



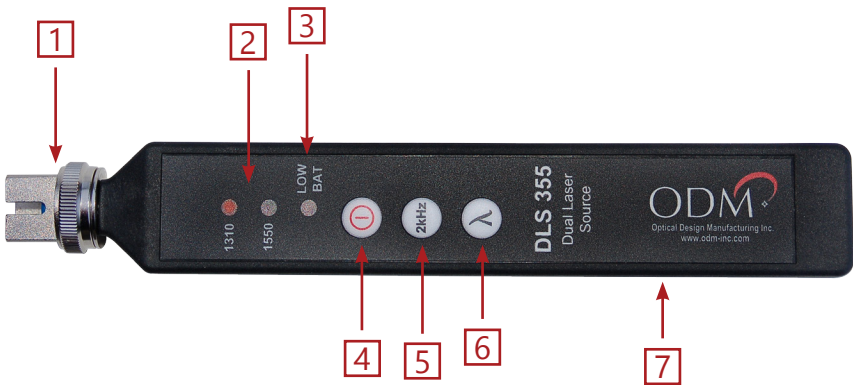
A RIPLEY® BRAND

DLS 355 Dual Laser Source

Device Manual and Quick-Start Guide

The DLS 355 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

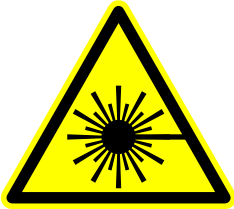


- Connector Adapter - Interchangeable**
The DLS 355 comes with an SC screw-on adapter. Additional adapters are available from ODM; see page 4 of this document for more information.
- Wavelength Indicator**
This unit offers 1310nm and 1550nm wavelengths. When the DLS 355 is turned on, the red light indicates which wavelength is selected. The red light will blink to indicate when the 2kHz modulation is turned ON.
- 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 355.
- Power Button**
Press this button to turn the DLS 355 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.
- 2kHz Button**
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.
- Wavelength Button**
Switches between the 1310nm and 1550nm wavelength.
- 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 1310nm and 1550nm wavelengths are not visible to the human eye. Do not look directly into the output port of the DLS 355 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.



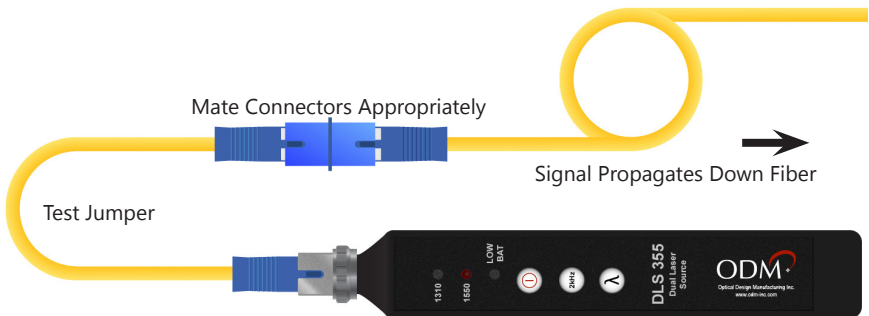
FDA 21 CFR 1040.10 and 1040.11

IEC 60825-1: 2007-03

Class 1 Laser Product

Transmitting Light

The DLS 355 transmits either the 1310nm or 1550nm wavelength on singlemode fiber. Be sure to use a test jumper to mate the DLS 355 to the fiber under test.



Output Power

The DLS 355 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 355 output port, and other factors.

Always ensure the DLS 355 is transmitting an acceptable power level before performing an insertion loss test. Simply insert the test jumper (plugged into the DLS 355) 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

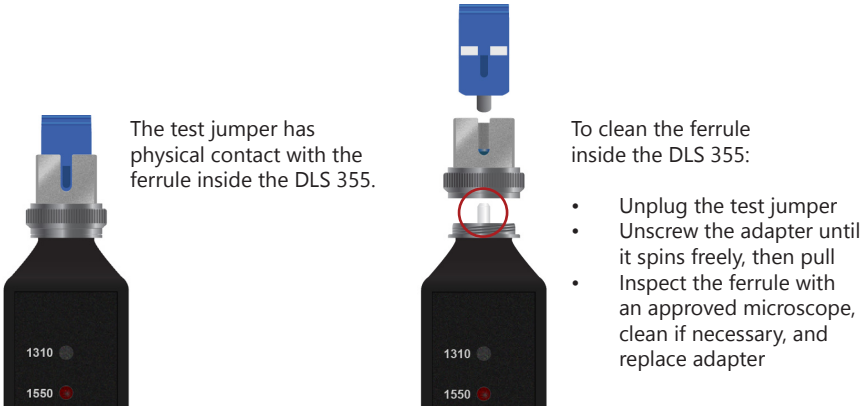


Power Meter Displays Output Power of Laser

Caring for the DLS 355 Output Port

The DLS 355 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 355 unit. If soiled or damaged connectors are inserted, they can cause damage to the DLS 355 output port and the unit may need to be repaired.



Using the 2kHz Function

When the 2kHz modulation is active on the DLS 355, 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.

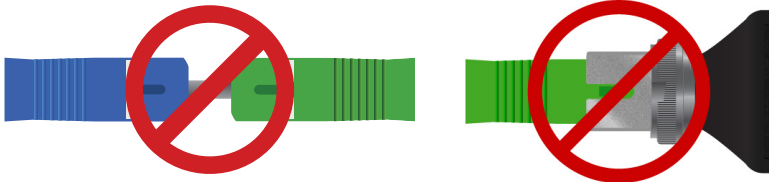


Notes On Testing

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 355 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 355 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 | |
|-----------------------|--------------------|
| <i>Part Number</i> | <i>Description</i> |
| AC 022B | SC Adapter |
| AC 023B | FC Adapter |
| AC 024B | ST Adapter |
| AC 025B | LC Adapter |

| Patch Cord Accessories | |
|------------------------|------------------------|
| <i>Part Number</i> | <i>Description</i> |
| 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 |

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