



# Acterna pocket-sized optical power meters

Optical power meter OLP-5, OLP-6 and OLP-8

The Acterna 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 Acterna 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 Acterna 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.

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### **Highlights**

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- Fast, accurate measurement of optical power and attenuation
- Easy to use, rugged, lightweight solution
- Dedicated for all singlemode and multimode applications like LAN, Telecom, CATV, and DWDM-Testing
- Universal push pull interface
- Twintest and Auto-λ
- Three year recalibration period

## Simple, reliable, economic solution

### **Automatic identification of individual fibers**

Pocket-sized OLPs can be used with an Acterna 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 singlemode 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 2.5 mm UPP you can connect every 2.5 mm optical connector without changing any adapter.



## Specifications

### Acterna OLP-5 BN2256/01

- Display range	-60 to +5 dBm
- Max. permitted input level	+10 dBm
- Accuracy	
Intrinsic uncertainty <sup>(1)</sup>	±0.20 dB (±5%)
Linearity <sup>(2)</sup>	±0.06 dB (-50 to +5 dBm)
- Wavelength range	780 to 1600 nm
- Standard wavelength settings	820, 850, 1300, 1550 nm
- Wavelength and modulation detection together with OLS-5, OLS-6, OLS-15 from series E	
270 Hz, 330 Hz, 1 kHz, 2 kHz	
1300, 1550 nm	-50 to +5 dBm
820, 850 nm	-45 to +5 dBm
- Connectable fiber types	9/125 to 100/140 μm

### Acterna OLP-6 BN 2256/02

- Display range	-65 to +10 dBm
- Max. permitted input level	+10 dBm
- Accuracy	
Intrinsic uncertainty <sup>(1)</sup>	±0.20 dB (±5%)
Linearity <sup>(2)</sup>	±0.06 dB (-50 to +5dBm)
- Wavelength range	780 to 1650 nm
- Standard wavelength settings	780, 850, 1300, 1310, 1550 nm
- Wavelength and modulation detection together with OLS-5, OLS-6, OLS-15 from series E	
270 Hz, 330 Hz, 1 kHz, 2 kHz	
1300, 1310, 1550 nm	-50 to +10 dBm
780, 850 nm	-45 to +10 dBm
- Connectable fiber types	9/125 to 100/140 μm

### Acterna OLP-8 BN2256/03

- Display range	-50 to +23 dBm
- Max. permitted input level	+23 dBm
- Accuracy <sup>(1)</sup>	
Intrinsic uncertainty <sup>(3)</sup>	±0.20 dB (±5%)
Linearity <sup>(2)</sup>	±0.06 dB (-35 to +20 dBm)
- Wavelength range	780 to 1650 nm
- Standard wavelength settings	980, 1310, 1480, 1550 nm
- Wavelength and modulation detection together with OLS-5, OLS-6, OLS-15 from series E	
270 Hz, 330 Hz, 1 kHz, 2 kHz	
1310, 1550 nm	-35 to +23 dBm
980nm	-30 to +23 dBm
- Connectable fiber types	9/125 μm to 10/125μm

## General specifications

- Optical connector	Universal Push-Pull (UPP) adapter Matches DIN, ST, FC, SC, E2000 flat or angled face plugs
- Photodiode 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, 2kHz
- 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 X Mignon (AA) 1.5 V
or NiCd cells	2 X 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 50082-1 (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 x h x d)	approx. 73 x 28 x 140 mm
- Weight	approx. 180 g

## Delivery contents/power meter

### Acterna power meter OLP-5

- OLP-5 comes complete with	power meter (-60 to +5 dBm)
	2 dry batteries Mignon AA 1.5V
	1 belt bag
	operating manual

### Acterna power meter OLP-6

- OLP-6 comes complete with	power meter (-65 to +10 dBm)
	2 dry batteries Mignon AA 1.5V
	1 belt bag
	operating manual

### Acterna optical level meter OLP-8

- OLP-8 comes complete with	power meter (-50 to +23 dBm)
	2 dry batteries Mignon AA 1.5V
	1 belt bag
	operating manual

## Accessories

- Cleaning kit for optical plugs	BN 2229/90.07
- Spare tape for cleaning kit	BN 2229/90.08
- Dry batteries, Mignon (AA) type	BN 2229/90.01 (2 required per instrument)
- NiCd batteries, Mignon (AA) type	BN 2229/90.02 (2 required per instrument)
- NiCd 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
- Belt bag, per instrument	BN 2256/90.01
- Transport case MK-5	BN 2126/90.01 (space for 2 instruments, 2 cables, OVF-1)
- Transport bag MT-32	BN 2126/32 (space for 3 instruments, several cables, OVF-1, battery charger)
- Calibration report for OLP-5/OLP-6/OLP-8	BN 2256/90.02

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

<sup>(1)</sup>Under reference conditions: -20 dBm (CW), 1310 nm, ±2 nm, 23°C ± 3K, 40 up to 75% relative humidity

<sup>(2)</sup>Temperature range 23°C ± 3K, 9/125 to 50/125 μm fiber + pc connector 40 up to 75% relative humidity

<sup>(3)</sup>While using APC connector, additional uncertainty of -0.1 dB may occur

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