

Axsun Swept Source Warnings and Precautions

The following precautions should be followed to minimize the possibility of personal injury and/or damage to property. This document applies to swept source lasers with part numbers AXP50124-XX and AXP50125-XX.

ELECTROSTATIC CHARGES:

The internal components of each unit are sensitive to electrostatic discharges (ESD). Procedures for prevention from ESD during handling, movement, and testing should be followed by trained personnel.

FIBER OPTICS:

Fiber Optic Cables are fragile. If a bend is needed, take care that a moderate bend is used and the minimum longterm bending radius is at least 20 mm.

FIBER OPTIC CLEANING AND INSPECTION:

- Stop laser emission prior to making or breaking fiber optic connections. This is especially important for • 1060nm lasers which use smaller fiber core diameters that are susceptible to fiber end face damage when exposed to high power densities.
- Before optical fiber connections are made, perform fiber end face cleaning using a fiber wash technique and inspection per industry standards.
- For benchtop units (part number AXP50125-XX), the laser should never be operated unless the optical output is connected to a patch cord. When NOT connected to a fiber patch cord, the laser emission should be OFF and the dust cover should be kept in place.









LASER SAFETY:

Before you power up the engine, please identify the source wavelength label (1060nm, 1310nm, or 1220nm) located on your laser engine.



Please also identify the laser safety classification labels. The classification of the Axsun swept source laser engine is per the IEC International standard for Laser Eye Safety IEC60825-1. Avoid direct eye exposure for laser 3B and 3R classes. Do not view directly with optical instruments for laser 1M class.



If you are integrating the laser as a subcomponent in your system, please be aware that your final system may be subject to the IEC60825-1. Additional optical attenuation and/or interlocks for safe operation of the laser during and after system integration may be required.

For safety reasons, in each laser engine there is a hardware-mediated interlock with NO firmware interaction. Each laser engine cannot be operated without the mating connector for the interlock plugged.

Contact Axsun Technologies for more information describing the laser safety classifications and fault conditions.