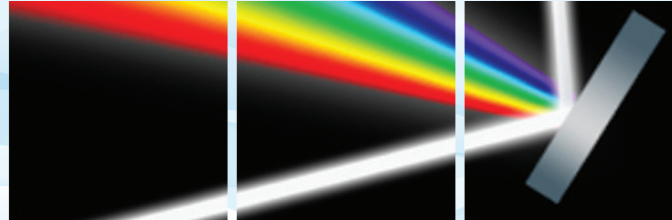


## Tunable PowerArc™

Tunable High Intensity Light Source

ELEMENTAL ANALYSIS
FLUORESCENCE
GRATINGS & OEM SPECTROMETERS
OPTICAL COMPONENTS
FORENSICS
PARTICLE CHARACTERIZATION
RAMAN
SPECTROSCOPIC ELLIPSOMETRY
SPR IMAGING

The power of a mW laser with the continuous tunability of a monochromator!



### Are you looking for:

- ✓ High intensity CW laser that is tunable from 250 to 1,000 nm?
- ✓ Delivers milliwatts of energy?
- ✓ Portable and simple to operate?

If this sounds like the light source you need, then OBB has the answer. The Tunable PowerArc™ Illuminator provides all of these benefits, it just isn't a laser...

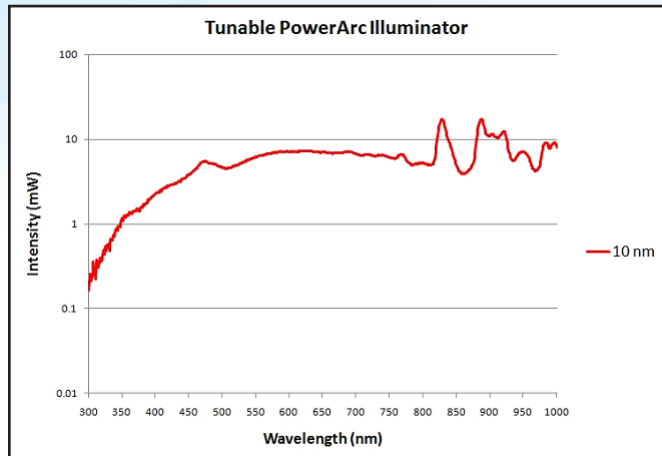
### Features and Benefits

- Continuously tunable from 180 nm to 2.2 microns
- Continuously adjustable bandpass from 0 to 25 nm
- Milliwatts of optical power
- Push button start and manual or USB wavelength tunability
- No ozone venting required
- Easy to use
- Compact and portable

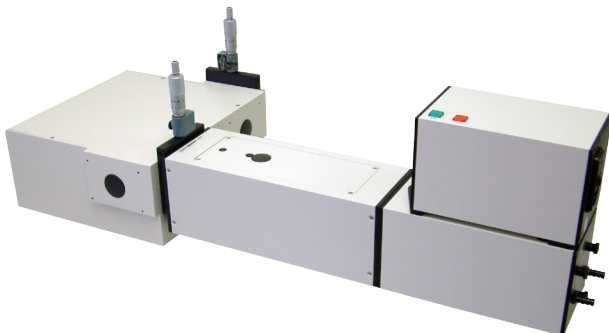
### Applications

Applications for the Tunable PowerArc™ Illuminator cover a broad range of scientific, OEM and research applications. Tunable illuminators are used for a broad range of applications almost as diverse as the wavelength range across which they emit.

- Detector calibration
- Photochemistry
- Photo-activation
- Photobiology
- Photovoltaics
- Solar simulators
- Spectroscopy
- Optical teaching labs
- Dermatology



Output curve for Tunable PowerArc™ Illuminator equipped with 75 W Xe arc lamp and monochromator with 1200 l/mm 500 nm blaze grating.



These illuminators are the light sources of choice for a variety of spectroscopy systems, such as:

- Fluorometers
- UV-Vis spectrometers
- CD spectrometers
- Stopped-flow spectrometers
- Tunable illuminators

## Specifications

Optical Specifications		
<b>Optical power</b>	Up to 20 mW (grating, bandpass & wavelength dependent)	
<b>Spot size at slit exit</b>	5 to 10 mm (lamp and slit dependent)	
<b>Diverging beam angle (full)</b>	14.5 degrees	
<b>Numerical aperture (N.A.)</b>	0.12	
<b>Optical noise</b>	0.07% RMS	
<b>Optical stability</b>	0.2%	
Power Supply Specifications		
	75 Watt Switch Mode Power Supply	75 to 150 Watt Universal Power Supply
<b>Input (user selectable)</b>	90–274 V AC, 50–60 Hz	105–120 V/60 Hz or 210–240 V/50 Hz
<b>Power rating</b>	50 to 100 watts	0 to 150 watts
<b>Operating voltage</b>	10 to 25 volts	10 to 24 volts
<b>Operating current</b>	3 to 7 amps	0 to 8 amps
<b>Pre-ignition voltage</b>	65–75 V DC	> 85 volts
<b>Ripple at max current</b>	< 3% peak to peak	< 10 millivolts
<b>Stability after warm-up</b>	0.5%	0.2%
<b>Line voltage regulation</b>	< 0.5% current variation for 5 volts line change	0.1% current variation for 5 volts line change
Monochromator Specifications (using standard 1200 line/mm ruled grating)		
<b>Focal length</b>	200 mm	
<b>Aperture ratio</b>	F/4 (calculated using grating width)	
<b>Wavelength range</b>	180 nm to 2.2 microns (grating dependent)	
<b>Bandpass</b>	Continuously adjustable from 0 to 25 nm	
<b>Reciprocal linear dispersion</b>	4 nm/mm	
<b>Resolution</b>	0.25 nm	
<b>Scattered light</b>	0.02% two bandwidths from 365 nm Hg line	
<b>Accuracy</b>	+/- 0.25 nm (using motorizing option under computer control)	
<b>Reproducibility</b>	+/- 0.25 nm	
<b>Grating size</b>	50 x 50 mm	



**OPTICAL BUILDING BLOCKS**



**HORIBA**  
Scientific

[contact@OBB1.com](mailto:contact@OBB1.com)

**USA:** +1 732 494 8660  
**UK:** +44 (0)20 8204 8142  
**China:** +86 (0)21 6289 6060

**France:** +33 (0)1 69 74 72 00  
**Italy:** +39 2 5760 3050  
**Brazil:** +55 (0)11 5545 1500

[www.obbcorp.com](http://www.obbcorp.com)

**Germany:** +49 (0)89 4623 17-0  
**Japan:** +81 (0)3 6206 4721  
**Other:** +1 732 494 8660