The 9815B is a 51mm (2") diameter, end window photomultiplier with blue-green sensitive bialkali photocathode and 10 BeCu dynodes of linear focused design.

- high light level
- high energy physics studies

- high pulsed linearity

**Photocathode: bialkali**
- active diameter: 46 mm (1.8")
- quantum efficiency at peak: %
- luminous sensitivity: μA/lm 70
- with CB filter: 8
- with CR filter: 11.5

**Anode sensitivity in divider B:**
- nominal anode sensitivity: A/lm 50
- max. rated anode sensitivity: A/lm 500
- overall V for nominal A/lm: V 1800
- overall V for max. rated A/lm: V 2400
- gain at nominal A/lm: x 10
- dark current at 20 °C:
  - dc at nominal A/lm: nA 0.3
  - dc at max. rated A/lm: nA 3
- dark count: s⁻¹ 300

**Pulsed linearity (-5% deviation):**
- divider A: mA 50
- divider B: mA 150

**Pulse height resolution:**
- single electron peak to valley: ratio 2
- rate effect (I, for Δg/g=1%): μA 1

**Magnetic field sensitivity:**
- the field for which the output decreases by 50 %
- T x 10⁻⁴ 2

**Temperature coefficient:**
- °C % ± 0.5

**Timing:**
- single electron rise time: ns 2
- single electron fwhm: ns 3
- single electron jitter (fwhm): ns 2.2
- transit time: ns 40

**Weight:**
- g 150

**Maximum ratings:**
- anode current: μA 100
- cathode current: nA 100
- gain: x 10⁻³ 7
- sensitivity: A/lm 500
- temperature °C -30
- V (k-a)(1) V 60
- V (k-d1) V 2500
- V (d-d)(2) V 500
- ambient pressure (absolute): kPa 450

(1) subject to not exceeding max. rated sensitivity
(2) subject to not exceeding max. rated V(k-a)
The standard voltage dividers available for these pmts are tabulated below:

<table>
<thead>
<tr>
<th>9815B</th>
<th>9815KB</th>
<th>k</th>
<th>d2</th>
<th>d2</th>
<th>d3</th>
<th>d3</th>
<th>d3</th>
<th>d10</th>
</tr>
</thead>
<tbody>
<tr>
<td>C638A</td>
<td>C644A</td>
<td>3R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C638B</td>
<td>C644B</td>
<td>3R</td>
<td></td>
<td></td>
<td>1.25R</td>
<td>1.5R</td>
<td>2R</td>
<td>3R</td>
</tr>
<tr>
<td>C638C</td>
<td>C644C</td>
<td>300V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C638D</td>
<td>C644D</td>
<td>300V</td>
<td></td>
<td></td>
<td>1.25R</td>
<td>1.5R</td>
<td>2R</td>
<td>3R</td>
</tr>
</tbody>
</table>

R = 330 kΩ

Note: focus connected to d1

*mumetal is a registered trademark of Magnetic Shield Corporation