

OLP-5, OLP-6 and OLP-8 Optical Power Meters

Pocket-sized optical power meters



Key features

- **Pocket class: Rugged, compact and lightweight**
- **Easy-to-use, straight forward operation**
- **Reliable basic functionality for most economical testing**
- **Three year calibration period**
- **Dedicated for all single mode and multi-mode applications like LAN, Telecom, CATV, and DWDM testing**
- **Universal push pull interface (2.5 or 1.25 mm)**
- **Twintest and Auto-λ**
- **Compact design, versatile use**
- **Standard AA batteries or NiMH/NiCd cells**

Basic, reliable, economic solution

The JDSU OLP-5, OLP-6 and OLP-8 are handy, pocket-sized optical power meters for quick, easy and convenient field measurement of optical power and attenuation in fiber networks. They can be used on their own for simple output tests, or with a light source for insertion loss measurements. The full functionality of the pocket-sized OLP range is realized when used with an JDSU optical light source (OLS).

Accurate measurement, simple operation

Three-button operation and a bright, clear display make the pocket-sized OLPs very easy-to-use. The reference level for the attenuation measurement is made to IEC-874-1 (method 6) and can be saved with a single keystroke.

Used with an JDSU OLS light source, the possibility of measurement errors is eliminated because the power meter automatically detects the wavelength being transmitted. As a result, dual wavelength measurements at 850 and 1300 nm or 1310 and 1550 nm can be made quickly and easily, using the saved reference levels.

Automatic identification of individual fibers

Pocket-sized OLPs can be used with an JDSU light source to detect the modulation frequency of the light coupled into the fiber, for identification purposes.

Different power ranges for different applications

There are three OLPs available with different power ranges. The OLP-5 is dedicated to LAN/multimode or single mode applications. The OLP-6 covers mostly the standard telecom applications, while the OLP-8 is dedicated to higher power applications like CATV networks, DWDM systems and EDFA testing.

Rugged field instrumentation

The instruments, which all take standard AA (Mignon) batteries or rechargeable batteries, are supplied in a robust case with a handy belt bag. The selectable on/off power-down shuts off automatically after 20 minutes. Whenever the on/off key is pressed the remaining battery capacity is displayed. Operating time is further maximized by the use of low-power components.

Universal push pull interface

With the UPP (2.5 or 1.25 mm) you can connect every optical connector without changing any adapter.



OMK-5/6/7: available as test kits together with a power meter and accessories



Quick charger for NiMH or NiCd cells (accessory)



OVF-1 Visual Fault Locator (accessory)

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Specifications

OLP-5 BN 2256/01

Display range -60 to +5 dBm
 Max. permitted input level +10 dBm

Accuracy

Intrinsic uncertainty⁽¹⁾ ± 0.20 dB (± 5%)
 Linearity⁽²⁾ ± 0.06 dB (-50 to +5 dBm)
 Wavelength range 780 to 1600 nm
 Standard wavelength settings 820, 850,
 1300, 1310, 1550 nm

Wavelength and modulation detection together

with OLS-5, OLS-6, OLS-55/56,
 OLT-55 270 Hz, 330 Hz, 1 kHz, 2 kHz
 1300, 1310, 1550 nm -50 to +5 dBm
 850 nm -45 to +5 dBm

Connectable fiber types 9/125 to 100/140 μm

OLP-6 BN 2256/02

Display range -65 to +10 dBm
 Max. permitted input level +10 dBm

Accuracy

Intrinsic uncertainty⁽¹⁾ ± 0.20 dB (± 5%)
 Linearity⁽²⁾ ± 0.06 dB (-50 to +5 dBm)
 Wavelength range 780 to 1650 nm
 Standard wavelength settings 850,
 1300, 1310, 1490, 1550 nm

Wavelength and modulation detection together

with OLS-5, OLS-6, OLS-55/56,
 OLT-55 270 Hz, 330 Hz, 1 kHz, 2 kHz
 1300, 1310, 1490, 1550 nm -50 to +10 dBm
 850 nm -45 to +10 dBm

Connectable fiber types 9/125 to 100/140 μm

OLP-8 BN 2256/03

Display range -50 to +23 dBm
 Max. permitted input level +23 dBm

Accuracy⁽¹⁾

Intrinsic uncertainty⁽³⁾ ± 0.20 dB (± 5%)
 Linearity⁽²⁾ ± 0.06 dB (-35 to +20 dBm)
 Wavelength range 780 to 1650 nm
 Standard wavelength settings 980, 1310,
 1480, 1490, 1550 nm

Wavelength and modulation detection together with OLS-5, OLS-6, OLS-55/56, OLT-55 270 Hz, 330 Hz, 1 kHz, 2 kHz
 1310, 1550 nm -35 to +23 dBm
 980 nm -30 to +23 dBm

Connectable fiber types 9/125 μm to 10/125 μm

- (1) Under reference conditions: -20 dBm (CW), 1310 nm, ± 2 nm, 23°C ± 3 K, 40 up to 75% relative humidity.
- (2) Temperature range 23°C ± 3 K, 9/125 μm fiber + PC connector, 40 up to 75% relative humidity.
- (3) While using APC connector, additional uncertainty of -0.1 dB may occur.

Optical interface

Standard: Universal Push-Pull (UPP)
 2.5 mm adapter
 Matches DIN, ST, FC, SC,
 E2000 flat or angled face plugs

Optional: UPP 1.25 mm (F3000, LC)
 Photo diode type Germanium

Display LCD, 4-digit
 Result display in dBm, dB
 Resolution 0.01 dB,
 below -60 dBm 0.1 dB
 Modulation detection 270 Hz, 330 Hz,
 1 kHz, 2 kHz

Wavelength detection "on" (Auto-λ) "AU"
 Permanent mode "PERM"
 Battery charge state in %
 when switching on/off

Reference level

Reference level stored for each wavelength
 Operating time from dry batteries typical 130 h

Power supply

Dry batteries 2 × Mignon (AA) 1.5 V
 or NiCd/NiMH cells 2 × Mignon (AA) 1.2 V
 Discharge protection for batteries/NiCd cells Automatic power down after approx. 20 minutes to conserve battery power (function can be disabled)

Electromagnetic compatibility

Corresponds to EN 50081-1 and EN 500082-1 (CE conformance)
 Recommended calibration interval 3 years
 Ambient temperature
 Nominal range use -10 °C to +50 °C
 Storage and transport -40 °C to +70 °C
 Dimensions (w × h × d) approx. 73 × 28 × 140 mm
 Weight approx. 180 g

Ordering information

BN 2256/01	OLP-5 (-60 to +5 dBm) Included with the OLP-5 are two dry batteries Mignon AA 1.5 V, operating manual; belt bag
BN 2256/02	OLP-6 (-65 to +10 dBm) OLP-6 comes complete with two dry batteries Mignon AA 1.5 V, operating manual, belt bag
BN 2256/03	JDSU OLP-8 (-50 to +23 dBm) OLP-8 comes complete with two dry batteries Mignon AA 1.5 V, operating manual, belt bag

Accessories

BN 2229/90.07	Optical cleaning tape
BN 2229/90.08	Spare tape for optical cleaning tape
BN 2256/90.05	Cleaning pins
BN 2229/90.01	Dry batteries, Mignon (AA) type (two required per instrument)
BN 2229/90.02	NiCd cells, Mignon (AA) type (two required per instrument)
BN 2237/90.02	NiMH cells
BN 2229/90.03	NiCd cells charger (for external charging) 230 V, European AC line plug
BN 2229/90.09	110 V, US AC line plug
BN 2229/90.19	230 V, UK AC line plug
BN 2256/90.01	Belt pouch, per instrument
BN 2256/90.03	LC-UPP adapter
BN 2126/90.01	Transport case MK-5 (space for two instruments, two cables, OVF-1)
BN 2229/90.21	OCK-10 Optical connector cleaning kit
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 2256/90.02	Calibration report for OLP-5/OLP-6/OLP-8

Detailed information about test adapters, cables and fiber-optic couplers can be found in separate data sheet: "JDSU fiber-optic test adapters and cables".

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