



Applicable requirements:  
ANSI/UL 1017  
CSA C22.2 No. 243

## Characteristics



Pharma Applications



Cleanroom Applications



Dry Recovery



Static Dissipating



ULPA Included



Stainless Steel  
AISI 304 & 316



High Efficiency



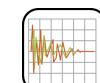
Resistivity:  
Less than 10  
ohms



Static  
Dissipating  
Toolkit



Low Noise  
Level



EMI Shielded



- ULPA Filter - Included with an efficiency of 99.999% on 0.12 micron. Tested: IEST RP-CC001.3. Filtration efficiency of 99.9995% on 0.18 micron. Tested: IEST RP-CC001.3. U15 by MPPS method as per EN 1822.
- \*Cleanroom compatible with ISO Class 4 (former Class 10). Can be used in the pharmaceutical industry
- Static free and ESD safe. EMI/RFI Shielded. TELECOM package available
- 4-stage filtration system include an ULPA Filter U15, Double Cloth Filter and Disposable Filter Bag. An internal HEPA Filter H14 is available as an optional 5th stage of filtration
- Designed for general cleanup in contamination controlled environments
- Single phase thru-flow motor
- Dual Speed Control to regulate suction
- For dry recovery only
- Chrome plated steel construction. Recovery capacity of 4 gallons (14 liters) in the recovery tank and 2.5 gallons (9.5 liters) in a Disposable Filter Bag
- Based on a 4-wheel dolly for easy maneuverability
- Complete tool kit included

Chrome plated steel construction ensures that the unit will resist abuse and the industrial gaskets and seals ensure that the vacuum cleaner will always be leak free.. These units are equipped with a true ULPA Filter (U15) located downstream of the motor. These units are EMI/RFI Shielded and will not disrupt computers and sensitive electronic equipment. These units are also static free and ESD safe. For critical static control applications requiring zero voltage potential a special TELECOM package is available (conductive wheels are incorporated on the vacuum cleaner and a special tool kit is provided). These units are cleanroom compatible and can be used in the pharmaceutical industry. These units were designed for general cleanup in contamination controlled environments. These are dry only vacuum cleaners. This unit is also equipped with a dual speed control that allows the operator to regulate the suction. It also incorporates a thermo-protector which prevents the motor from overheating if there is a blockage in a nozzle or hose. All of our ULPA vacuum cleaners are Aerosol Leak Tested before leaving our facility.

## Specifications

	Unit	EMI-CWR
Part#		110110A
Weight	lbs	35
Filter Cleaning		NONE
Dimensions	Inches	H28 x W17 x L15
Dry Recovery	Gal	4
Collection Bag Capacity	Gal	2.5
Vacuum Pressure	Inches H <sub>2</sub> O	95
Air Flow at Suction Intake	CFM	120
Phase		Single
Horse Power	HP	1.3
Amperage	A	8.5
Wattage	W	1000
Hertz	Hz	60
Voltage	V	120
Plug		120V Plug

### Ultra Low Penetration Air Filter

A ULPA filter is a type of air filter. It can remove at least 99.999% of dust, pollen, mould, bacteria and any other airborne particles with a size of 0.12 microns or larger.

North-America: Each ULPA Filter has a minimum filtration efficiency of 99.999% on 0.12 micron. Tested as per IEST-RP-CC001.3.

Europe: Each ULPA Filter has a minimum filtration efficiency of 99.9995% on 0.18 micron, rated U15 as per EN 1822 by MPPS method.

### EMI Suppression / RFI Shielding

These cleanroom vacuum cleaners are equipped with an electronic filter suppresser which reduces electromagnetic interference (EMI), both radiated and conducted, below class B limits for digital apparatus as established by the FCC and ISO. It also provides shielding against RFI (Radio Frequency Interference). The electronic filter is wired in line with the motor. If the electronic filter should fail, power to the motor will automatically be cut-off. These vacuum cleaners will not disrupt computers, radio and video monitors and other sensitive electronic equipment.

### Static Free Vacuum System (ESD Safe)

The vacuum cleaner is designed to be grounded during use. Any static electricity that is produced while vacuuming is dissipated through the conductive hose, through the vacuum cleaner and it is discharged to the ground. A ground continuity tester is included with every vacuum cleaner to verify ground continuity before use. The ESD safe vacuum cleaners eliminate static electricity and static charge buildup and they protect sensitive electronic equipment.

## High Efficiency Particulate Air Filter

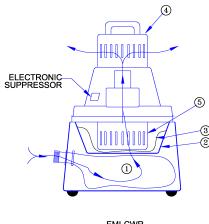
A HEPA filter is a type of air filter, which means it filters the air coming in or out of the vacuum cleaner system. It can remove at least 99.99% of dust, pollen, mould, bacteria and any other airborne particles with a size of 0.3 micron or larger.

North-America: Each HEPA Filter has a minimum filtration efficiency of 99.99% on 0.3 micron. Tested as per IEST-RP-CC001.3 and OSHA compliant.

Europe: Each HEPA Filter has a minimum filtration efficiency of 99.995% on 0.3 micron, rated H14 as per EN 1822 by MPPS method.

[Click here to download Tiger-Vac's HEPA Filter's standards chart.](#)

## 4 STAGE FILTRATION SYSTEM (UPGRADABLE TO 5 STAGES)



1. Paper Filter Bag with liner (one micron efficiency) collects the bulk of recovered materials and keeps the other filters clean.
2. Double Cloth Filter (2 stages, washable) consisting of:
  - 2.1. Dralon filter with smooth surface prevents caking of fine dust.
  - 2.2. Polyester filter (one micron efficiency) prolongs the life of the ULPA filter.
3. ULPA filter (Ultra Low Penetration Air) Minimum efficiency of 99.999% on 0.12 micron. The ULPA filter is large enough to handle the amount of airflow that the vacuum produces without any significant pressure drop. It also ensures compatibility with Class 10 cleanroom conditions.
4. (Optional 5th Stage) Internal HEPA filter (High Efficiency Particulate Air) can be incorporated in the filtration system for a total of 5 stages. The filter is installed before the motor and is used when recovering toxic or nuisance dusts. It protects the motor from contamination and it allows the motor to be serviced without danger to the operator. HEPA filter: 99.99% efficiency on 0.3 micron.

## Class 10 Compatible

When we first set out to build our cleanroom vacuum cleaners, we did not attempt to modify an existing model and adapt it for cleanroom use. We knew that the cleanroom industry deserved and wanted better, so we started from scratch. A quick glance at the EMI-CWR's innovative features will prove that we did not leave anything out.

EMI cleanroom vacuum cleaners are certified for use in class 10 cleanrooms. Cleanroom compatibility tests have been performed by independent labs and copies of the test reports are available upon request. As part of our quality assurance program, every ULPA filter is individually laser tested and every vacuum cleaner is individually leak tested before being shipped. This assures compatibility with Class 10 cleanroom conditions.

## Static Free Vacuum System (ESD Safe)

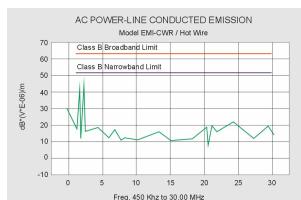
The EMI-CWR is designed to be grounded during use. Any static electricity that is produced while vacuuming is dissipated through the conductive hose, through the vacuum cleaner and it is discharged to the ground. A ground continuity tester is included with every vacuum cleaner to verify ground continuity before use. The EMI cleanroom vacuum cleaners eliminate static electricity and static charge buildup and they protect sensitive electronic equipment.

For critical static control applications requiring zero voltage potential (telecommunication facilities, computer and electronics manufacturing, integrated circuit manufacturing, etc.) a special TELECOM package is available. Conductive wheels are incorporated on the vacuum cleaner and a special tool kit is provided. ESD safe micro tools and a round brush with conductive bristles are standard with the EMI-CWR.

## Additional Features

The EMI-CWR is equipped with a dual speed control that allows the operator to regulate the suction. The EMI-CWR also incorporates a thermo-protector which prevents the motor from overheating if there is a blockage in a nozzle or hose. The heavy duty construction ensures that the EMI-CWR will resist abuse and the industrial gaskets and seals ensure that the vacuum cleaner will always be leak free.

## EMI SUPPRESSION / RFI SHIELDING



The EMI cleanroom vacuums are equipped with an electronic filter suppresser which reduces electromagnetic interference (EMI), both radiated and conducted, below class B limits for digital apparatus as established by the FCC and ISO . It also provides shielding against RFI (Radio Frequency Interference.) The electronic filter is wired in line with the motor. If the electronic filter should fail, power to the motor will automatically be cut-off. The outer shell of the EMI-CWR is made entirely of chrome polished steel which acts as a shield against interference from emitting sources. EMI cleanroom vacuums will not disrupt computers, radio and video monitors and other sensitive electronic equipment.

### ULPA FILTER - Included

Part#	Qty	Description
211027	1	ULPA FILTER (U15)

### HEPA FILTER - UPSTREAM (OPTIONAL 5th STAGE FILTRATION). NB: 3 spacers are required to install Upstream HEPA Filter. Can also be factory installed upon request - Optional

Part#	Qty	Description
211027B	1	HEPA FILTER 99.995% EFFICIENCY ON 0.3 MICRON (CE VERSION)
211098	1	SPACER -NEOPRENE(WITH SELF ADHESIVE)

### FILTERS - Included

Part#	Qty	Description
211226	1	DOUBLE CLOTH FILTER ASSEMBLY

### DISPOSABLE FILTER BAGS - Included

Part#	Qty	Description
211028	1	PAPER FILTER BAG (PACKAGE OF 5)

### DISPOSABLE FILTER BAGS - Optional

Part#	Qty	Description
211069	1	PAPER FILTER BAG (PACKAGE OF 12)

### TOOLS AND ACCESSORIES - Included

Part#	Qty	Description
323303	1	SUCTION HOSE ASSEMBLY 10'(3m) SD* WITH SS ENDS FOR EMI-CWR (WITH STRAIGHT HANDLE)
323331	1	WANDS 1.25"(32mm) STAINLESS STEEL(SET OF 2) - ONE CURVED AND ONE STRAIGHT
323311A	1	COMBI TOOL, Ø1.25" (Ø32mm), STATIC CONDUCTIVE PLASTIC WITH CONDUCTIVE NYLON BRISTLES
323317A	1	UTILITY FLOOR TOOL, 1.25"(Ø32mm) x 12"(30cm), STATIC CONDUCTIVE PLASTIC w/GREY SQUEEGEE BLADES
323312A	1	ROUND BRUSH, Ø1.25"(32mm), ESD SAFE PLASTIC
323314A	1	UPHOLSTERY FLAT TOOL, Ø1.25"(32mm), ESD SAFE PLASTIC
323313A	1	CREVICE TOOL, Ø1.25"(32mm), ESD SAFE PLASTIC
323316	1	MICRO TOOL KIT, Ø1.25"(32mm), ESD* SAFE PLASTIC
323321A	1	ROUND TOOL, WITH RUBBER BLADES, Ø1.25"(32mm), ESD SAFE PLASTIC
211065	1	GROUND CONTINUITY TESTER

### TOOLS AND ACCESSORIES - Optional

Part#	Qty	Description
323412	1	FLOOR TOOL ASSEMBLY, AUTOCLAVABLE, Ø1.25"(32mm)x12"(30cm) -STAINLESS STEEL
323413	1	CREVICE TOOL, AUTOCLAVABLE, Ø1.25"(32mm)x10"(25.4cm) -STAINLESS STEEL

### PREVIOUS SYSTEM - SUCTION HOSE WITH CURVED HANDLE AND STRAIGHT EXTENSION WANDS - Optional

Part#	Qty	Description
323301	1	SUCTION HOSE ASSEMBLY 1.25"(32mm) x 10'(3m) SD* WITH SS ENDS FOR EMI-CWR (WITH CURVED HANDLE)
323330	1	EXTENSION WANDS, BOTH STRAIGHT, (SET OF 2), Ø1.25"(32mm) -STAINLESS STEEL

### INTERCEPTOR ATTACHMENT FOR LIQUID RECOVERY - Optional

Part#	Qty	Description
211024	1	INTERCEPTOR FOR CLEANROOM USE WITH ACCESSORIES

## WARNINGS:

Do not use these vacuum cleaners to recover explosive dusts or flammable liquids