

## Wavelength Calibration Light Source

# ATG1500

### Feature:

1. Life: >3000 hours
2. Low power, only 3 watts;
3. Size: 105mm x 75mm x 40mm;
4. Wavelength range: 253~1700nm;
5. SMA905 interface or PC/FC interface output;
6. Power Supply: 12V 2A DC

### Application:

Wavelength calibration for UV-NIR spectrometers

### Description:

Spectrometer wavelength calibration sources are available for convenient, reliable spectrometer calibration across UV-NIR wavelengths.

It can be used in various optical fiber interface type spectral analysis instruments for wavelength calibration;

It produces low-pressure mercury and argon atomic emission lines in the wavelength range 253-1700nm. For quick and reliable calibration of spectral analysis instruments!

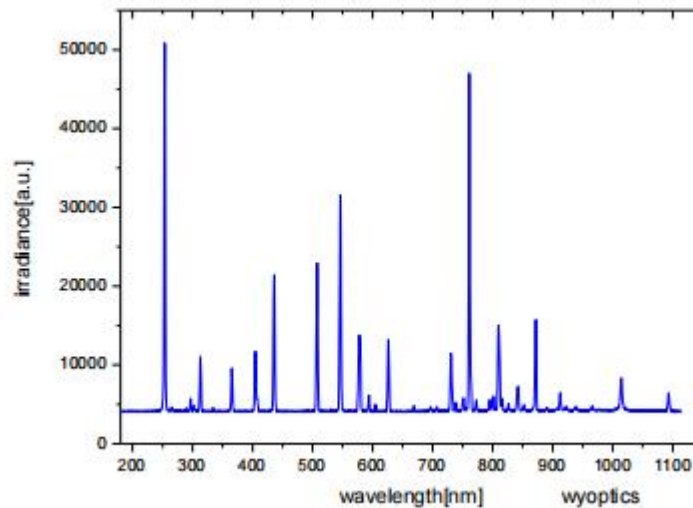


ATHG150

## 1. Specifications:

Wavelength Range:	253-1700nm
Sources:	Mercury Argon
Life	>3000 hours
Amplitude Stabilization:	~1 minute
Fiber Connector:	SMA 905
Aperture:	3mm
Dimensions:	10.5 x 7.5 x 4 cm (without feet)
Power:	3W
Power Supply:	12V 2A DC
Weight:	180g

## 2. Spectral graph:



## 3. Wavelength of mercury emission line (nm):

253.652 404.656

296.728 407.783\*

302.150 435.833

313.155 546.074\*\*

334.148 576.960

365.015 579.066

\*This spectral line is indistinguishable from spectrometer configurations with 300 or 600 lines/mm gratings.

\*\*Spectrometer, 1200-, 1800-, 2400- or 3600 lines/mm grating, spectral lines will be clearly displayed at 576.96 nm and 579.07 nm.

#### **4. Argon emission line wavelength (nm):**

696.543 800.616\*

706.722 811.531

714.704 826.452

727.294 842.465

738.398 852.144

750.387 866.794

763.511 912.297

772.376 922.450

794.818

It gives all the characteristic spectral lines of mercury and argon from 253 nm to 922 nm.

The main spectral lines and structures including their relative intensities are attached to the surface of the light source

superior. Through the standard SMA905 or FC/PC connector, the light source can be quickly connected to the optical fiber, so the optical fiber spectrometer can be easily tested.

Long calibration. In addition, there are wavelength-calibrated light sources suitable for other wavelength bands, such as Neon Lamp NE-1 (340-1100nm) and Argon Lamp (600-1704nm).

## 5. Calibration light source characteristic curve value (150~1100nm range):

	100	200	300	400	500	600	700	800	900 - 1100
<b>MERCURY</b>	184.950 194.227	226.223 237.832 248.200 253.652* 265.204 280.346 289.360 296.728	302.15 312.567 313.155 313.184 334.148 365.016* 365.484 366.328	404.656 407.784 433.922 (vw) 434.7506 (vw) 435.833*	507.304* (2 x 253.65) 546.075* 576.961 579.067	625.14 (2 x 312.57) 626.37 (2 x 313.184)	730.03 (2 x 365.016) 760.95 (3 x 253.65)	871.66 (2 x 435.833)	1013.975* 1014.61 (4 x 253.65)
<b>ARGON</b>				404.442 415.859* 416.418 418.188 419.103 420.067* 425.936 427.217 430.010 433.356		696.543*	706.722 727.294 738.398 750.387* 751.465 763.511* 772.376 794.818	800.616 801.479 810.369 811.531* 826.452 840.821 842.465 852.144 866.794	912.297* 922.450 965.779 978.450 1047.005 1067.3565
<b>NEON</b>			336.99 341.790 344.770 346.658 347.257 352.047* 359.353		533.078 534.109 540.056 585.249* 588.190 594.483 597.553	603.000 607.434 609.616* 614.306* 616.359 621.728 626.650 630.479 633.443 638.299* 640.225* 650.653* 653.288 659.895 667.828* 671.704 692.947	702.405 703.241* 705.911 717.394 724.517* 747.244 748.887 753.577 754.404 783.906 794.318	808.246 811.855 813.641 825.938 826.608 830.033 836.575 837.761* 849.536 863.465 865.438 878.062 878.375 885.387	920.176 1056.241 1079.804 1084.448*