

**ATLAS**  
**UV**TEST  
Fluorescent/UV Instrument



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

Experience. The Atlas Difference.



# ATLAS UVTEST

## FLUORESCENT/UV INSTRUMENT

### Easy to use:

- Simple touch screen operation and control
  - Pre-programmed tests for error free operation
  - All critical parameters displayed on one screen
  - Trendplot, alarm messages and maintenance schedule displayed
- Automatic restart after a power interruption
- Easy to change lamps
- Advanced calibration technology



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 contact [info@atlas-mts.com](mailto:info@atlas-mts.com).

### Cost effective:

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



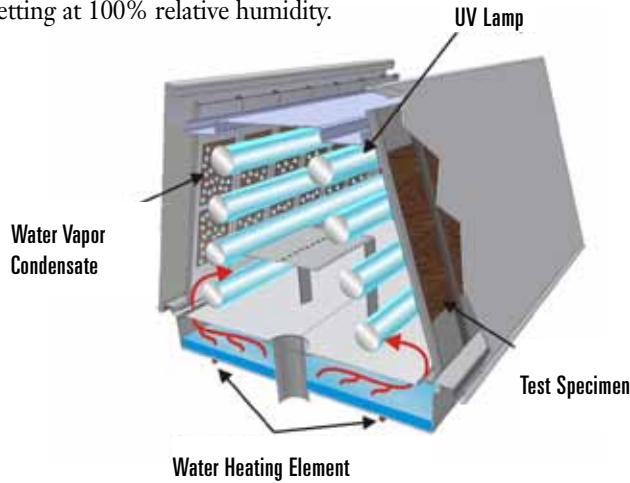
### Additional features:

- 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 >1.55 W/m<sup>2</sup> (UVA) and >1.23 W/m<sup>2</sup> (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
- Adjustable height casters and integrated bubble level
- Re-circulating spray water option
- Different spray nozzles available
- Stackable frames for increased capacity with a lower overall footprint – spray option available



## Chamber Diagram

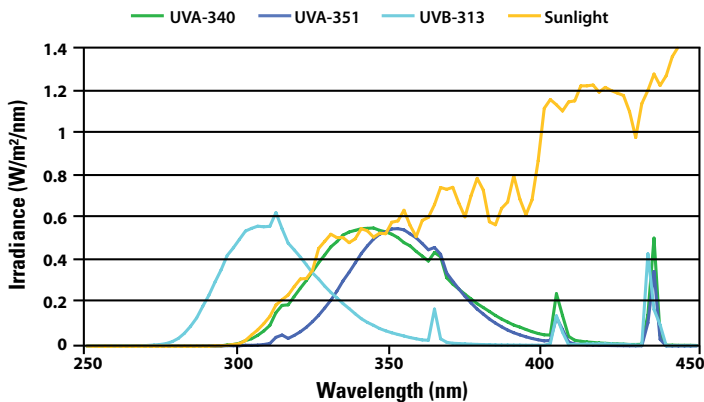
To produce condensation, a heated reservoir in the bottom of the test chamber produces water vapor that rises to the upper chamber where specimens will be exposed to UV radiation and uniform wetting at 100% relative humidity.



## 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>)



## Common Applications

Paints, Coatings  
and Pigments



Wood Coatings

Automotive  
Exteriors



Plastics

Photovoltaics



## Other Applications:

Adhesives  
Geotextiles  
Textiles

## The Atlas® UVTest™ vs. Competition

FEATURE	UVTest	Competition
Stackability with Spray Option	Yes	No
Calibration Safety	Calibration ports	Must bypass safety switch during calibration process
Calibration of UVA-351 lamps	Yes, direct at 350 nm	No, uses conversion factor from 340 nm
Recirculating Spray	Yes (optional)	No
Spray with Lights On	Yes	Requires special User Function code
BPT Temperature Sensor	More accurate Class A Pt1000 RTD Sensor	Less accurate I.C. temperature sensor
User Interface Platform	Fully functional touch screen	Keypad with numeric displays
Languages Available	English, French, German and Spanish	English only
Trend Plot of Test Parameters	Yes	No



## UVTest™ Features

Fluorescent UV lamps (8)	40 W UVA 340, UVB 313, UVA 351
Black Panel Temperature (BPT) Control	●
Door safety and over-temperature shutoff	●
CE compliance and UL & CSA certified	●
Specimen Holders	●
Touch screen display	●
Recirculating spray water	■
Irradiance control (340 nm, 313 nm, 351 nm)	■
Stacking kit	■
(12) specimen spray nozzles	■
Hand-held irradiance calibrator	■
Data acquisition program via Ethernet	■
Customer-specified spray nozzles	■

● Standard ■ Optional

## UVTest Standards

ASTM	G151	Nonmetallic Materials
	G154	General Testing
	D4329	Plastics
EN	927-6	Wood Coatings
	1297	Roofing
	1898	FIBC
	12224	Technical Textiles
	13523-10	Coil Coatings
ISO	11507	Coatings
	11895	FIBC
	11997-2	Cyclic UV/Corrosion Tests
	4892-1	Plastics
	4892-3	Plastics
SAE	J2020	Automotive Exterior

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>	Minimum: 0.35 W/m <sup>2</sup> (UVA, UVB) Maximum: 1.55 W/m <sup>2</sup> (UVA), 1.23 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: 25-60 psi 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 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.

