The AvaLight-CAL-xxx is a spectral calibration lamp. It's available in Mercury-Argon (253.6-922.5 nm), Neon (337-1084.5 nm), Argon (696.5-1704 nm) Zinc (202.5-636.2 nm) and Cadmium (214.4-643.8 nm) versions. The major lines including their relative intensity and structures are shown below.

The standard SMA-905 connector supplies an easy connection between the lamp and optical fibers, making the AvaLight-CAL-xxx a low cost wavelength calibration system for any fiber-optic spectrometer. AvaSoft-Full spectroscopy software includes an automatic recalibration procedure.

The AvaLight-CAL-Mini, AvaLight-CAL-AR-Mini, AvaLight-CAL-Neon-Mini all come in the Mini-housing. They are equipped with a connector at the rear enabling to switch the unit on/off remotely with a TTL signal.

The AvaLight-CAL can also be delivered in rack-mountable version, to be integrated in Avantes 19” Rack-mount or the 9.5” desktop housing. The PS-12V/1.0A power supply should be ordered separately.

- Calibration light source
- Available in a variety of wavelength ranges (UV to NIR)

![Figure 14 Spectral lines AvaLight-CAL-Mini](image)

Figure 14 Spectral lines AvaLight-CAL-Mini
Figure 15 Spectral lines AvaLight-CAL-Neon-Mini

Figure 16 Spectral lines AvaLight-CAL-Zinc

Figure 17 Spectral lines AvaLight-CAL-CAD
### Technical Data

<table>
<thead>
<tr>
<th>Lamp</th>
<th>HgAr</th>
<th>Neon</th>
<th>Ar</th>
<th>Zinc</th>
<th>Cadmium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>253.6–922.5 nm</td>
<td>337–966 nm</td>
<td>950–1704 nm</td>
<td>202.5–636.2 nm</td>
<td>214.4–643.8 nm</td>
</tr>
<tr>
<td>Optical power in 600 µm fiber</td>
<td>1.6 µW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connector</td>
<td>SMA-905 connector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Voltage</td>
<td>1200 Volts AC at 30 kHz, 10 mA</td>
<td>1500 Volts AC at 27 kHz, 47.5 mA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm up</td>
<td>1 minute for vapor stabilization</td>
<td>&lt; 10 min.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamp lifetime</td>
<td>5000 hrs.</td>
<td>1000 hrs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power requirement</td>
<td>12VDC supply, 240 mA</td>
<td>85-240 VAC, 1.0A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions, weight</td>
<td>150 x 78 x 37 mm, 480 grams</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Ordering Information

- **AvaLight-CAL-Mini** • Mercury Argon Calibration source needs extra PS-12V/1.0A power supply, SMA
- **AvaLight-CAL-NEON-Mini** • Neon Calibration source needs extra PS-12V/1.0A power supply, SMA
- **AvaLight-CAL-AR-Mini** • Argon Calibration source needs extra PS-12V/1.0A power supply, SMA
- **AvaLight-CAL-RM** • Rack-mounted version of AvaLight-CAL
- **AvaLight-CAL-B-Mini** • Replacement bulb, Mercury-Argon
- **AvaLight-CAL-NEON-B-Mini** • Replacement bulb, Neon
- **AvaLight-CAL-AR-B-Mini** • Replacement bulb, Argon
- **AvaLight-CAL-ZINC** • Zinc Calibration Light source, including power supply
- **AvaLight-CAL-CAD** • Cadmium Calibration Light source, including power supply
- **AvaLight-CAL-ZINC-B** • Zinc replacement bulb
- **AvaLight-CAL-CAD-B** • Cadmium replacement bulb
- **PS-12V/1.0A** • Power supply 100-240 VAC/12 VDC, 1.0 A for AvaLight-CAL-Mini series