



# Acterna optical single port laser source

## High performance OLS-15

### Acterna high power single-mode laser source

OLS-15 is a high power single-mode laser source designed for use with all Acterna's high performance and pocket sized optical power meters.

### High performance

The power and stability of the OLS-15 source make it ideal for use with single-mode fibers and for accurate monitoring of long distance links.

Universal adapters provide reliable, reproduceable connection to all common fiber optic connector types.

### Twintest and Auto Wavelength Detection

OLS-15 can be used with an Acterna OLP (optical power meter) for Twintest and auto wavelength detection. The actual used wavelength is automatically detected by the OLP which then switches to the right wavelength range. TwinTest provides two wavelength loss measurements automatically. Both functions help to avoid errors during the measurement procedure.

A single port provides connection for 1310 and 1550 nm testing. This saves connect/disconnect time as well as reducing cleaning procedures and connector abrasion.

### Features

- Rugged, compact and lightweight
- Ideal for networks with single-mode fibers and long distance links
- 3 years period re-calibration period
- One port for dual wavelength
- Auto-λ and Twintest
- Simple, reliable operation
- PC and APC versions

### Automatic identification of individual fibers

OLS-15 can be used with an Acterna OLP to detect the modulation frequency of the fiber to be measured, for identification purposes.

### Rugged field instrumentation

OLS-15 can be operated with AC, dry or rechargeable batteries. It is supplied in a robust housing, with splash-proof foil keypad and protectors for the optical connectors, to ensure reliable operation even in harsh field conditions.



### Acterna OLS-15 Optical Laser Source Specifications<sup>(1)</sup>

- Optical source type Dual FP laser
- Wavelength<sup>(2)(3)</sup> 1310 ±20 nm / 1550 ±20 nm
- FWHM spectral width<sup>(4)</sup> < 5 nm / < 5 nm
- Output power (CW) into 9/125 micro fiber
- Class 1 laser as per IEC 825 -7 dBm
- In Twintest mode, AUTO-λ and FMOD 3 dB
- Output level reduction
- All data valid after a warm up of 15 minutes

### Total output power uncertainty<sup>(5)</sup>

in range -10 to +55°C ±1 dB

### Output signal stability

(valid for CW and modulated signals)

- Short-term (15 min, -10 to +55°C, ΔT = ± 0.3 K) ±0.02 dB typ.
- Long-term (8h, -10 to +55°C, ΔT = ±3 K) ±0.2 dB

### Modes

- CW continuous wave output signal
- TWIN Test alternating output signal with 1310 or 1550 nm identifiers
- AUTO-λ output signal has 1310 or 1550 nm identifier
- FMOD square wave modulation (270 Hz, 1 kHz or 2 kHz, selectable)

### Optical connector

- Physical Contact (PC) or Angled Physical Contact (APC)
- Interchangeable test adapters for BN 2060/00.XX series e.g., DIN, FC, SC, LC, E2000 and others

## General specifications

- Power supply
  - Dry batteries 2 x Mignon (AA size), 1.5 V
  - Rechargeable batteries
    - NiCd cells 2 x Mignon (AA size), 1.2 V
- Operating time
  - Dry batteries NiCds typical 28 hours/  
typical 9 hours
- Battery/NiCd power saving
  - The instrument switches off automatically after approx. 20 min(function can be disabled)
- AC separate AC adapter
- Battery charging internally using AC adapter  
externally with charger unit
- Electromagnetic compatibility
  - corresponds to EN standards  
50 081-1 and 50 082-1 (CE conformance)
- Recommended calibration interval 3 years
- Ambient temperature -10 to +55°C
- Storage and transport -40 to +70°C
- Dimensions (w x h x d) in mm  
approx. 95 x 49 x 195
- Weight (including batteries/NiCds)  
approx. 500 g

## Ordering information

### Optical Laser Source

- Acterna OLS-15: /PC or /APC BN 2238/01 or /11
- Calibration report for OLS-15 BN 2238/90.01

### Accessories

- Optical connector cleaning kit BN 2229/90.07
- Spare tape for cleaning kit BN 2229/90.08
- NiCd cells, Mignon (AA) type  
(2 required per instrument) BN 2229/90.02

### Battery charger (for external charging)

- 230 V, European AC line plug BN 2229/90.03
- 110 V, US AC line plug BN 2229/90.09
- 230 V, UK AC line plug BN 2229/90.19

## AC Adapter NT-20

- European version BN 2238/90.02
- UK version BN 2238/90.03
- US version BN 2238/90.04
- Australian version BN 2238/90.05
- Japanese version BN 2238/90.06
- Neck strap BN 820/00.52
- ABK-30 storage box for optical accessories  
BN 2126/30
- Equipment case MK-1 BN 2090/13  
(rigid shell case for 2 x OLS-1x plus accessories)
- Equipment bag MT-2 BN 2126/01  
(nylon bag for 2 x OLS-1x plus accessories)
- Equipment bag MT-3 BN 2126/02  
(nylon bag for 3 x OLS-1x plus accessories)
- Equipment bag MT-22 BN 2126/22  
(nylon bag for 1 x OLS-1x and  
1 x OLS-x plus accessories)
- Equipment bag MT-32 BN 2126/32  
(nylon bag for 1 x OLS-1x and  
2 x OLS-x plus accessories)
- Equipment case MK-4 BN 2092/12  
(rigid shell case for 3 x OLS-1x plus accessories)

## Delivery contents

- OLS-15 Single port dual laser 1310/1550 nm
- 1 interchangeable adapter  
from BN 2060/00.XX range
  - 2 dry batteries Mignon (AA size), 1.5 V
  - Operating manual

Detailed information about test adapters, cables and fiber optic sleeves can be found in separate datasheet: "Acterna fiber optic test adapters and cables".

<sup>(1)</sup> All data valid after a 15 minute warm up time

<sup>(2)</sup> Other wavelengths on request

<sup>(3)</sup> At 23°C ± 3K

<sup>(4)</sup> According to Telecordia number TR-TSY - 000887

<sup>(5)</sup> Depends on the quality of the applied connector