

# UVTEST

FLUORESCENT  
UV INSTRUMENT



Best-in-class for consistent  
distribution of irradiance and temperature

# ATLAS UVTEST - FLUORESCENT/UV INSTRUMENT



The Atlas UVTest is designed for economical weathering testing with the sophistication of Atlas' 90 years of weathering expertise. Innovative design features improve test reproducibility and lower operating costs while testing a variety of materials for their reaction to UV, temperature and moisture.

## A2LA Accredited

Atlas calibration services are accredited by A2LA to meet ISO 17025 requirements. This includes xenon lamp and UVTest 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 color 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 .....



## Cost effective:

- Unmatched lamp life to price ratio
- Plug-and-play; little maintenance required



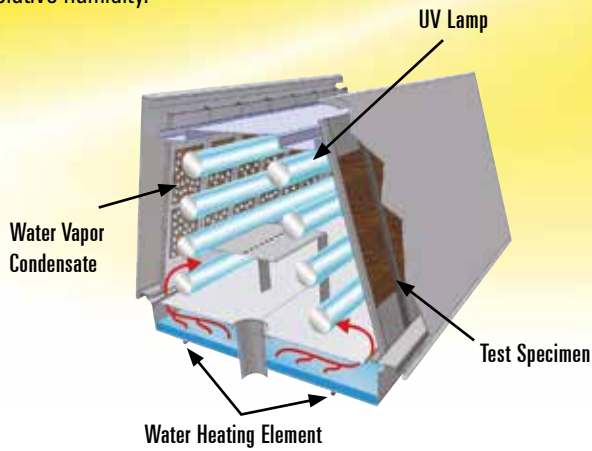
## Additional features:

- DAQ via Ethernet connection
- Pt1000 RTD used with BPT for more accurate temperature measurement
- Best-in-class, consistent distribution of irradiance and temperature
- High maximum irradiance levels of  $>1.80 \text{ W/m}^2$  (UVA) and  $>1.70 \text{ W/m}^2$  (UVB)
- State-of-the-art optical and temperature sensor technology for improved accuracy
- Air heater protection from splash water to avoid burnout
- Frame-integrated float switch and viewing window to protect against accidental damage
- Patented 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
- Recirculating spray water option
- Different spray nozzles available
- Stackable frames for increased capacity with a lower overall footprint .....
  - Specially designed drip guards provide added protection for the lower unit in accordance with international safety codes
- Spray option available



## Chamber Diagram

To produce condensation, a heated reservoir in the bottom of the test chamber produces water vapor that rises to the upper chamber where specimens will be exposed to UV radiation and uniform wetting at 100% relative humidity.



## Deionized (DI) Water Recirculation System

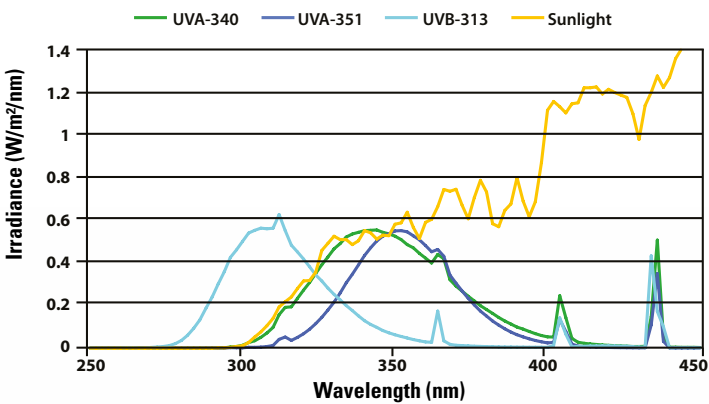
Optional system allows DI water to be recirculated for re-use during testing. This helps laboratories reduce water consumption; especially critical when adequate DI water supply is not available. The system has a 53 liter storage tank, deionized water filter and a pressure activated pump. It fits conveniently on the bottom shelf of the standard UVTest, requiring no additional floor space.



## UVA/UVB Lamps

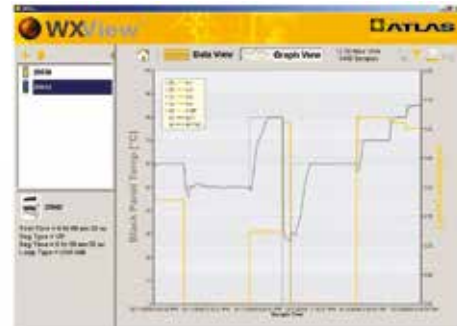
Three types of fluorescent UV lamps are available for the UVTest – UVA 340 nm, UVA 351 nm and UVB 313 nm. Atlas can help you determine which light source is the most suitable for your material test specification.

Atlas UV Lamps Compared to Sunlight  
(Control Wavelength Normalized at 0.55 W/m<sup>2</sup>)



## WXView Data Acquisition Software

WXView is a remote monitoring and DAQ application, providing an overview of all the UVTest 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.



## The Atlas UVTest vs. Competition

Feature	Atlas	Competition*
<b>Calibration Safety</b>	Patented Calibration Ports	Must bypass safety switch during calibration process
<b>BPT Temperature Sensor</b>	More accurate Class A Pt1000 RTD Sensor	Less accurate I.C. temperature sensor
<b>User Interface Platform</b>	Single, intuitive touchscreen	Two separate touchscreens
<b>Languages available</b>		8 languages
<b>UV Bulbs</b>	All Atlas UV bulbs have extended life	Separate bulb types for standard or extended life
<b>High Irradiance Lifetimes</b>	2500 Hours (UVA-340 @ 1.55 W/m <sup>2</sup> ) - All UVA-340 bulbs	1500 Hours (UVA-340 @ 1.55 W/m <sup>2</sup> ) - Extended life bulbs only
<b>Maximum Irradiance (UVA-340)</b>	1.80 W/m <sup>2</sup>	1.70 W/m <sup>2</sup>
<b>Stackability with spray option</b>	Yes	No

\* Competitive information based on Q-Lab website as of the publication date of this brochure (June 2021)

## UVTest Features

Fluorescent UV Lamps (8)	40 W UVA 340, UVB 313, UVA 351
Extended lifetime of bulbs	●
Black Panel Temperature (BPT) Control	●
Door Safety and Over-temperature Shutoff	●
CE Compliance and UL & CSA Certified	●
Specimen Holders	●
Color Touch Screen Display	●
Irradiance Calibration Safety Access Ports	●
Ergonomically Designed Specimen Retaining Rings	●
Recirculating Spray Water	■
Irradiance Control (340 nm, 313 nm, 351 nm)	■
Stacking Kit	■
Specimen Spray Nozzles (12)	■
Hand-held Irradiance Calibrator	■
Data Acquisition Program via Ethernet	■

● Standard ■ Optional

## UVTest Standards

ASTM	D4329	Plastics
	D4587	Coatings
	D4799	Roofing
	D5208	Photodegradable Plastics
	G151	Nonmetallic Materials
EN	G154	General Testing
	927-6	Wood Coatings
	1297	Roofing
	1898	FIBC
	12224	Technical Textiles
ISO	13523-10	Coil Coatings
	4892-1	Plastics
	4892-3	Plastics
	11507	Coatings
	21898	FIBC
SAE	11997-2	Cyclic UV/Corrosion Tests
	J2020	Automotive Exterior
	16474-3	Coatings
prEN	1062-4	Exterior Masonry Coatings

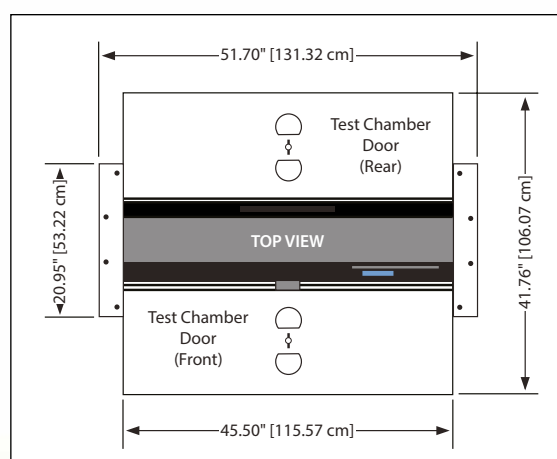
This is a sample of global standards that can be met by this instrument. For more information on additional or specific standards, contact your local Atlas representative. Standards are subject to change without notice.

## UVTest Specifications

<b>Irradiance Uniformity:</b>	4% across sample face
<b>Irradiance Ratings:</b>	Typical: 0.89 W/m <sup>2</sup> (UVA), 0.71 W/m <sup>2</sup> (UVB) Maximum: 1.80 W/m <sup>2</sup> (UVA), 1.70 W/m <sup>2</sup> (UVB)
<b>Black Panel Temperature Range:</b>	UV Phase – BPT 35-80 °C (95-176 °F) Condensation Phase – BPT 35-60 °C (95-140 °F)
<b>Specimen Capacity:</b>	48 specimens + BPT in 24 specimen holders
<b>Weight:</b>	140 kg (310 lb) approximately, depending on options ordered
<b>Electrical:</b>	120 VAC (± 10%), 1 Ph., 2 Wire (1/N/PE), 50/60 Hz, 12A 230 VAC (± 10%), 1 Ph., 2 Wire (1/N/PE or 2/PE), 50/60 Hz, 8A
<b>Water for Spray:</b>	Pressure: 25-40 psi (1.7-2.7 bar) Purity: <1 ppm dissolved solids Silica: <0.1 ppm Conductivity: <5µS/cm or 200 kOhm Or refer to your test method
<b>Water for Condensation:</b>	Pressure: 2-60 psi (0.1-4.1 bar) Purity: Deionized water is recommended, but not required. Less pure water or tap water usage will leave undesirable mineral deposits in the water pan and will require frequent cleaning.

NOTE: The optional spray system water flow rate is non-adjustable and is automatically controlled (limited) by an in-line restricting device at the flow rate indicated above. The maximum flow rate is maintained over an input pressure range of 193 to 345 kPa (28 to 50 psi).

Deionized water requirement only for instruments with spray option.



Atlas Material Testing Technology LLC  
(p) +1.773.327.4520  
(f) +1.773.327.5787

Atlas Material Testing Technology GmbH  
(p) +49.6051.707.140  
(f) +49.6051.707.149

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