Acterna variable optical attenuator

High performance OLA-15B

The Acterna OLA-15B is a handy-sized, rugged optical attenuator for single mode applications from 1260 to 1625 nm. Applications include bit error rate tests, determination of system margin and receiver sensitivity, and calibration of optical power meters.

Wide measurement range, simple operation

OLA-15B has a large rotary control on the front panel which makes setting of the attenuation quick and easy. Attenuation can be set within a wide range from 3 to 60 dB.

For high-return loss applications — e.g., CATV systems — both optical connectors can be provided with an APC (angled physical contact) interface as an option.

Rugged field instrumentation

OLA-15B 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.

Features

– Multiple applications in optical system verification, installation and maintenance
– Ideal for optimization of DWDM systems
– Wide attenuation range
– Simple, reliable operation
– Rugged, compact and lightweight
– 3 years re-calibration period

Acterna OLA-15B Variable Optical Attenuator

Ordering information

– OLA-15B/PC	BN 2239/02
– OLA-15B/APC	BN 2239/21
– Calibration report for OLA-15B	BN 2239/90.01

Product specification

Wavelength

– Range of use	1260 to 1625 nm
– Calibrated at	1310 and 1550 nm

Attenuation setting

– Attenuation range[1]	3 to 60 dB
– Minimum insertion loss[1]	≤3 dB
– Linearity	±0.2 dB
– Repeatability of attenuation setting[2]	±0.1 dB
– Total attenuation uncertainty[1]	±0.8 dB
– Setting type	continuous over the entire range
– Function	bidirectional

Attenuation display — 4 digit liquid crystal display

– Displayed value[1]	absolute attenuation including connector
– Resolution	0.05 dB

Optical input/output — Physical Connector (PC) or Angled Physical Connector (APC)

Interchangeable test adapters of BN 2060/00.XX series BN 2060/00.X e.g. DIN, FC, SC, ST, E2000

– Fiber type	single-mode 9/125mm
– Return loss at input/output[3]	>40 dB (PC) Or >60 dB (APC)
– Maximum input level	+ 23 dBm

General specifications

Power supply

– Dry batteries	2 x Mignon (AA) 1.5 V
– NiCd rechargeable batteries	2 x Mignon (AA) 1.2 V
– Operating time (typical)	45 h (dry batteries)/15 h (NiCd cells)
– Battery/ NiCd power saving	automatic switch after approx. 20 min (can be disabled)
– AC line operation	with separate AC adapter unit NT-20
– Battery charging	internally using NT-20, externally with charger unit
– Electromagnetic compatibility	corresponds to EN standards 50081-1 and 50082-1(CE conformance)
Recommended calibration interval	3 years

Ambient temperature

– Nominal range of use	-5 to +55ºC
– Storage and transport	-40 to +70ºC
– Dimensions (w x h x d) in mm	approx. 95 x 49 x 195
– Weight (including batteries)	approx. 500g

Delivery contents

– OLA-15B variable optical attenuator	
– 2 interchangeable adapters from BN 2060/00.XX range	
– Dry batteries	2 x Mignon (AA)1.5 V
– Operating manual	

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 (rigid shell case for 2 x OLX-1x plus accessories)	BN 2090/13
– Equipment bag MT-2 (nylon bag for 2 x OLX-1x plus accessories)	BN 2126/01
– Equipment bag MT-3 (nylon bag for 3 x OLX-1x plus accessories)	BN 2126/02
– Equipment bag MT-22 (nylon bag for 1 x OLX-1x and 1 x OLX-x plus accessories)	BN 2126/22
– Equipment bag MT-32 (nylon bag for 1 x OLX-1x and 2 x OLX-x plus accessories)	BN 2126/32
– Equipment case MK-4 (rigid shell case for 3 x OLX-1x plus accessories)	BN 2092/12

Detailed information about test adapters, cables and fiber optic sleeves is found in separate data sheet: "Acterna fiberoptic test adapters and cables".

[1] Including connectors (to IEC 874-1, method 6), depending on quality of connectors applied to the OLA.
[2] Excluding remating.
[3] Typical value; depends on the characteristics of the external plug.

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