ASE BROADBAND LIGHT SOURCE

Features:
- High output power from 13 dBm (20mW) to 27 dBm (500mW)
- Wide spectral bandwidth
- Covers C-band, L-band, or both
- High stability
- Un-polarized output light
- RS232 and USB interface, GPIB optional
- High performance-to-cost ratio
- Optional built-in attenuator and optical power monitor
- Custom design flexibility

Applications:
- Optical component testing
- Telecom system compliance testing
- EDFA gain spectrum measurements
- Optical fiber sensors and sensing systems
- WDM by spectral slicing
- Biomedical imaging
- Coherent communication systems

Product Description:

An ASE (Amplified Spontaneous Emission) broadband low coherence light source is an ideal instrument for optical component spectral measurement and system compliance testing in manufacturing and R&D environments. The new generation of ASE sources have no high frequency ripples, which makes them very useful for sensor interrogation applications.

Sources are available to cover the C-band, L-band, or both the C & L bands together. These are available with either a flattened spectral output for demanding applications, or a non-flattened response for less demanding or cost-sensitive applications. A range of output powers are available.

The output light is accessed via a female fiber connector receptacle on the front panel. A variety of standard connector types are available. Custom connectors can also be accommodated.

The basic version of the source has built-in microprocessor for applications that require output power adjustment. RS-232 and USB interfaces are included with the addition of a GPIB interface offered as an option.
### Ordering Information For Standard Parts

<table>
<thead>
<tr>
<th>Bar Code</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>33447</td>
<td>ASE-1-13-C-1-F-3A-RU</td>
<td>Basic single output ASE broadband light source, with 13 dBm output power covering the C-band in a bench top housing with angled FC/PC connector. The spectrum is flattened. Both RS232 and USB control interfaces included.</td>
</tr>
<tr>
<td>TBD</td>
<td>ASE-1-23-C-1-F-3A-RU</td>
<td>Basic single output ASE broadband light source, with 23 dBm output power covering the C-band in a bench top housing with angled FC/PC connector. The spectrum is flattened. Both RS232 and USB control interfaces included.</td>
</tr>
<tr>
<td>37967</td>
<td>ASE-1-27-C-1-F-3A-RU</td>
<td>Basic single output ASE broadband light source, with 27 dBm output power covering the C-band in a bench top housing with angled FC/PC connector. The spectrum is flattened. Both RS232 and USB control interfaces included.</td>
</tr>
<tr>
<td>2737</td>
<td>POWER CORD - EUROPE</td>
<td>Power cord for European 4mm round pin plug to IEC connection.</td>
</tr>
<tr>
<td>2736</td>
<td>POWER CORD - UK</td>
<td>Power cord for UK plug to IEC connection.</td>
</tr>
</tbody>
</table>

### Product Specifications

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Unit</th>
<th>C - Band</th>
<th>L - Band</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Output Power</td>
<td>dBm</td>
<td>13 to 27</td>
<td>13 to 22</td>
<td></td>
</tr>
<tr>
<td>Total power stability</td>
<td>dB</td>
<td>0.02</td>
<td>0.02</td>
<td>One hour</td>
</tr>
<tr>
<td>Operating Wavelength range - Unflattened</td>
<td>nm</td>
<td>1527-1567</td>
<td>1565-1610</td>
<td>Typical</td>
</tr>
<tr>
<td>Operating Wavelength range - Flattened</td>
<td>nm</td>
<td>1531-1565</td>
<td>1568-1607</td>
<td>Typical</td>
</tr>
<tr>
<td>Spectrum flatness*</td>
<td>dB</td>
<td>1.0-2.0</td>
<td>1.0-2.0</td>
<td>Typical</td>
</tr>
<tr>
<td>Output polarization</td>
<td></td>
<td>Un-polarized</td>
<td>Un-polarized</td>
<td></td>
</tr>
<tr>
<td>Output isolation</td>
<td>dB</td>
<td>45</td>
<td>45</td>
<td>Minimum</td>
</tr>
<tr>
<td>Return Loss</td>
<td>dB</td>
<td>55</td>
<td>55</td>
<td>Minimum</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>°C</td>
<td>0 to +40</td>
<td>0 to +40</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>°C</td>
<td>-40 to +80</td>
<td>-40 to +80</td>
<td></td>
</tr>
<tr>
<td>Humidity**</td>
<td>%</td>
<td>0 to 95</td>
<td>0 to 95</td>
<td></td>
</tr>
</tbody>
</table>

* For flattened wavelength range devices  
** Non-condensing

### Custom Ordering Information:

OZ Optics welcomes the opportunity to provide custom designed products to meet your application needs. As with most manufacturers, customized products do take additional effort so please expect some differences in the pricing compared to our standard parts list. In particular, we will need additional time to prepare a comprehensive quotation, and lead times will be longer than normal. In certain cases non-recurring engineering (NRE) charges, lot charges, and/or a minimum order will be necessary. These points will be carefully explained in your quotation, so your decision will be as well-informed as possible.

### Description

**ASE Broadband Source**

- **N**: Number of Output Ports. Specify 1, 2 or 4. The specified output power is divided equally amongst the output ports.
- **PP**: Output Power in dBm. Power should be within the range of 13 to 27 dBm.
- **B**: Wavelength band:  
  - C = C band  
  - L = L band  
  - D = C & L bands
- **S**: Package style:  
  - 1 = Bench top  
  - 2 = Rack mountable  
  - 3 = OEM module

**Part Number**:  

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ASE-N-PP-B-S-F-X-I
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- **I**: Control interface:  
  - RU = RS232 & USB  
  - RUG = RS232 & USB & GPIB

- **X**: Receptacle style:  
  - 3 = Standard flat, Super, or Ultra  
  - FC/PC  
  - 3A = Angled FC/PC  
  - 8 = AT&T-ST  
  - SC = SC  
  - SCA = Angled SC  
  - LC = LC  
  - MU = MU

- **F**: Flatness:  
  - N = Non-flattened  
  - F = Flattened