Operation Manual for OLS-1315 Optical Light Source

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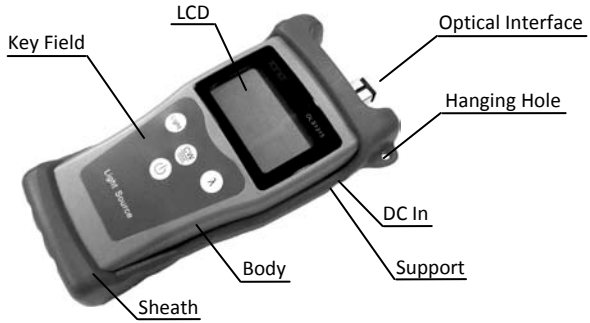
1. INTRODUCTION

All the details including operation procedure, technical parameters as well as any others related can be found in this *Operation Manual* for the Toner OLS1315 Handheld Light Source as shown in the following diagram:



1.1 SUMMARY

The OLS1315 Handheld Light Source is designed as a test device for measuring optical loss in systems, or to proof test installed optical plant when used with an optical power meter such as the Toner OPM1315. The light source provides two optical wavelengths; these are 1310 and 1150 nm which are the standard singlemode wavelengths used in the CATV or RF industries.

1.2 PRODUCT FEATURES

- Providing two wavelength outputs
- Optional CW, 270Hz, 1KHz, 2KHz modulation output
- High stability of the output power
- SC/PC adapter standard
- Compact size and ergonomic design
- Large LCD display and easy operation

1.3 TECHNICAL PARAMETERS

Model	OPM1315
Wavelength (nm)	1310, 1550, user selectable
Emitter Type	FP-LD
Output Power (dBm)	-7 dBm
Modulation Frequencies	CW / 2Hz (650) / 270 Hz, 1 KHz, 2 KHz
Fiber Type	SM
Output Stability (dBm)	±0.04 @ 20°C @ 15 min
Optical Connector	SC (optional FC and ST)
Operating Temp (°C)	-10~+60
Storage Temp (°C)	-25~+70
Automatic Shutdown Time (min)	15
Battery (hrs.)	60
Overall Dimension (mm)	185X105X50 (7X4X1.75")
Power Supply	9V battery, AC adaptor
Weight (g)	350 (13 oz)

1.4 MAIN APPLICATIONS

- Loss test of optical fiber link
- Test Insertion loss of fiber jumpers or couplers
- Installation and maintenance of fiber optic network

2. OPERATION INSTRUCTIONS

2.1 TURNING OLS1315 ON AND OFF

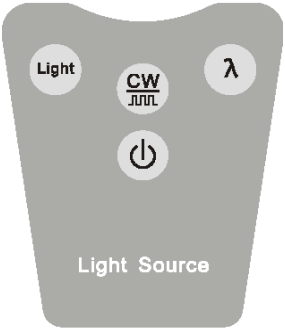
Press the ⏻ button to turn on the OLS1315. When the OLS1315 is turned on, the auto-off function is activated and the meter will shut off in 15 minutes. To deactivate this function momentarily press the ⏻ a second time. Pressing the ⏻ button when the light source is switched on will toggle the auto off function on and off. An auto off icon will appear in the LCD display when this function is active.

To turn the OLS1315 off press and hold the ⏻ for about 3 to 5 seconds.

2.2 BACKLIGHT OPERATION

When the light source is turned on, the back light will automatically activate. After a short period, the back light will switch off to conserve battery. Pressing the light button will turn the back light back on.

2.3 CONTROL PANEL DESCRIPTION



Power Button ⏻
Used to turn meter on and off. Auto-off function operates through the use of this button.

Wavelength Button λ
This button is used to select the wavelength, 1310 or 1550 nm.

Modulation Button CW
Used to turn the different light modulaton modes on and off. When a modulation mode is selected, a dot appears in the LCD display.

3. LCD DISPLAY

Once the power is turned on the following information will display on the LCD screen:

(1) When the meter is on battery power, a battery level indicator will be displayed in the lower left hand corner. When the indicator goes down to one bar, it is time to replace the battery.

(2) When operating on the AC adapter, a plug symbol will be displayed above the battery indicator.

(3) In the lower left hand corner of the LCD screen next to the battery indicator is the auto-off indicator. When the meter is turned on this is automatically activated and will turn the meter off after 15 minutes if the meter is not used.

(4) In the main area of the screen (the center) the light wave frequency is displayed.

(5) In the upper right part of the screen, the modulation mode in frequency is displayed in Hz.

4. MAINTENANCE

As a highly sensitive electronic & optical instrument, the OLS1315 must be cared for properly so that it maintains accuracy.

- Keep away from dust and dirt as this can damage the emitter
- Only keep the meter in a dry clean place away from direct sunlight
- Do not allow the light source to become overheated or extremely cold as this will affect the optical output
- Keep away from vibration and do not drop the light source
- Keep away from moisture, do not use in the rain or high humidity areas

4.1 LIGHT EMITTER CLEANING

Clean the emitter of the optical light source regularly.

(1) Open the dust proof cap.

(2) Screw off the adapter.

(3) Use 2.5mm cotton swab with some anhydrous alcohol to clean the surface of the emitter gently.

WARNING: Do not use anything hard or abrasive when cleaning the surface of the emitter. Do not drop since it may crack the emitter and cause the light source to not work.

ATTENTION: Remember to cover the dust-cap when not using the meter.

4.2 9V BATTERY REPLACEMENT

Open the back cover in order to remove and install the battery. Following is some useful information for better operation:

(1) Install a new Alkaline 9V battery when the  icon is displayed on the LCD screen.

(2) Check the condition of the battery if the unit has been out of use for some time.

4.3 CALIBRATION

The OLS1315 is properly calibrated when shipped from the factory. The optical output level is set at -7 dBm ±0.5 dBm. If the unit is dropped or damaged, it should be returned for calibration or if you suspect erroneous readings.

5. TROUBLESHOOTING

PROBLEM	POSSIBLE REASON	CORRECTIVE MEASURE
Inaccurate measurements	Incorrect wavelength	Change the operating wavelength on the meter
Meter won't turn on	9V battery is dead	Change battery
Low LCD Display	Low battery power	Either use AC adaptor or change the battery
Unstable output level	Meter not at room temperature or below operating temperature	Allow light source to warm to ambient temperature. Turn on light source and allow to stabilize.
Low output power of light source	Dirt on optical emitter	Clean the connectivity port thoroughly

6. WARRANTY PERIOD

6.1 GENERAL INFORMATION

The meter has a one year free from defects warranty period. This warranty is from the date of delivery and shall be guaranteed for any defects or faults caused by material quality or non-performance. Performance under normal operating conditions is fully guaranteed. Under this guarantee the company reserves the right to carry out any maintenance it deems necessary to restore the meter to optimal performance. If maintenance fails then the unit will be replaced. One free calibration is included on any warranty item. Note: Any damage that is caused by improper use of any kind will be charged for any maintenance or necessary replacement. The company will not be responsible for any accidental damage caused by the use of this meter.

WARNING: If any of the following conditions takes place, the warranty shall be null and void.

(1) If the warranty label is removed.
(2) Case bolts (not mentioned in the manual) have been removed.
(3) Improper use of the meter.
(4) If the serial number has been altered or removed.
(5) If the meter has been damaged.
(6) If the meter has been exposed to moisture.

6.2 INCLUDED IN PACKAGE

OLS1315 Handheld Light Source ..... 1 piece
Operation Manual ..... 1 piece
9V Battery ..... 1 piece
Cotton Swab ..... 1 piece
SC/PC Optical Adapter ..... 1 piece

Options
AC Power Adapter model OPM-PS
FC Optical Adapater model OLS-FC
ST Optical Adapater model OLS-ST
SC Optical Adapater model OLS-SC

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