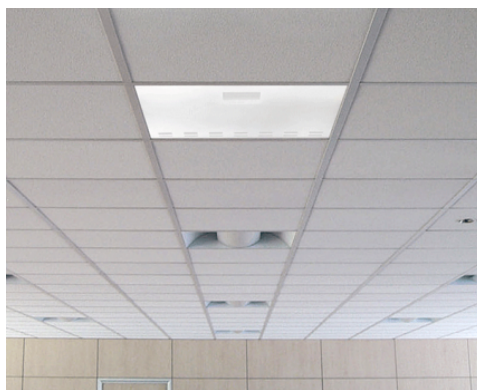


ECOSAN - TASK 70

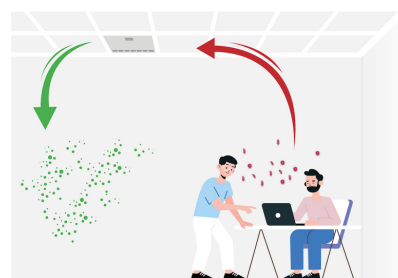
Data Sheet



Ecosan Task 70 is a device created to offer a **tested and certified photocatalytic system** useful for combating the problem of unsanitary environments. The sanitation of the rooms **guarantees safety and protection** of people's health, increases the quality of life, **prevents the spread of viral and bacterial diseases** and reduces the damage caused by air pollution.

INSTALLATION

The device was created to be installed inside the classic 60 x 60 cm ceiling panels. Its **high functionality** allows to purify **70 m³ / h of air** allowing the **presence of people inside the environments** in which it operates. The device is also available for installation in plasterboard walls or walls with the appropriate accessory bracket kits.



DATA SHEET

Ecosan Task 70



| | |
|--------------------------|--|
| Power supply | 230 V |
| Consumption | 18 W |
| Frequency | 50 Hz |
| Capacity | 70 m ³ /h |
| Weight | 6,7 kg |
| Dimensions | h. 7,5cm x l. 59,5 cm x l. 59,5 cm |
| Certifications | Lab test certified ACCREDIA Certification CE |
| Effectiveness | Bactericidal Virucidal Anti Pollution Anti Odor |
| Sanitation system | Photocatalysis |

Prevention devices (ACCREDIA certified)

*Active biocide identified by ECHA, included in the list of approved active substances

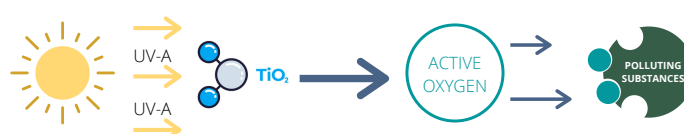
Product Warranty: **24 months**

For more information, contact your trusted dealer or consult the General Sales and Warranty Conditions available on the website www.retiar.com

HOW DOES PHOTOCATALYSIS WORK?

Photocatalysis is a **NATURAL** process in which a photocatalyst, through the action of light, modifies the speed of a chemical reaction, through an **oxidation and mineralization process**.

Consequently, organic substances such as viruses, bacteria, molds and inorganic ones such as fine dust, nitrogen oxides, NOx, VOC, air pollutants are transformed into **harmless compounds**.



Photocatalysis is a system that has been studied for decades in various public and private universities, as well as by the Italian Ministry of the Environment and Territory itself. In fact, its effectiveness as an anti-pollution, anti-viral and anti-bacterial system has been clear for many years.

The **effectiveness** of the photocatalytic system is **immediate**, all organic and non-organic compounds that come into contact with the photocatalytic surface are immediately oxidized and eliminated. This function applied by the device allows you to make the environment healthy in a **few minutes** thanks to the high air recirculation capacity.

Finally, a last interesting aspect is that **photocatalysts never lose their functional properties** with the passage of time, since they only act as activating agents of the oxidizing process; not binding with pollutants, they are always available for new photocatalysis cycles.

Today, photocatalysis allows us to improve the environment in which we live and at the same time be compatible with the needs and style of the modern world.

“Photocatalysis can provide an important contribution to solving the problem of indoor pollution”

- ITALIAN MINISTRY OF THE ENVIRONMENT -
AND THE PROTECTION OF THE TERRITORY AND THE SEA

Ecosan Task 70 device certifications

1. In the photocatalytic system used within the Ecosan Task 70 device, there is an active biocidal ingredient recognized by the European agency ECHA (**European Chemical Agency**) in compliance with Article 17, paragraph 5, of Regulation (EU) no. 1062/2014.

2. There is a study carried out by the **Italian Ministry of the Environment** regarding the effectiveness of photocatalysis: Ministerial Decree 13959 of 1 April 2004 Guidelines for the use of innovative systems in environmental impact assessments (Official Gazette no. 84 of 9 April 2004).
Photocatalysis works to reduce nitrogen oxides, NOx, VOC, bacteria and other air pollutants.

3. **The University of Florence** was able to determine in the tests conducted in its laboratories with a photocatalytic system similar to that present in the Ecosan Task 70 device, the reduction of the virological load in the following viruses:

- Influenza A virus (H1N1) 2009
- Single-stranded RNA genome virus
- Herpes simplex virus type 1 (HSV 1) virus with double-stranded DNA genome
- Adenovirus type 2 (AD2) virus with double-stranded DNA genome.

4. **The University of Turin** in accordance with UNI 11484 determined a significant reduction of 86% for NO and 60% of NOx, after 180 minutes from the activation of photocatalysis with a system similar to that used in the Task 70 device.

5. The device produced by Retiax srl is designed with a photocatalytic system tested by an **ACCREDIA** certified laboratory. It can be used effectively to treat the air in closed environments in the presence of people in terms of eliminating microorganisms, reducing pollutants and inactivating viruses and bacteria. The effectiveness has been recognized by the laboratory which has issued compliant documentation regarding the tests carried out and the results obtained.

6. **CE** certification regularly issued by a body recognized throughout Europe.



CERTIFICATE CHEMICAL MICROBIOLOGICAL ANALYSIS LABORATORY
ACCREDIA 0677

Test to verify the effectiveness of the Ecosan TASK 70 device

The tested device performs the sanitizing action continuously through the generation of oxidizing molecules, obtained by photocatalysis from the oxygen naturally present in the atmosphere. The molecules obtained are produced in low quantities and difficult to measure also due to their intrinsic chemical instability. The expected effect is obviously modest compared to a traditional sanitation system where biocide concentrations are much higher.

Observed the low dosage, sampling is expected with a modest reduction of microorganisms. Therefore the proposed solution is to repeat the measurement in order to obtain an average which has a lower variability in its mathematical characteristics, compared to the single determination, following the t-student distribution. The average obtained will be compared to the historical average recorded in the rooms available to our laboratory. In this way we could check the differences between untreated and treated smaller.

Test conditions similar to those of normal use

1. Local up to 70 m³
2. Device always on (24h / 24h - 7 days / 7 days)
3. Modest load of microorganisms present.

In the Lab1 and Lab4 rooms, the 2 devices turned on continuously for the verification time of 22 days were respectively positioned at the height of the worktop.

The tests carried out are:

Microorganisms at 30 ° C UNI EN ISO 4833-2: 2013 / EC1: 2014
Yeasts, Molds ISO 21527-1: 2008

The samplings were made with the exposure method (plating) for 15 minutes.

The device shows a significant reduction of the mycotic and microbial load. Perceptible effectiveness with reduction in non-quantifiable numerical terms. The observed effect is therefore compatible with a bacteriostatic effect. This result confirms what emerged from university tests endorsing the certification and effectiveness of the product.



LABORATORY COMMENT

The laboratory expected a MINIMUM reduction in mycotic and microbial loads:

- 1- Compared to traditional sanitation systems that contain HIGH concentrations of biocides, photocatalysis does not produce toxic molecules but oxidizes and mineralizes the microbial and fungal loads.
- 2- Consequently it is EXPECTED that the Retiax system will not have the same efficacy.

THE TEST

- 1- It is carried out inside environments where the composition of the air is constantly measured with a historical record of years.
- 2- Within these environments there is a MODEST presence of microorganisms, which are therefore difficult to kill.
- 3- Several tests are carried out to establish an average, thus lowering the margin of error on the results.

ANALYSIS AFTER THE TEST

- 1- The Retiax device shows a SIGNIFICANT REDUCTION of the mycotic and microbial load present in the environments, which we recall, were in low concentrations.
- 2- This means that the device is able to break down even low concentrations of microbial loads.
- 3- The tests performed and the results CONFIRM when already tested by the Italian Universities on the functionality of photocatalysis.

Why sanitize environments?

- Pollution is the main environmental risk factor
- In closed environments, pollution is 5 times higher
- 92% of the days we spend indoors in shared spaces
- We ingest 25 million particles with each breath
- Damage to health even at low concentrations
- Spread of lung diseases, damage to the respiratory system, bronchitis, cough
- Health hazard from pathogens

Why choose the Ecosan Task 70 device?

- *Certified and tested in recognized laboratories*
- *Built according to current regulations*
- *Protects the health and safety of people*
- *Guarantees clean and uncontaminated air in the treated rooms*
- *Prevents the spread of airborne diseases*
- *Removes dust and fine particles present in the air*

Effectiveness:

- Complete protection against viruses, bacteria, molds, fungi, pollutants and bad smells.
- Always usable even with people in the room
- Wide spectrum of action, reaches every area of the environment
- 70 m³ / h of air

Advantageous:

- Quick and easy installation
- Reduction of external sanitation interventions
- Low maintenance
- Low consumption

Eco friendly:

- It does not use chemical agents
- It does not pollute the environment
- Eco friendly, fully recyclable