SmartClass™ OLA-54 and OLA-55

Optical Level Attenuator

Key features

- 50/125 µm multimode fiber design (SmartClass OLA-54)
- Ready for 40 Gbps systems (SmartClass OLA-55)
- New optical design allowing for low minimum insertion loss
- Wheel for precise and fast manual setting
- Absolute and relative attenuation setting
- FTTx ready

JDSU SmartClass optical handhelds go beyond the basics

With more than 100,000 optical handhelds already in use, JDSU continues the success story with the SmartClass optical handhelds. The SmartClass help your network move to the next level of performance. JDSU SmartClass 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 SmartClass optical handhelds provide:

- An extended number of calibration wavelengths for the highest performance range in the industry.
- The intuitive graphical user interface for fast, easy, and straightforward operation.
- The intelligent power supply management system.•
- The belt bag 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 SmartClass OLA-54 (optical level attenuator) is designed for multimode fiber systems (50/125 µm fiber).

The SmartClass OLA-55 (optical level attenuator) is a future-proof instrument for system testing, installation, maintenance, and production of single-mode fibers. Due to minimized differential group delay (DGD), the OLA-55 is also suitable for 40 Gbps systems.

2

Accessories

OCK-10 Optical Connector Cleaning Kit (accessory)

OVF-1 Visual Fault Locator (accessory)

Optical adapters (BN 2150) for laser source output

Worldwide compatible AC adapter (SNT-121A)

3

Specifications

	SmartClass OLA-54 BN 2280/41 Multimode	SmartClass OLA-55 BN 2280/01 Single-mode BN 2280/21 Single-mode APC
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(1)	<2.5 to 55 dB	2.0 to 60 dB
Minimum insertion loss(1)	<2.5 dB	<2.0 dB
Linearity	± 0.2	± 0.2
Repeatability of attenuation setting(2)	± 0.1 dB	± 0.1 dB
Total attenuation accuracy(1)	typ. ± 0.8 dB	± 0.8 dB
Setting type	Continuous over the entire range	Continuous over the entire range
Function	Bi-directional	Bi-directional
Displayed value(1)	Absolute or relative attenuation value	Absolute or relative attenuation value
Max. permitted level	+20 dBm	+23 dBm

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

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)

Order information

Order number	Instrument
BN 2280/01	SmartClass OLA-55 Single-mode, variable attenuator, PC
BN 2280/21	SmartClass OLA-55 Single-mode, variable attenuator, APC
BN 2280/41	SmartClass OLA-54 Multimode, variable attenuator, 50/125 µm

Included with the SmartClass OLA-55

2 interchangeable adapter from BN 2150/00.xx (range (must be selected), 4 dry batteries Mignon/AA, 1.5 V, operating manual, MT-1S belt bag

Order number	Accessories
BN 2150/00.32	Optical adapter ST type
BN 2150/00.58	Optical adapter SC type
BN 2150/00.51	Optical adapter FC type
BN 2150/00.50	Optical adapter DIN type
BN 2150/00.59	Optical adapter LC type
BN 2252/01	OVF-1 Visual Fault Locator
BN 2229/90.21	OCK-10 Optical Connector Cleaning Kit
BN 2229/90.07	Optical cleaning tape
BN 2229/90.08	Spare tape for optical cleaning tape
BN 2237/90.02	NiMH cells, Mignon/AA, 1.2 V (4 required per instrument)
BN 2277/90.01	SNT-121A Worldwide compatible AC adapter
K804	USB connection cable
BN 2277/90.02	MT-1S belt bag for one instrument
BN 2126/03	MT-2S soft bag for two instruments
BN 2126/04	MT-3S soft bag for three instruments
BN 2093/31	MK-3S hard case for three instruments
BN 2280/90.01	Calibration Report

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