



# Acterna OLA-54/-55 SMART Optical Level Attenuator

**FTTx Ready!**

A SMART, Future-Proof Optical Level Attenuator

## Acterna's SMART optical handhelds go beyond the basics

With more than 70,000 Acterna optical handhelds already in use, Acterna introduces a new line of SMART optical handhelds to help your network graduate to the next level of performance. Acterna's SMART optical handhelds encompass a new, intelligent, and next level product line for testing all optical signals and systems, including broadband, PONs, and Gigabit Ethernet.

All of Acterna's SMART optical handhelds provide:

- An extended number of calibration wavelengths for the highest performance range in the industry.
- The SMARTStar graphical user interface for fast, easy, and straightforward operation.
- The SMARTEnergy power supply management system.
- The SMARTBag for safe and hands-free operation and transport.
- Traceable measurements to international standards for confidence in accuracy.
- A robust, shock-proof, and splash-proof design for field operation.

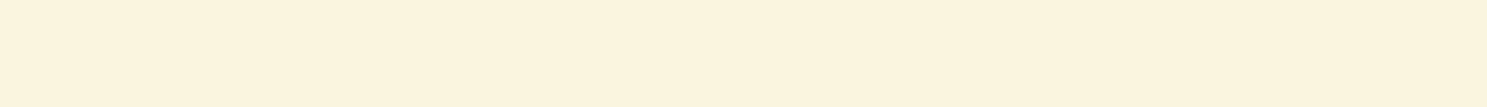
- Quick start operation, requiring no warm-up time and reducing testing time.

The **OLA-54 SMART Optical Level Attenuator** is designed for multimode fiber systems (50/125  $\mu\text{m}$  fiber).

The **OLA-55 SMART Optical Level Attenuator** is a future-proof instrument for system testing, installation, maintenance, and production of singlemode fibers. Due to minimized differential group delay (DGD), the OLA-55 is also suitable for 40 Gbps systems.

## Highlights

- 50/125  $\mu\text{m}$  multimode fiber design (OLA-54)
- Ready for 40 Gbps systems (OLA-55)
- New optical design allowing for low minimum insertion loss
- SMARTWheel for precise and fast manual setting
- Absolute and relative attenuation setting



**OCK-10 Optical Connector Cleaning Kit**



**Worldwide compatible AC adapter (SNT-121A)**



**OV-1 Visual Fault Locator**



**Optical adapters (BN 2150)**



**Car battery adapter**

## Specifications

	<b>OLA-54 BN 2280/41 Multimode</b>	<b>OLA-55 BN 2280/01 Singlemode BN 2280/21</b>
Adjustable wavelength range	750 to 1350 nm in 1 nm increments	1260 to 1650 nm in 1 nm increments
Fiber type	50/125 µm	9/125 µm
Calibrated wavelengths	850 nm, 1300 nm	1310 nm, 1550 nm, 1625 nm
Display range <sup>(1)</sup>	<2.5 to 60 dB	2.0 to 60 dB
Minimum insertion loss <sup>(1)</sup>	<2.5 dB	<2.0 dB
Linearity	± 0.2	± 0.2
Repeatability of attenuation setting <sup>(2)</sup>	± 0.1 dB	± 0.1 dB
Total attenuation accuracy <sup>(1)</sup>	---	± 0.8 dB
Setting type	Continuous over the entire range	Continuous over the entire range
Function	Bi-directional	Bi-directional
Displayed value <sup>(1)</sup>	Absolute or relative attenuation value	Absolute or relative attenuation value
Max. permitted level	+20 dBm	+23 dBm

## General data

### Display

Illuminated graphical display, resolution of 128 × 64 dots

Results displayed in dB  
Backlight function switchable via a separate key

### Connector

Optical connector interchangeable adapter from BN 2150/00.xx range is suitable for measurements on flat or angled physical contact systems

### Power supply

Four dry batteries Mignon/AA, 1.5 V or NiMH rechargeable cells Mignon/AA, 1.2 V

Operating time from dry batteries >300 h

Batteries/NiCd/NiMH power saving: The instrument switches off automatically after ~20 min (function can be disabled)

AC line operation via separate AC adapter

Integrated fast battery charging function (2 hours)

External 12 V DC operating via an AC adapter or a 12 V car battery adapter

## Electromagnetic compatibility

Corresponds to IEC 61326 (CE conformance)

### Calibration

Suggested calibration interval 3 years

### Ambient temperature

Nominal range of use -10°C to +55°C

Storage and transport -40°C to +70°C

### Dimensions and weight

W × H × D approximately  
95 × 60 × 195 mm  
(3.74 × 2.36 × 7.68 in)

Weight approximately 500 g  
(1.1 lb)

(1) Including connectors (to IEC874-1, method 6), depending on quality of the connectors applied to the OLA  
(2) Excluding remating

## Ordering Information

**Acterna OLA-55**      **BN 2280/01**  
Singlemode, variable attenuator, PC

**Acterna OLA-55**      **BN 2280/21**  
Singlemode, variable attenuator, APC

**Acterna OLA-54**      **BN 2280/41**  
Multimode, variable attenuator,  
50/125 µm

### Included with the OLA-55

Interchangeable adapter from  
BN 2150/00.xx range  
Four dry batteries Mignon/AA, 1.5 V  
Operating manual  
Belt bag MT-1S

## Accessories      Ordering number

**Optical adapter**      **BN 2150/00.xx**  
**OCK-10**      **BN 2229/90.21**  
Optical Connector Cleaning Kit

**Optical cleaning tape** **BN 2229/90.07**  
**Spare tape**      **BN 2229/90.08**  
for optical cleaning tape

**NiMH cells,**      **BN 2237/90.02**  
Mignon/AA, 1.2 V  
(4 required per instrument)

**SNT-121A**      **BN 2277/90.01**  
Worldwide compatible AC adapter

**USB connection cable**      **K804**  
**12 V car adapter**      **BN 2277/90.04**

**MT-1S belt bag**      **BN 2277/90.02**  
for one instrument

**MT-2S soft bag**      **BN 2126/03**  
for two instruments

**MT-3S soft bag**      **BN 2126/04**  
for three instruments

**MK-3S hard case**      **BN 2093/31**  
for three instruments

### Calibration Report      **BN 2280/90.01**

Detailed information regarding test adapters, cables, and fiber optic sleeves can be found in a separate datasheet entitled "Acterna Fiber Optic Test Adapters and Cables".

## Acterna Advantage<sup>SM</sup> — adding value with global services and solutions

From basic instrument support for your field technicians to management of complex, company-wide initiatives, Acterna's service professionals are committed to helping you maximize your return on investment. Whatever your needs — product support, system management, education solutions, tailored test & measurement solutions or refurbished equipment — we offer programs that will give you the competitive edge. To learn more about how Acterna Advantage can help your business be more successful, visit the services section on your local web page at [www.acterna.com/](http://www.acterna.com/).

Acterna is the world's largest provider of communications test solutions for telecommunications and cable network operators. A trusted communications test partner for more than eight decades, Acterna offers an unmatched portfolio of award-winning instruments, systems, software and services that help its customers reduce network costs while improving performance and reliability. Headquartered in Germantown, Maryland, USA—with European and Asia-Pacific operations based in Eningen, Germany and Hong Kong—Acterna serves nearly every major communications service provider and equipment manufacturer around the world through a skilled sales and support organization in 31 countries.

### Worldwide Headquarters

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Acterna is present in more than 80 countries. To find your local sales office go to: [www.acterna.com](http://www.acterna.com)

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