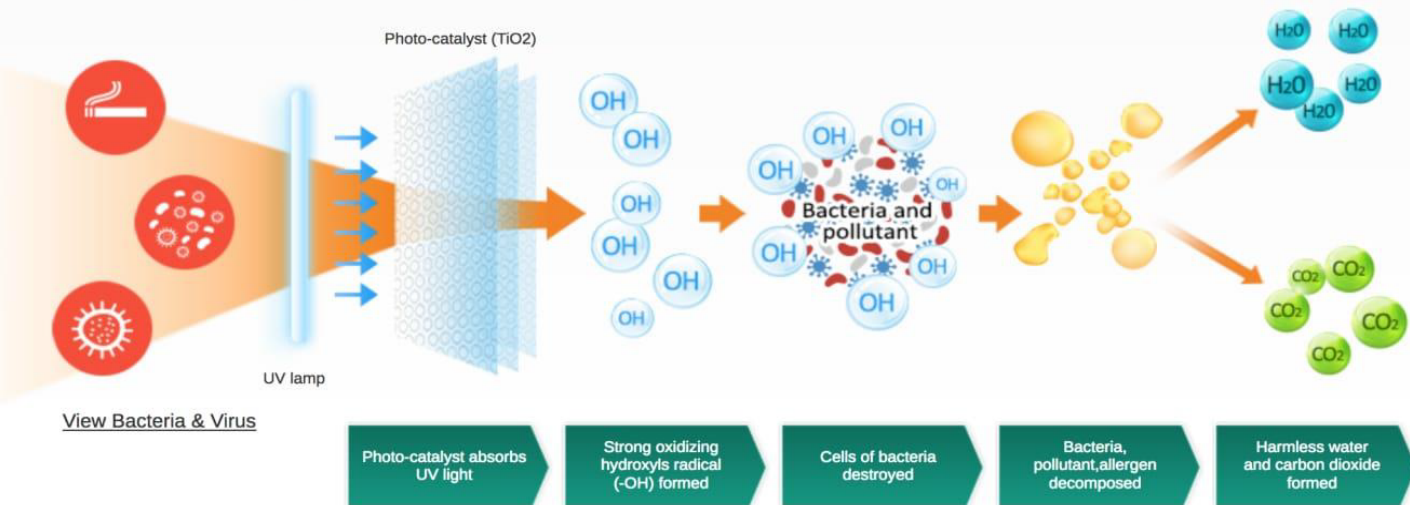


Technology explained

Principle of Photo-Catalytic Oxidation



Internal Technologies

- 1. Germicidal Irradiation** kills microorganisms by disrupting their DNA and removing their reproductive capabilities.
- 2. PCO – Photocatalytic Oxidation** UV reacts with our Catalyst (TiO₂) to form highly reactive but short lived oxidising Hydroxyl Radicals (OH) which break down Volatile Organic Compounds (VOCs).
- 3. Dual Waveband UV Technology** our UV lamps use two wavebands, 185nm and 254nm. These both generate Ozone (O₃) and create the “Plasma Quatro” which further reduces pollutants.

Transmitted Technologies – “Plasma Quatro”

- 4. Superoxide Ions** break down VOCs and electrically charge air contaminants as small as 0.001 microns, so they form clusters and fall from the air, aiding all other processes.
- 5. Targeted Ozone** produced via the specialist 185nm lamp, to eliminate bacteria, viruses, mold and fungi in the air and on exposed surfaces. Each lamp produces a specific amount of Ozone for the required environments disinfection.
- 6. Purified Air** the previously contaminated air is now clean and fresh spreading throughout the facility reducing contamination and improving the environment for all.

In September 2009 the Health Protection Agency’s laboratories at Porton Down performed efficacy testing of the Airsteril® Unit’s ability to reduce aerosol and surface microbial contamination.

The tests showed a reduction of airborne microorganisms of up to 98.11% within five minutes of exposure and a reduction of surface contamination up to 59.47% in one hour, the surface tests included MRSA (Golden Staph).

