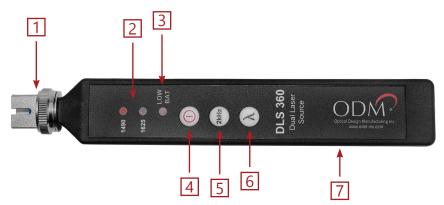


DLS 360 Dual Laser Source

Device Manual and Quick-Start Guide

The DLS 360 dual laser source is a singlemode test laser used for verifying the proper function of fiber optic networks. This document will serve as an overview of the major features and functions of the device and will offer tips for troubleshooting common issues in optical networks.

Device Overview



1. <u>Connector Adapter - Interchangeable</u>

The DLS 360 comes with an SC screw-on adapter. Additional adapters are available from ODM; see page 4 of this document for more information.

2. Wavelength Indicator

This unit offers 1490nm and 1625nm wavelengths. When the DLS 360 is turned on, the red light indicates which wavelength is selected. The red light will blink to indicate when the 2kHz modulation is turned ON.

3. Low Battery Indicator

A red indicator light will appear when the CR2 battery power is low. Replace the battery to return to normal operation of the DLS 360.

4. Power Button

Press this button to turn the DLS 360 ON and OFF. The unit will turn off automatically after 15 minutes. To bypass the auto-shutoff, hold the power button for 5 seconds when turning ON.

5. <u>2kHz Button</u>

Toggles 2kHz modulation of currently-selected wavelength output. Laser flashes at 2000 times per second to provide a recognizable signal to a companion power meter. Output power of the laser is reduced by 3dB when the modulation is active.

6. Wavelength Button

Switches between the 1490nm and 1625nm wavelength.

7. External Power Port

Accepts AC 030 power supply. Power supply is not a battery charger, just battery bypass.

Caution: Invisible Laser Radiation

Please note that 1490nm and 1625nm wavelengths are not visible to the human eye. Do not look directly into the output port of the DLS 360 or directly into any fiber connector that may be live.

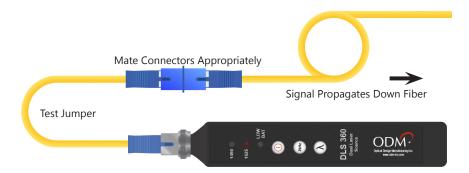
Since the laser is invisible to the eye, the eye's natural blink reflex is suppressed. This can cause damage to the retina.



FDA 21 CFR 1040.10 and 1040.11 IEC 60825-1: 2007-03 Class 1 Laser Product

Transmitting Light

The DLS 360 transmits either the 1490nm or 1625nm wavelength on singlemode fiber. Be sure to use a test jumper to mate the DLS 360 to the fiber under test.



Output Power

The DLS 360 is calibrated to have an output power level of -5dBm. Variations in power level between -5dBm and -8dBm may be normal depending on the quality and age of the test jumper, the DLS 360 output port, and other factors.

Always ensure the DLS 360 is transmitting an acceptable power level before performing an insertion loss test. Simply insert the test jumper (plugged into the DLS 360) into a companion power meter set to the dBm mode. The power meter will indicate the measured output power of the laser.

Test Jumper Plugged Into Power Meter



Power Meter Displays Output Power of Laser

Caring for the DLS 360 Output Port

The DLS 360 utilizes a physical fiber connection at the output port. This ensures a steady power level for performing insertion loss tests.

Be aware that any test jumpers must be inspected and cleaned before plugging into the DLS 360 unit. If soiled or damaged connectors are inserted, they can cause damage to the DLS 360 output port and the unit may need to be repaired.



The test jumper has physical contact with the ferrule inside the DLS 360.



To clean the ferrule inside the DLS 360:

- Unplug the test jumper
- Unscrew the adapter until it spins freely, then pull
- Inspect the ferrule with an approved microscope, clean if necessary, and replace adapter

Using the 2kHz Function

When the 2kHz modulation is active on the DLS 360, the currently-selected wavelength indicator will blink. The 2kHz modulation will be recognized by optical power meters further down the fiber and indicated by a 2kHz notification onscreen and a loud beep. The modulated tone may also be recognized through the fiber jacket when a Live Fiber Identifier is used.



The LFI introduces a bend into the fiber which leaks light from the core onto the detector of the power meter. When using an LFI, expect a 30-35dB offset in core power.



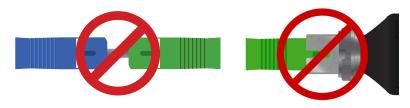
Notes On Testing

Blue connectors (UPC) have a straight ferrule with a domed interface. Green connectors (APC) have an eight-degree angled ferrule with a domed interface.





UPC and APC connectors are not compatible. NEVER connect UPC and APC connectors together, OR plug an APC connector into the DLS 360 unit. This can cause irreparable damage to both connectors.



AC 030 Battery Bypass

ODM offers the AC 030 wall plug for users who wish to leave their DLS 360 turned on for long periods of time. This is NOT a charger, but rather powers the unit from a wall outlet.



Light Source Accessories

Light Source Adapters	
Part Number	Description
AC 022B	SC Adapter
AC 023B	FC Adapter
AC 024B	ST Adapter
AC 025B	LC Adapter

Patch Cord Accessories	
Part Number	Description
AC 500	SM SC-LC - 1m simplex
AC 505	SM SC-ASC - 1m simplex
AC 501	SM SC-SC - 1m simplex
AC 502	SM LC-LC - 1m simplex
AC 600	SC-SC simplex bulkhead
AC 601	LC-LC simplex bulkhead
AC 602	LC-LC duplex bulkhead

Contact ODM Support

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