powered and in operation.
6. The CCV1000 requires one (1) final filter.



FEATURES

EC MOTORIZED IMPELLER FANS

Fan is a backward curved impeller fan with an EC motor. EC motor offers low power consumption, quiet operation and easy servicing.

FAN SAFETY SHUT OFF

When the system is operating, and the blower module access door is opened, the fan motor will automatically power OFF as a built-in safety function.

ADJUSTABLE PRE-SET DIGITAL SPEED CONTROL

Allows real-time flow adjustment based on specific application. Measures airflow and maintains the required flow setpoint over the life of the filters. This allows for a consistent flow as filters load with no need for adjustment. Digital readout indicating actual flow is visible on the controller, located on the blower module. See "CHANGING THE AIRFLOW SET POINT" on page 9 for directions on how to adjust flow controller.

EASY ACCESS SECURE DOOR HANDLES AND PANEL CLAMP STOPS

The filter modules are equipped with easy to use secure door handles that allow access inside modules without the need for a tool, yet also provides a secure panel closure. Secure panel clamp stops are provided on the blower module and can be operated using a 4mm hex key to loosen the six (6) panel stops and rotate them 90° to release the access door panel.

PERIODIC MAINTENANCE INSPECTIONS

Proper maintenance of the CamCleaner system is vital for proper operation. To maintain optimum performance, it is necessary to replace filters when their performance no longer meets their required specification. To determine when media change-out is required, the following guidelines must be considered.

1. Filters
The pressure drop across the filter exceeds the recommended change-out pressure drop or system design pressure. The recommended "dirty" or change-out pressure drop varies depending on the filter installed. Refer to the filter specifications or contact your Camfil representative for filter change-out recommendations.
2. System
The system should be periodically inspected, and routine maintenance checks and/or other planned surveillance should be conducted.

When placing an order for replacement filters, provide Camfil with the serial number, part number and housing model number. The information can be found on the equipment label located on the back of the system.

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Washington, North Carolina, USA 27889
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Fax: (252) 948-3636
Email: Sales-WA@camfil.com

SPARE PARTS	
CF PART NO.	DESCRIPTION
M35003735	CASTER SWIVEL WITH BRAKE
M35003734	CASTER SWIVEL
M34003549	FUSE GLASS-TUBE TIME DELAY, 5MM, 6-3/10A (POWER SUPPLY)
M34003531	FUSE GLASS-TUBE TIME DELAY, 1/4" DIA, 1/2A (CONTROL PANEL 120V VERSION)
M34003532	FUSE GLASS-TUBE TIME-DELAY, 1/4" DIA, 1/10A (CONTROL PANEL 240V VERSION)
M34003426	POWER CORD 8FT, 18GA, 10A-125V (120V VERSION)
M34003529	POWER CORD 8FT, 14GA, 15A-250V (240V VERSION)
855148004	OPTIPAC MERV 11, 4"X24"X24" FILTER
855148024	OPTIPAC MERV 14, 4"X24"X24" FILTER

WARRANTY

WARRANTY: Camfil USA, Inc. (seller), warrants that all manufactured items shall be merchantable, free from defects in workmanship and material, and shall conform to Camfil USA's published specifications and submittal drawings included in the scope of the purchase agreement. The term of this warranty shall be one (1) year from date of shipment from Camfil USA's manufacturing facility. There are no other warranties that extend beyond this description.

15

LIABILITY: Regarding defective product, Camfil USA shall repair, replace or refund the purchase price at seller's election, provided the products are returned to the seller with seller's written authorization. Under no circumstances (whether or not foreseeable) shall seller be obligated for consequential or incidental damages, losses or expenses in connection with, or by reason of, any breach. Seller's liability is limited to the purchase price of the product(s) plus common carrier freight costs to and from seller's manufacturing facility. The remedies expressed are exclusive.

TERMS: No other claims other than explicit written claims shall be recognized. Written claims must be received by seller within one year from the date of shipment.

Repairs made without prior consultation and authorization by Camfil USA may void the product warranty.



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Holly Springs, Mississippi • Laval, Quebec • Conover, North Carolina • Washington, North Carolina • Concord, Ontario

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Camfil has a policy of continuous research, development and product improvement. We reserve the right to change designs and specifications without notice.