

**ATLAS**  
**UVC** TEST™

UVC EXPOSURE TESTING  
INSTRUMENT



Pioneering instrument to test  
durability of materials to UVC radiation

# ATLAS UVCTEST - UVC EXPOSURE TESTING



The Atlas UVCTest is designed to test the durability of materials exposed to UVC radiation (centered at 254nm) that is becoming more and more popular as a means to sterilize surfaces. This instrument is based on the popular UVTest fluorescent/UV platform, with special modifications made for safety and reliability. The UVCTest is another innovative offering following Atlas' tradition and over 100 years of expertise.

## A2LA Accredited

Atlas calibration services are accredited by A2LA to meet ISO 17025 requirements. This includes xenon lamp and UVCTest irradiance calibrations performed in our Chicago-based calibration laboratory using state-of-the-art irradiance measurement equipment, as well as on-site calibrations for both Atlas and competitors' weathering instruments by our experienced, factory-trained Technical Service staff. For more information please visit our website [www.atlas-mts.com](http://www.atlas-mts.com).

## Easy to use:

- Simple touch screen operation and control
  - Pre-programmed tests for error-free operation
  - Trendplot, alarm messages and maintenance schedule displayed
  - All critical parameters displayed on one screen
  - User interface available in several languages including English, Chinese, Korean, French, German, Spanish and Portuguese
- Automatic restart after a power interruption
- Easy to change lamps
- Advanced calibration technology
- Plug-and-play; little maintenance required



## Additional features:

- DAQ via Ethernet connection
- Pt1000 RTD used with BPT for more accurate temperature measurement
- Best-in-class, consistent distribution of irradiance and temperature
- New irradiance levels will be forthcoming
- State-of-the-art optical and temperature sensor technology for improved accuracy
- Air heater
- Special safety features to protect against UVC light leaks
- Access ports allow for irradiance calibration without bypassing the door safety interlock switch when the lights are on, reducing the user's risk of exposure to harmful UV radiation
- Adjustable height casters and integrated bubble level
- Stackable frames for increased capacity with a lower overall footprint
- Special backer boxes available for small 3-dimensional samples



## Basics of UV Radiation

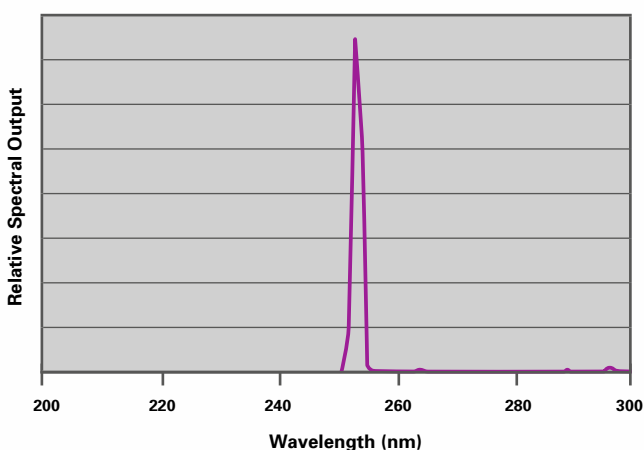
The UV range of the electromagnetic spectrum contains three types of UV. The UVA (between 315-400nm) and UVB (280-315nm) are the ranges of ultraviolet radiation reaching the Earth's surface from sunlight. The recognized "cut-on" wavelength is 295nm. Atlas has historically offered light sources that closely match this radiation with either xenon-arc or fluorescent UV. Researchers develop additives and formulations to protect materials from natural sunlight.

UVC radiation (200-280nm) does not reach the earth's surface, but sterilization devices, using a light source centered at 254nm are becoming more and more popular, and the applications for their use are increasing considerably. **Those additives and formulations protecting polymers and coatings from sunlight may not be designed to protect materials from this shorter wavelength radiation.**

## UVC Lamps

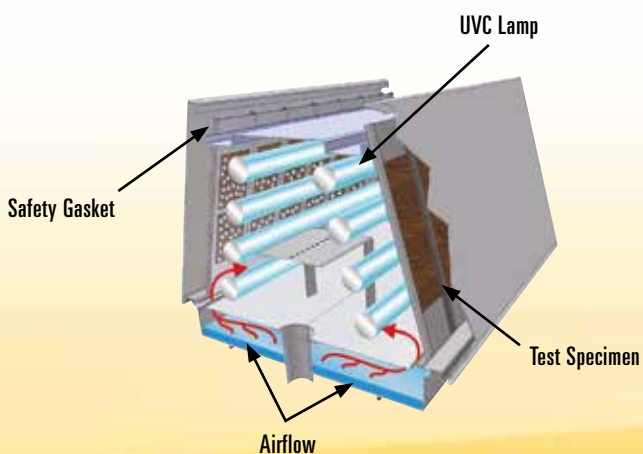
Specially designed UVC lamps have an output that peaks at 254nm, matching the typical spectrum of UVC sterilization devices.

Spectral Output of UVC Lamp



## Chamber Diagram

Specimens are mounted parallel to a bank of specially designed UVC bulbs to maximize irradiance and temperature uniformity.



## WXView II Data Acquisition Software\*

WXView II is a remote monitoring and DAQ application, providing an overview of all the UVCTest instruments on your network, their status, the status of any active tests and sensor readings. This data is displayed in both tabular and graphical formats and is written to a database, allowing simple retrieval in the future.

\* Coming soon

## Atlas UVCTest Applications

Electronic devices



Bus and other public transportation interiors



Airplane cabins



Automotive interiors



Retail, hotel, and other public spaces



Hospital rooms

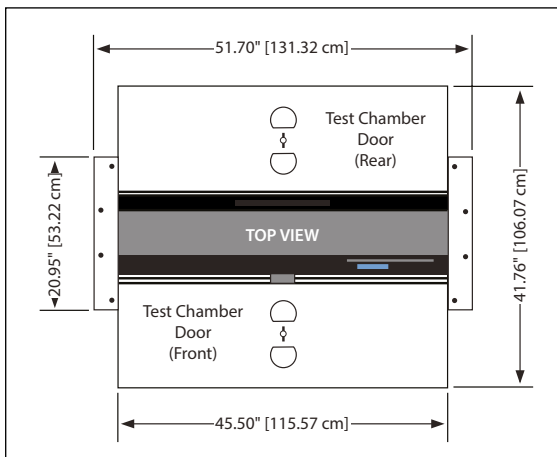


## UVCTest Features

Fluorescent UVC Lamps (8)	40 W UVC 254
Black Panel Temperature (BPT) Control	●
Door Safety and Over-temperature Shutoff	●
CE Compliance and UL & CSA Certified	●
Specimen Holders	●
Touch Screen Display	●
Irradiance Calibration Safety Access Ports	●
Ergonomically Designed Specimen Retaining Rings	●
Irradiance Control (254 nm)	●
Stacking Kit	■
Specially Designed Backer Boxes	■
Hand-held Irradiance Calibrator	■
Data Acquisition Program via Ethernet	■

● Standard ■ Optional

## UVCTest Dimensions



Atlas offers more than testing instruments. From technical advice to final test method implementation, Atlas provides the support that you need when determining the right weathering testing solution for your products.

For more information, please contact your local Atlas sales office or visit us at [www.atlas-mts.com](http://www.atlas-mts.com).

## UVCTest Specifications

<b>Irradiance Uniformity</b>	4% across sample faces
<b>Irradiance Ratings</b>	Minimum: 2.0 mW/cm <sup>2</sup> at 254nm Maximum: 7.0 mW/cm <sup>2</sup> at 254nm
<b>Black Panel Temperature Range</b>	UV Phase – BPT 35-80 °C (95-176 °F)
<b>Specimen Capacity</b>	48 specimens + BPT in 24 specimen holders
<b>Electrical</b>	120 VAC (± 10%), 1 Ph., 2 Wire (1/N/PE), 50/60 Hz, 12 A 230 VAC (± 10 %), 1ph., 2 Wire (1/N/PE or 2/PE), 50/60 Hz, 8A

## More UVC Sterilization Applications

From medical devices in hospital rooms to textiles used in face coverings to the surfaces of electronic devices, UVC sterilization is more prevalent than ever before.

Make sure your materials will withstand that high energy UVC germicidal radiation with the Atlas UVCTest!

