

Quick Start Guide

CAUTION: PLEASE READ CAREFULLY

Cleaning-Use standard fiber optic cleaning methods (e.g. GR-CORE-326). Clean all ferrules with an approved fiber optic lint free cloth (a slightly moistened lint free cloth can be used with appropriate cleaning solution). Canned air can also be used to clean the ferrule. NOTE: Infiltration of liquids may cause damage to the Series 500.

Battery Removal-Use a non-electrically conductive tool (e.g. fingernail) to remove the battery. Use of an electrically conductive tool (e.g. screw driver) to remove the battery can short the battery terminals and cause permanent damage to the battery and the Series 500 device.

Laser Safety-Under no circumstances should you look into the input or output of the Series 500 when light (e.g. laser light) is propagating thru the device. The laser radiation is not visible to the human eye, but it can seriously damage your eyesight.

Magnet Safety-The Series 500 contains high strength, rare-earth magnets which may damage sensitive equipment.

USB-Series 500 USB port is USB 2.0 (or earlier) compatible, connecting any non USB 2.0 (or earlier) compatible device will cause damage to Series 500. USB cable length is limited to a maximum of 5 meters.

Max Power-Do not operate Series 500 above the threshold power defined in the specification sheet. This will lead to damage of the Series 500, and will void warranty.



Measuring Optical Power

- Unscrew both universal adaptors from the Series 500, and carefully clean both internal ferrules .
- To reassemble universal adaptors, align keyway of the universal adaptor to the universal bulkhead, then screw the universal adaptors back on using your fingers (finger-tight).
- If optional variable attenuator patchcord has been ordered, unpack patchcord and carefully clean ferrules.
- Align keyway on patchcord to universal adaptor and carefully tighten (finger-tight).
 - NOTE: Mismatched internal ferrules will not give an accurate power reading. (e.g. PC to APC will increase insertion loss).
- Connect Series 500 to your optical system.
 - NOTE: Direction of light propagation should match the arrow on the Series 500 device.
 - NOTE: **If power into the Series 500 is above the threshold power, the Series 500 monitor will turn on automatically** (if not the screen will remain blank).
 - NOTE: The Series 500 is calibrated to the light exiting the internal ferrule on the output side of the device.
- Using the selection buttons, you can select your display orientation, desired wavelength, sample rate, and measurement mode (please see Figure A).
 - NOTE: Pressing and holding the dB/dBm (center) button for longer than 2 seconds will light up all LCD segments. Press and hold the button for 2 seconds to return to normal operation.

Changing the Battery

- To remove battery place Series 500 face down on a sturdy and clean surface.
- Fully open the stand to 90 degrees and carefully remove all 4 screws on the battery door using a No. 1 Phillips head screwdriver. Please note the orientation of the stand and hinges. This will insure proper reassembly.
- To remove stand and battery door, carefully lift the stand upward.
- Use a non-electrically conductive tool (e.g. fingernail) to remove the battery. **Use of an electrically conductive tool (e.g. screw driver) to remove the battery can short the battery terminals and cause permanent damage to the battery and the Series 500 device.**
- Gently snap a new battery into the battery holder.
- Place stand and battery door in proper orientation on the Series 500.
- Using the No. 1 Phillips head screwdriver, screw in the 4 screws (by hand only) until hinge and stand functions properly. Please note that over-tightening of screws can cause damage to Series 500.

Use Non-Conductive Tool
To Remove Battery By Lifting
Up On Battery Flange



Specifications

	Model 51x High Sensitivity	Model 52x Low Loss, High Power
Fiber Type	SMF	SMF
Insertion Loss (dB) ¹	≤0.5	≤0.2
Power Range (dBm)	-50 to +16	-40 to +26
Absolute Accuracy (dB) ²	+/-0.2	+/-0.2
Directivity (dB) ³	≥20	≥20
Polarization Stability (dB)	≤0.2	≤0.2
Power	1 Lithium Coin Cell (CR2477N), Micro USB	
Battery Life	3 Years Typical (Slow Mode)	
Display Resolution	0.1 dB	
Display Refresh Rate	0.1 Sec/0.8 Sec (Fast/Slow Mode)	
Output Interface	Micro USB (requires additional license)	
Operating Temperature	0°C to +40°C	
Storage Temperature	-10°C to +60°C	
Size (Housing Only)	94.5 x 56.5 x 27 mm	
Weight	100 grams	
Housing Material	Lexan Body, Santoprene Bumpers	

- Excludes connector loss
- Measured at the output and calibrated wavelengths
- Measured at 1550 nm