

OBS-55/500/550 SMART Optical Broadband Light Sources

High Performance Light Source for PMD, CD and Attenuation Profile (AP) Measurements



OBS-55: For PMD and Attenuation Profile measurement



OBS-550: For CD, PMD and Attenuation Profile measurement

Key features

- SmartClass design for harsh environmental conditions
- Battery operated, field usable handheld
- Broadband wavelength range to cover DWDM applications
- High dynamic range for ultra-long haul PMD and CD testing

10 GE service delivery/40G network deployments and trials are driving fiber characterization test out to field tech support groups.

Cost effective solution and fast return on investment are required due to wider test set dispatch. The growing number of projects is driving an increasing demand for higher productivity with better reliability and availability.

JDSU's SMART optical handhelds go beyond the basics

The OBS-55 Smart Optical Broadband Source with its polarized broadband spectrum of light allows to perform high dynamic range PMD measurements. With its high dynamic power range, the unit is able to measure the complete fiber link, including all components in the link (like ROADMs and EDFAs).

The OBS-500/550 combines three applications in one rugged and splash-proofed field solution. Its high output power (OBS-550) and wide wavelength range enable the characterization of any fiber network configuration. In combination with the JDSU ODM module (T-BERD/MTS-6000/8000), high performance CD, PMD and AP measurements can be executed.



Specifications

	OBS-55	OBS-500	OBS-550
Wavelength range	1520 to 1620 nm	1460 to 1625 nm	1460 to 1625 nm
Output power level	≥ 0 dBm (≥ -3 dBm modulated)	≥ 0 dBm	+15 dBm (1530 to 1610 nm) ¹ ≥ 0 dBm (1460 to 1625 nm) ²
Spectral power density	>-42 dBm/0.1 nm	>-46 dBm/0.1 nm	>-46 dBm/0.1 nm (1460 to 1625 nm) ² -30 dBm/0.1 nm (1500 to 1580 nm) ¹
State of polarization	Polarized	Polarized or non-polarized	Polarized or non-polarized ¹
Operating mode indication	Display (128 x 64 dots)	LED (no display)	
Optical interface	PC/interchangeable	PC/interchangeable adapter system	
Battery life	8 hours ⁽⁶⁾	2.5 hours ^{(2), (6)}	
Power supply	Four dry batteries Mignon/AA 1.5 V or NiMH rechargeable cells Mignon/AA AC line operation via separate AC adapter Nominal range of use 100 to 240 V, 50/60 Hz		

- (1) non-polarized for "SA" and "CD" mode
 (2) in broadband (BB) mode
 (3) in polarization mode dispersion (PMD) mode
 (4) in chromatic dispersion (CD) mode
 (5) in attenuation profile (AP) mode
 (6) at 20 °C ambient temperature

Temperature

Operation	-10 °C to +40 °C
Storage	-40 °C to +70 °C

Dimensions and weight

OBS-55

W × H × D	15 × 195 × 60 mm (3.74 × 7.68 × 2.36 in)
Weight	500 g (1.1 lb)

OBS-500/550

W × H × D	125 × 50 × 260 mm (9.05 × 4.72 × 1.97 in)
Weight	600 g (1.3 lb)

Ordering Information

Ordering number	Instrument
BN 2279/31 (EOBS55)	OBS-55 (for E81PMD & E81WDMPMD modules)
BN 2279/33 (EOBS500)	OBS-500 (for E81DISPAP & E81CD modules)
BN 2279/32 (EOBS550)	OBS-550 (for E81DISPAP & E81CD modules)

Included with the OBS-55

BN 2150/00.xx	Interchangeable adapter
BN 2237/90.02	Four NiMH rechargeable cells Mignon/AA
BN 2277/90.01	SNT-121 AC adapter
	Operating manual
BN 2277/90.02	MT-1S Belt bag

Included with the OBS-550

BN 2150/00.xx	Interchangeable adapter
BN 2237/90.02	Four NiMH rechargeable cells Mignon/AA
BN 2277/90.01	SNT-121 AC adapter
	Operating manual
BN 2279/90.10	Soft bag

Ordering 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 2279/90.10	OBS-550 soft bag

Test & Measurement Regional Sales

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