

REINTDECK & REINTDECK EASY

REINTDECK WARRIOR & REINTDECK EASY WARRIOR



TECHNICAL DATA SHEET

Centralized and decentralized, integrable and combinable purifiers for ceiling and false ceiling mounting

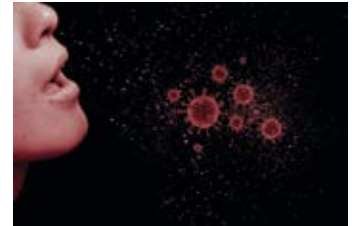


REINTDECK | REINTDECK EASY | REINTDECK WARRIOR | RE-INTDECK EASY WARRIOR

Centralized and decentralized, integrable and combinable purifiers for ceiling and false ceiling mounting

MAIN FUNCTION

- REINTDECK by Casals air purifiers convert any indoor space into an environment free of contaminating particles and thus leave a much healthier air.
- It is designed to reduce the viral load of the rooms given the constant air renewals that it carries out.



1. Reduction of dust particles, odours and contaminating microorganisms. Thus creating a healthier environment. Ideal for people with **allergies and asthma**.
2. Aside from a healthier work environment, our air purifiers **reduce the need for cleaning** by removing a large portion of the dust that is generated daily.
3. Three filtration stages with ISO Coarse 65% (G4) pre-filters, filters ISO ePM1 70% (F7) filters and a final **ABSOLUTE HEPA H14 molecular** filter that in few hours will reduce a large number of particles in the air such as microorganisms, bacteria, viruses, molecules, etc.
4. Equipped with **high efficiency and silent fans** to guarantee low energy consumption.

APPLICATIONS

- Designed for all kind of indoor spaces such as:
 - Supermarkets
 - Pavilions
 - Gyms
 - Restaurants
 - Health sector
 - Offices
 - Hotels
 - Homes
 - Colleges and universities
- In short, for any public space where high-quality air purification is required since REINTDECK purifiers are equipped with **high-efficiency HEPA H-14 filters**.
- Designed to be installed in indoor spaces in false ceilings, or by simple hanging, which makes them the best solution for:
 - Ventilation of workstations.
 - The health sector (waiting rooms, corridors, rooms, field hospitals, common areas, clinics, pharmacies, etc.).
 - The tertiary and industrial sector (gyms, pavilions, supermarkets, offices, hotels, universities, schools, public institutions, warehouses, living rooms in restaurants, shops, etc.).



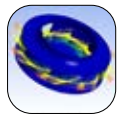


MANUFACTURING FEATURES

- **High efficiency** purification unit built in **soundproof** steel structure, galvanized for corrosion resistance.
- Available with electric motor (EC) in two versions:
 1. **REINTDECK 1800 EC** up to 1800m³/h for indoor spaces up to **182 m²** for 3 renovations/hour, installation at 3m height. **Centralized** model to be ducted in false ceiling, movable ceiling plate (Armstrong plate type, 600x600mm) replacement.
 2. **REINTDECK EASY 1200 EC** up to 1200m³/h for indoor spaces up to **126m²** for 3 renovations/hour, installation height 3m. **Decentralized** model, hang-up installation.
 3. **REINTDECK WARRIOR 1800 EC** up to 1800m³/h for indoor spaces up to **182 m²** for 3 renovations/hour, installation at 3m height. **Centralized** model, for false ceiling ducts, air intake through movable ceiling plate (Armstrong plate type, 600x600mm) replacement. With the Photocatalysis-UVC Tower ultraviolet light photocatalysis system installed.
 4. **REINTDECK EASY WARRIOR 1200 EC** up to 1200m³/h for indoor spaces up to **126m²** for 3 renovations/hour, installation at 3m height. **Decentralized** model, hanging installation. With the Photocatalysis-UVC Tower ultraviolet light photocatalysis system installed.

CHASIS:

- **Soundproof** 30mm extruded aluminum profile, nylon corners and pre lacquered steel sandwich panels, RAL 9006, class M0, with 25mm internal rockwool insulation class A1 (non combustible) and 90Kg/m³ density. Panels come with quick release **fastening system** for easy assembly and disassembly whenever required, whether for cleaning, maintenance or panel repositioning.
- **Filters** are located in the perforated side panels, with **handles and fastening system**. This ease of access optimizes maintenance and filter replacement procedures. Filter replacement and manipulation of the REINTDECK is recommended with the appropriate PPE's.



FAN:

- Equipped with **high efficiency single inlet - backward impeller** with **self-cleaning** system, made of polyamide, statically and dynamically balanced at the factory.



REINTDECK 1800 EC FILTERS:

- **Triple filtering stage** at each panel, comprised of 5x ISO Coarse 65% (G4) + 5 ISO ePM1 70% (F7) + 5 HEPA H14.
- 15 filters per purification unit.
- The ISO Coarse 65% pre-filters increase the life of the absolute filters HEPA H14.



REINTDECK EASY 1200 EC FILTERS:

- **One filtration stage in 4 supply panels with adjustable diffusers** comprised of 1 absolute filter HEPA-14 in each panel.
- **Double filtration stage** in inlet panel consisting of 1 filter ISO Coarse 65% (G4) + 1 filter ISO ePM1 70% (F7).
- 6 filters per purification unit.
- The ISO Coarse 65% pre-filters increase the life of the absolute filters HEPA H14.



MOTORS:

- **Low consumption EC** (electronically commutated) Technology exterior rotor motor. IP-44 protection and class B insulation. Standard voltage 230V 50Hz/60Hz.

CONTROL PANEL:

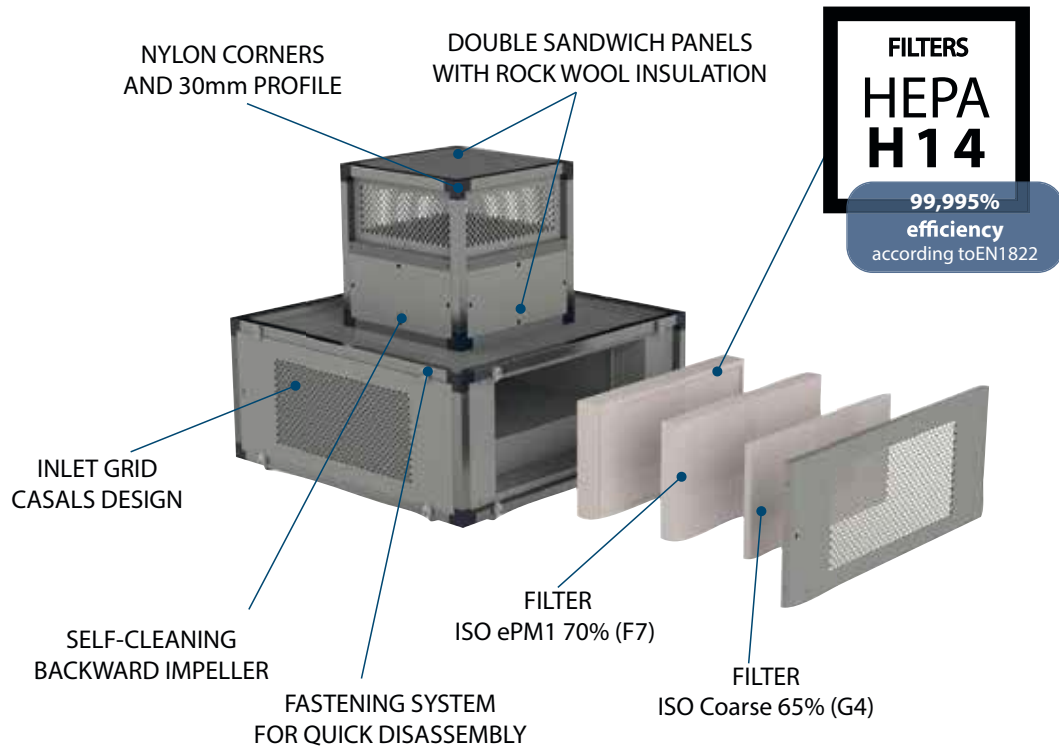
- All REINTDECK and REINTDECK EASY air purifiers are equipped with a master control panel located on one side of the structure.
- This control panel allows for control of the following parameters:
 1. On/Off of the air Purifier.
 2. Automatic function – Autonomous.
 3. Flow adjustment, 0 being the lowest and 10 the highest.
 4. Schedule control for night mode optimization and thus favouring low energy consumption when the interior spaces are empty.
 5. Clogged filter alarm and maintenance indication.

IMPORTANT

The REINTDECK and REINTDECK EASY purification system ensures the reduction of viral load by retaining viruses and bacteria (including COVID-19 coronaviruses) that pass through its high efficiency HEPA 14 filters. 100% air purification cannot be guaranteed in a specific space as it depends on different factors such as: architectural distribution of its location, external air currents, minimum operating time, improper use of the unit, obstruction of air inlets, maintenance level of the unit and the state of your filters, etc.

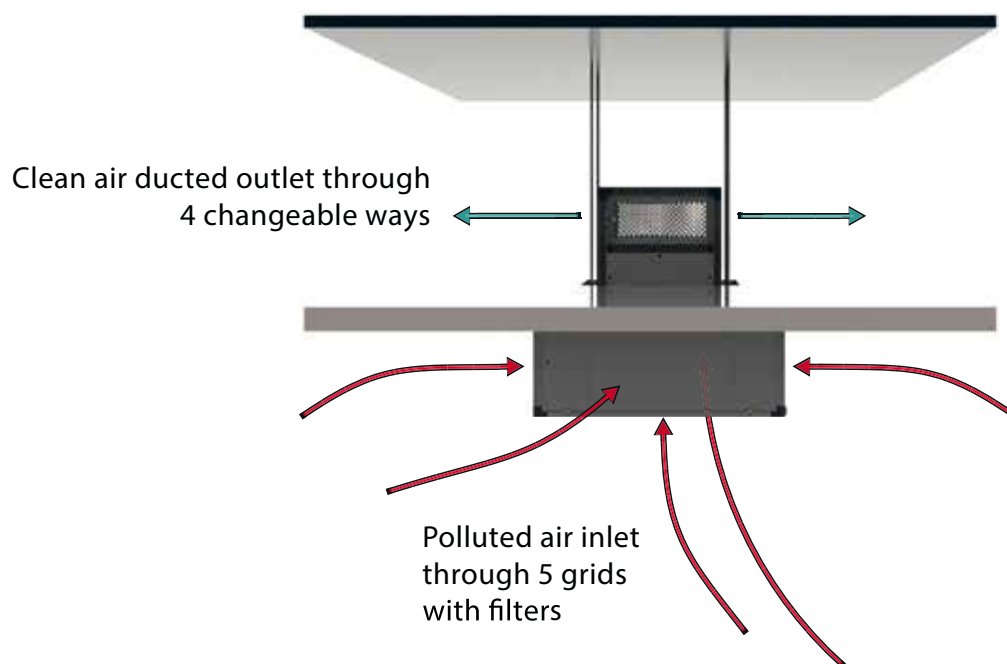


6. Modbus RS-485 included.



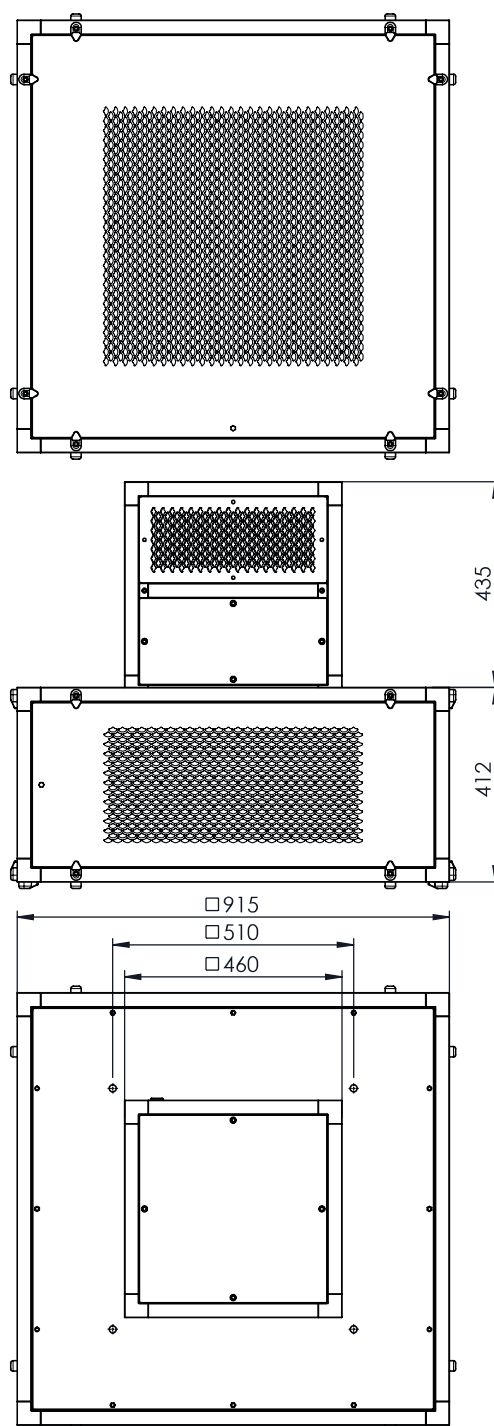
False ceiling installation example

To install REINTDECK it will only be necessary to remove a movable false ceiling plate, hang the purification unit and connect it to the ducts that will carry the purified air through up to 4 interchangeable ways.



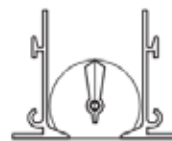
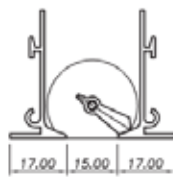


REINTDECK EXTERNAL DIMENSIONS





REINTDECK PARTS AND OPERATION SCHEME
REINTDECK EASY PARTS AND OPERATION SCHEME



**FASTENING SYSTEM
FOR QUICK DISASSEMBLY**

**SELF CLEANING
BACKWARD IMPELLER**

**NYLON CORNERS
AND 30mm PROFILE**

**99,995%
efficacy
according to EN1822**

**FILTERS
HEPA
H14**

**PREFILTERS
ISO COARSE
65%**

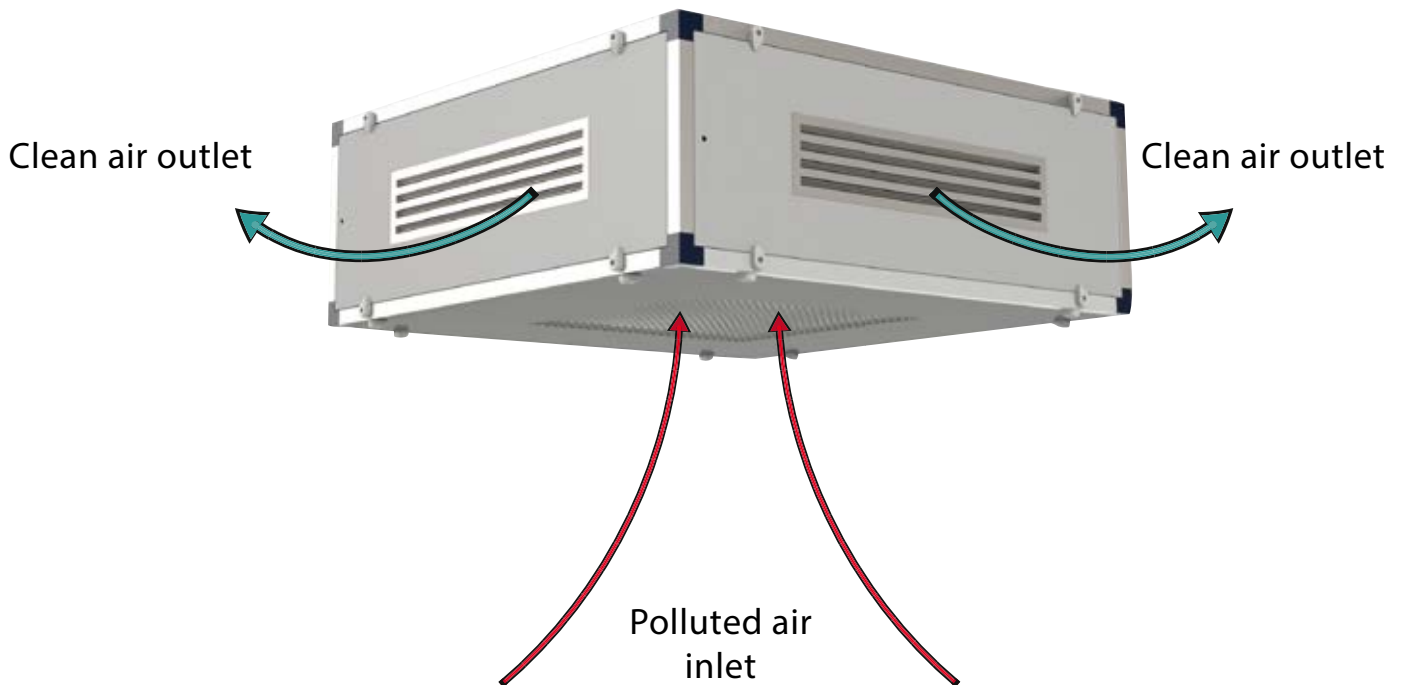
**PREFILTERS
ISO COARSE
70%**

**PRE-COATED DOUBLE
PANEL SANDWICH PANELS
WITH ROCK WOOL INSULATION**

**LINEAR
DIFFUSERS**



The REINTDECK EASY model is supplied with 4 linear 4-way diffusers on all 4 panels, with individually manually adjustable blades. Unlike REINTDECK, this decentralized version does not need to duct air and in a single unit the polluted air can be intaken through the lower panel, the air is filtered with a double stage, and clean air is provided by filtering it again with 4 absolute filters HEPA-14 through



side panels with linear and adjustable diffusers.

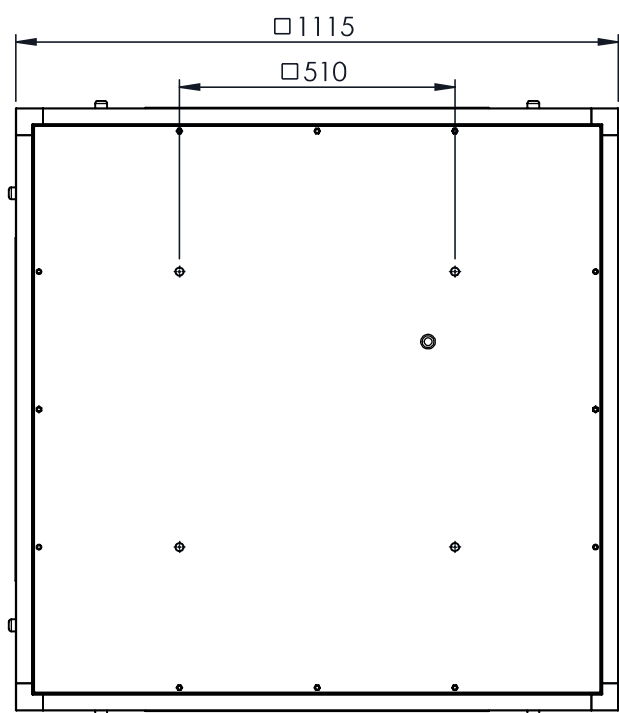
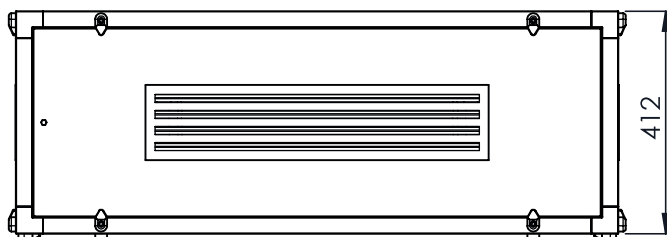
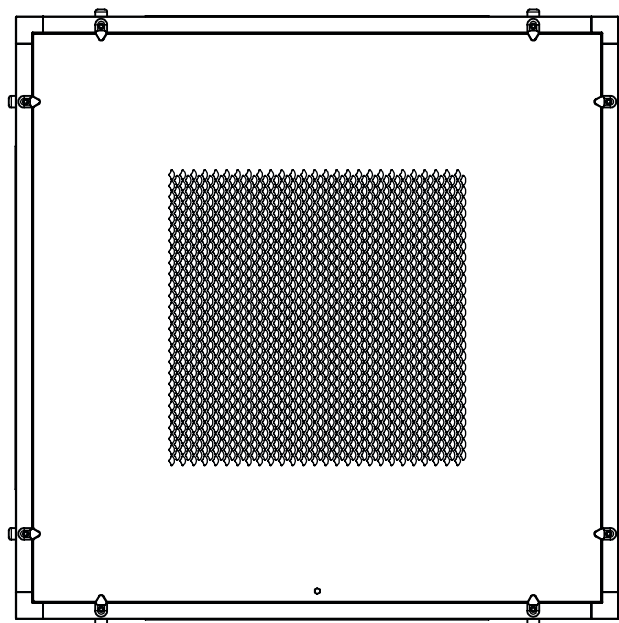
Installation example

Being a decentralized system, a duct installation is not necessary as can be seen in this image. Being a compact machine, REINT-





REINTDECK EASY EXTERNAL DIMENSIONS

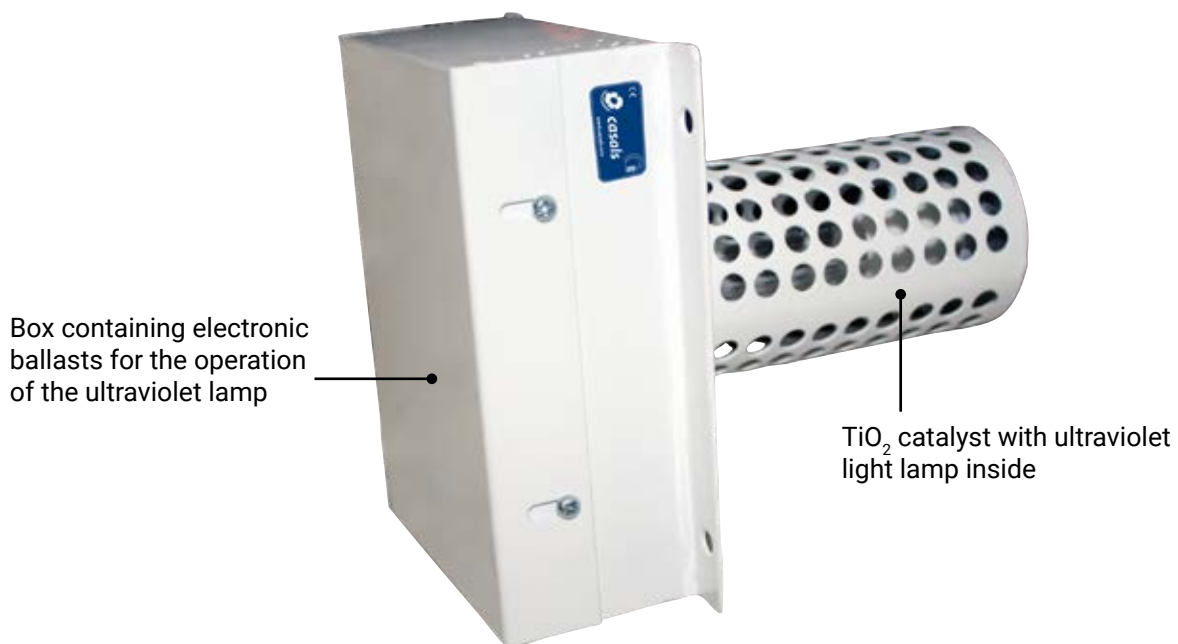
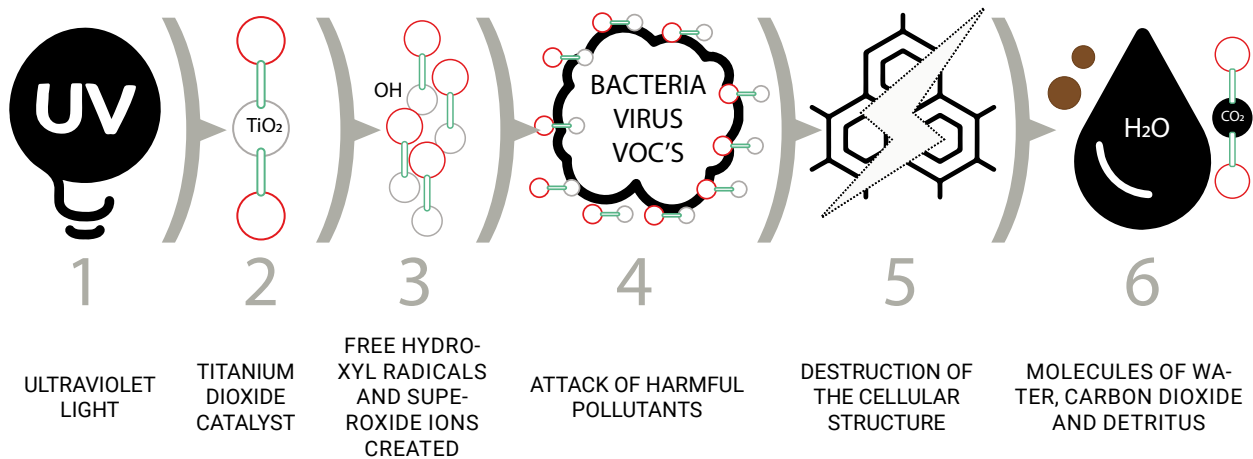




DECK EASY is ideal for installations with no-plate ceilings.

REINTDECK WARRIOR AND REINTDECK EASY WARRIOR VERSIONS

- REINTDECK WARRIOR and REINTDECK EASY WARRIOR purifiers have the same equipment as REINTDECK EC and REINTDECK EASY EC, but they also have the PHOTOCATALYSIS-UVC TOWER by Casals installed, consisting of a UV-C ultraviolet light lamp and a photocatalysis system that allows destroying the particles previously captured by the filters.
- PHOTOCATALYSIS-UVC TOWER by Casals carries out a photocatalytic oxidation process that combines UVC irradiation with a substance (catalyst) titanium dioxide (TiO_2) which results in a reaction that changes harmful contaminants (bacteria, viruses and volatile organic compounds or VOC's) into H_2O , CO_2 and detritus.
- The air purification process of using photocatalytic oxidation works by using an existing air system that pulls air through the REINTDECK which passes through the professionally installed ultraviolet light/ titanium dioxide chamber. As the malignant contaminant-filled ambient air circulates through these chamber the microbes are "attacked" by free hydroxyl radicals and super-oxide ions (created by UV light and titanium dioxide) breaking their cellular structure apart and destroying both the intracellular mass and DNA/HNA chromosomes. The result is harmless water molecules, carbon dioxide and detritus.





Watch the following video to see this quick operation.

REINTDECK TECHNICAL DATA

	REINTDECK EC	REINTDECK EASY EC
Phase	Single phase	Single phase
Rated voltage (V)	230	230
Rated voltage range (V)	220-240	220-240
Frequency (Hz)	50/60	50/60
Rated R.P.M	1870	1551
Rated I (A) 230V	2,08	0,77
Máx. power (W)	460	460
Rated airflow (m³/h)	1800	1200
Sound (at 3m) dB(A)	45	41
Surface up to (m²) [3m height]	182	126
Min. ambient temperature (°C)	-25	-25
Max. ambient temperature (°C)	50	50

Note: The REINTDECK & REINTDECK EASY purifiers are 100% speed adjustable.

TECHNICAL DATA OF REINTDECK FILTERS

	EFFICIENCY	DIMENSIONS mm [lateral panels + bottom panel]		MEDIUM AREA m²	AIRFLOW/ PRESSURE DROP at 1800m³/h (Pa)	WEIGHT Kg
HEPA H-14 FILTER	99,995%	305 x 610 x 68 (4)	610 x 610 x 68	33	130	23
ISO ePM1 70% (F7) FILTER	ISO ePM1 70%	305 x 610 x 48 (4)	610 X 610 X 48	19,02	10	16
ISO COARSE 65% (G4) FILTER	ISO COARSE 65%	287 x 592 x 20 (4)	592 X 592 X 20	1,03	10	3,3

TECHNICAL DATA OF REINTDECK EASY FILTERS

	EFFICIENCY	DIMENSIONS mm	MEDIUM AREA m²	AIRFLOW/ PRESSURE DROP at 1200m³/h (Pa)	WEIGHT Kg
FILTRO HEPA H-14 [paneles laterales]	99,995%	305 x 610 x 68 (4)	22	130	16
FILTRO ISO ePM1 70% (F7) [panel inferior]	ISO ePM1 70%	610 X 610 X 48	6,5	15	6
FILTRO ISO COARSE 65% (G4) [panel inferior]	ISO COARSE 65%	592 x 592 x 20	0,35	15	0,9

REINTDECK FLUIDS SIMULATION

In less than 5 minutes, the Casals REINTDECK 1800 EC purifier for false ceiling moves all the air in a 196m² and 3m high room such as a supermarket or pavilion. Any commercial building will be able to carry out its activity in an environment without viral load.

