

Sunview Integrated Solutions

Bus Applications Whitepaper

Our turnkey solutions for School, Transit, Coach and Shuttle Buses,
High Speed Rail and Commuter Trains, Subway Cars and Trolleys/Cable Cars

The Public Transportation Landscape

Throughout their respective day, a significant percentage of the population relies upon public transportation, in its various forms, to move between the places they live, work, learn, eat, play, gather and stay.

Be it via fleets of buses of the school, transit, coach and shuttle variety or high-speed rail, commuter trains, subway cars and cable/trolley cars, it is essential that people feel confident enough to travel in a shared public environment, where their health and safety have been protected to the highest degree possible.

Secondarily, beyond the related public health issues, the pandemic has also proven that when the masses lack confidence in taking public transportation, the economy suffers, as both the general workforce and consumers will logically avoid the process of traveling via public transit altogether.

Current Circumstances and the Need for a Constantly Applied and Consistently Effective Air Purification Solution

Science has determined that COVID-19 and its ever-evolving variants are likely here to stay at some significant level and through their prevalence over the past 2+ years, we have learned hard lessons regarding the dangers of being amongst others, in confined spaces that are devoid of purified air.

This is especially true in public transportation vehicles, where it is nearly impossible to 'stay 6' apart', especially during peak travel times.

Science has also determined that 90%+ of the contagion we are susceptible to is airborne, including causative pathogens like COVID-19, meaning that they are transmitted from person-to-person when they breathe, speak, cough and sneeze.

For the health and safety of society at large, this fact is especially concerning, as transit riders will inherently carry any pathogen that has infected them back to their families and friends, including those in their circle that are the most susceptible and at the highest level of risk - the ill and the elderly.

Further, it is a fact that the air found in and around public transportation vehicles has always contained harmful elements, including various bacteria, mold and ozone, along with the noxious gases emitted by both exhaust fumes and the materials used on the buses themselves (the seat surfaces, for example).

Mold has also long been an issue in buses operating in places where high humidity levels are prevalent, thereby requiring constant monitoring and remediation through the diligent cleaning of the affected surfaces.

Another key lesson learned during the pandemic is that assigning human staffers to clean surfaces by hand using disinfectant spray and wipes is detrimental in a number of ways. Specifically, the process puts them in harm's way while they work to complete the process, the liquid solutions used are often corrosive and caustic, plus human error becomes a factor, as the fatigue and tedium experienced during the never-ending cycle of cleaning ultimately affects their level of thoroughness.

Public transportation vehicles are also an environment where malodors are a constant, as the fuels that power them are by nature pungent and make some people feel ill upon exposure.

Sunview Integrated Solutions is proud to offer the most comprehensive line of Plasma Ionization-based Air Purification devices available anywhere, for public transportation vehicles of all kinds



SIS-100-BC
Ceiling Mounted

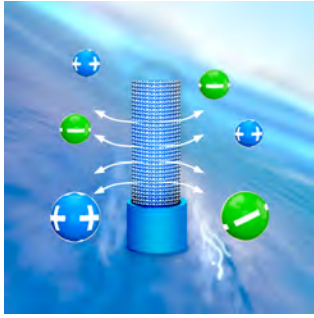


AirScene™ 100
Wall Mounted

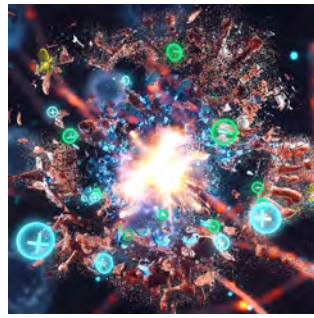


AirFrame™ 100
Wall or Ceiling Mounted

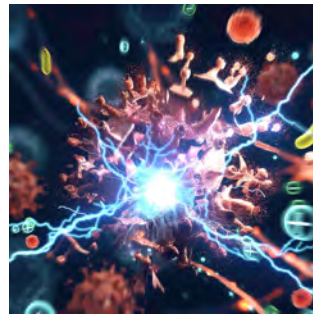
The Plasma Ionization-based Air Purification Process



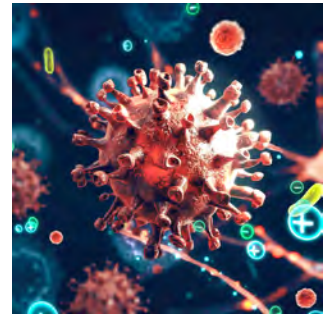
Step One



Step Two



Step Three



Step Four

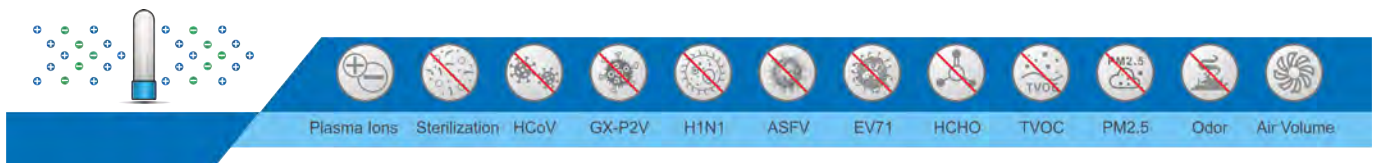
Step One: Plasma tubes produce large amounts of positive and negative ions

Step Two: Charged ion clusters actively attack the ambient pathogens and harmful particulate

Step Three: The destruction of their cell membranes, DNA and proteins begins

Step Four: The completed process results in the deactivation and eradication of the ambient pathogens and harmful particulate

What our Plasma Ionization-based Air Purification systems eliminate



The compliance standards that our systems meet



**Government Funding - The CSBP: an ambitious and forward-thinking initiative,
for the long term, not the near term**

Through the American Rescue Plan of 2021 (ARP), the \$5 Billion Clean School Bus Program (CSBP) has been established by the EPA (Environmental Protection Agency), to switch school buses from diesel and gas to a variety of alternate sources, including propane, CNG (compressed natural gas) and LNG (liquid natural gas), along with the top choices, in the form of the logically preferred electricity (EV) and hydrogen-powered vehicles, all by the end of 2026.

Most unfortunately, our Plasma Ionization-based Air Purification solutions are not eligible for these funds, so while the CSBP initiative is tremendously commendable from both a human health and climate change mitigation standpoint, what we are left with is a significantly long switch-over period, until such time that the majority of the school bus fleets on the road are powered by more healthful energy options.

As a result and in the meantime, our student riders, bus drivers and bus attendants will remain vulnerable to the prevailing risks of exposure to the causative pathogens (including COVID-19) and noxious diesel and gas fumes that currently surround them, throughout their daily commute to and from school, pre-school, day care and summer camp.

Beyond school buses, this extended time frame to convert the majority of public transportation vehicles of all kinds to more healthful fuel sources is equally problematic and again begs the question – why not eliminate the human exposure to this toxic air as soon as possible?

**To learn more about how Sunview Integrated Solutions creates
more healthful public transportation environments today,
please contact us at the coordinates below.**



For more information regarding our comprehensive line of products,

please visit www.sunviewintegratedsolutions.com

or contact us by Phone: 1-800-711-9582 or Email: info@sunviewintegratedsolutions.com