

## LaserLite OTOA-1000

In-Line, Step-Variable, Singlemode 1310nm Optical Attenuator (1dB thru 7dB \*)

### Features / Benefits

- **Low-cost** method for adding step-variable optical attenuation without interrupting connections
- Passive device intentionally induces macrobend losses around a series of restrictive curvatures
- Combination of 1dB, 2dB & 4dB loops provides step-variable attenuation from 1dB thru 7dB\*
- Built-in strain-relief mechanism minimizes changes in attenuation over time and temperature
- Ideally suited for singlemode 1310nm applications, including:
  - Reduction of the optical signal at the receiver to attain the “sweet spot”
  - CATV/HFC video & high speed data distribution networks
  - Laboratory testing



\* The Olson Technology, Inc. **Model OTOA-1000** provides approximately 1dB through 7dB of step-variable attenuation (i.e. @ 1dB steps) for 1310nm signals via standard 3mm simplex 9/125 $\mu$ m yellow non-plenum riser singlemode fiber cable with standard SMF-28 fiber. Results may vary significantly with other wavelengths, types of fiber cable and by how tightly the cable is wound in the loops. For instance a very tight winding on the “1dB” loop could yield as much as 2dB of optical loss. Newer “bend resistant fibers, such as SMF-28e and SMF-28eXB will yield much lower attenuation values. This is **not** a high-precision optical attenuator, but is very cost effective and performs well for many applications. It would be good practice to measure the loss with an optical power meter.

The **OTOA-1000** is the perfect companion to the Olson Technology, Inc. **Model OTPN** receiver and **Model OTMN** optical node product families or optical node/receivers from most leading manufacturers.