

## 5 Technical specifications

### 5.1 Generator element

Type . . . . .	infrared LED
Wavelength	
OLS-10 . . . . .	1300 nm $\pm$ 50 nm
FWHM spectral width	
OLS-10 . . . . .	typ. 150 nm

### 5.2 Generator level (CW)

into 50/125 $\mu$ m fiber . . . . .	-20 dBm
into 62.5/125 $\mu$ m fiber . . . . .	-15 dBm
into 85/125 $\mu$ m fiber . . . . .	-13 dBm
into 100/140 $\mu$ m fiber . . . . .	-11 dBm
into 9/125 $\mu$ m fiber. . . . .	-38 dBm
Level stability <sup>1</sup>	
T = +20 to +26 °C $\pm$ 5 °C, 15 min. . . . .	$\pm$ 0.003 dB
T = -10 to +55 °C $\pm$ 3 °C, 6 h. . . . .	$\pm$ 0.1 dB
Output power accuracy <sup>1</sup>	
incl. connector uncertainty. . . . .	$\pm$ 2 dB

<sup>1</sup> Valid for 50/125  $\mu$ m fibers

### 5.3 Internal modulation

Signal shape . . . . .	square-wave
Duty cycle . . . . .	1:1
Modulation factor . . . . .	100 %
Selectable frequencies . . . . .	270 Hz, 1 kHz, 2 kHz
Level reduction at activated modulation (average) . . . . .	3 dB

### 5.4 Optical output

Test adapter(s) . . . . .	BN 2014/00.xx
Connector(s) . . . . .	see ordering information

### 5.5 General specifications

#### Power supply

Dry batteries . . . . .	2 x Mignon (AA size), 1.5 V
NiCd batteries . . . . .	2 x Mignon (AA size), 1.2 V
Operating time, dry batteries / NiCds. . . . .	approx. 20 h / approx. 8 h
The instrument switches off automatically after approx. 20 min. to avoid discharging the batteries (function can be disabled).	
AC line operation . . . . .	using separate AC adapter
Battery charging . . . . .	using separate charge adapter

Electromagnetic compatibility . . . . . as per EN 50 081-1, 50 082-1

### **Ambient temperature**

Nominal range of use . . . . . -10 to +55 ° C

Storage and transport . . . . . -40 to +70 ° C

### **Air humidity**

Nominal range of use

relative humidity at up to 40 ° C . . . . . 5 to 95 %

absolute humidity, > 40 ° C . . . . .  $\leq 30 \text{ g/m}^3$

Occasional condensation is permitted as a limit condition

### **Mechanical tests**

Vibration, 3 axis . . . . . acc. to IEC 68-2-6

10 Hz to 55 Hz,  $\pm 0.35 \text{ mm}$ , 3 x 30 min

Continuous shocks, 3 axis . . . . . acc. to IEC 68-2-29

250  $\text{m/s}^2$ , 6 ms, 3 x 1000 shocks

Drop test, 0.8 m . . . . . acc. to IEC 68-2-32/2

### **Dimensions and weight**

Weight . . . . . approx. 500 g

Dimensions (w x h x d) . . . . . 95 x 49 x 185 mm

## 5.6 Ordering information

**OLS-10 Optical LED Generator . . . . .** BN 2228/03

Depending on the connector system, one or more test adapters are required to operate the LED source.

### **K 30xx test cables**

Details of test cables and fiber optics couplers are found in a separate data sheet, "Optical Test Adapters and Adapter Cables".