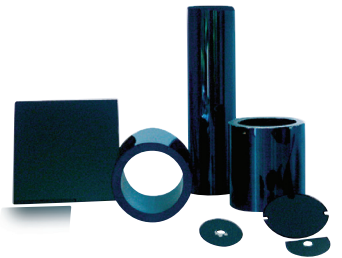


**Resistive Glass Products**

ATTRACT  
EVERY  
MOLECULE



# Capture Every Ion

Photonis Resistive Glass technology creates uniform electric fields that direct or guide charged particles within a rigid glass structure. The patented process creates an integral semi-conductive layer which can be manufactured into capillary inlet tubes, monolithic reflectron lenses, collision cells or drift tubes to preferentially attract either positive or negative ions. With Photonis' Resistive Glass technology, you'll be the first to identify every molecule.



## Capillary Inlet Tubes

Capillary inlet tubes made from Resistive Glass can improve ion transmission up to 100x when compared to traditional quartz inlet tubes. Ion loss due to ion collision is also reduced. Multi-capillary inlet tubes provide 6 inlet channels within a single standard tube size for an increase in ion throughput up to 1000x.

## Collision Cells and Ion Guides

Monolithic Resistive Glass assemblies can be custom manufactured into collision cells and ion guides, with significantly simpler construction than traditional metal components. Non-linear and dynamic electric fields can be applied, making more ions available for analysis.

## Reflectron Lenses

Resistive Glass can be made into single piece reflectron lenses, simplifying cleaning and maintenance when compared to a multi-piece stacked ring reflectron while providing equal or better performance. These monolithic lenses eliminate the need for voltage dividers, and can be custom manufactured to produce non-linear and dynamic electric fields for better performance.

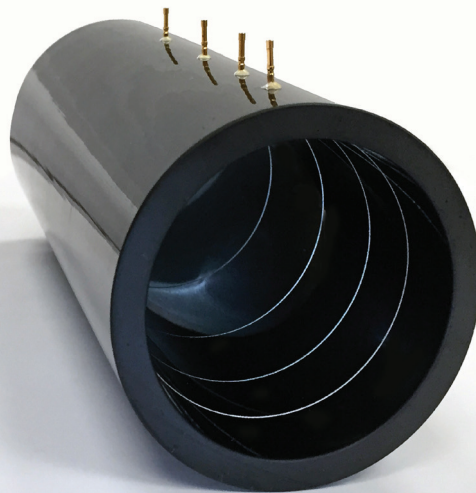
## Drift Tubes

Drift Tubes made from Resistive Glass are a single piece, solid tube design that improves ion transmission and contains counter-flow gas, eliminating the need for an additional enclosure.



## Improved Performance

Photonis Resistive Glass is proven to collect more ions when compared to traditional components commonly used in mass spectrometers or other analytical instruments. Resistive Glass products are easily cleaned with common solutions without degrading performance. Many Resistive Glass products simplify machine design by eliminating additional components. Resistive Glass is available in a wide variety of shapes and sizes for a wide range of ion throughput applications.



### Time of Flight Mass Spectrometry

Reflectron tubes made from Resistive Glass provide a single piece replacement for complex, multi-piece stacked ring assemblies. The single piece tube provides nearly identical performance in orthogonal TOF systems, with significantly less maintenance.



### Atmospheric Pressure Ionization

Capillary inlet tubes made from Resistive Glass improve ion transmission into the mass spectrometer. Voltages applied across the tube create an electric field that attracts and draws 10x more ions into the instrument. Multi-capillary tubes can increase ion input up to 1000x.



### Ion Mobility Spectroscopy

Drift tubes made from Resistive Glass have demonstrated an improvement in ion transmission when compared to traditional drift tubes. The tubes are easily removed and cleaned with common solutions without damage or degradation in performance, and the single piece construction eliminates the need for containment of counter-flow gas.



# PHOTONIS

Scientific Detectors

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