

OELED-100/OELED-200 Fiber Coupled LED Light Source

Description

The OELED-100 and OELED-200 fiber coupled LED light sources are low cost, compact size fiber light sources. Plenty of spectra are available from 375nm to 1550nm with typical 20nm bandwidth. LED is coupled by standard multimode optical communication fiber (50 μ m, 62.5 μ m, 100 μ m, 200 μ m). Typical coupled output power is 10 to 40 μ W into 100 μ m core.

Standard features include Power On indicator, switch, +5V DC jack and temperature compensating power control circuitry. OELED-100 provides stable fixed-power optic output. OELED-200 has a control signal input, the LED current can be linear modulated by the control voltage.

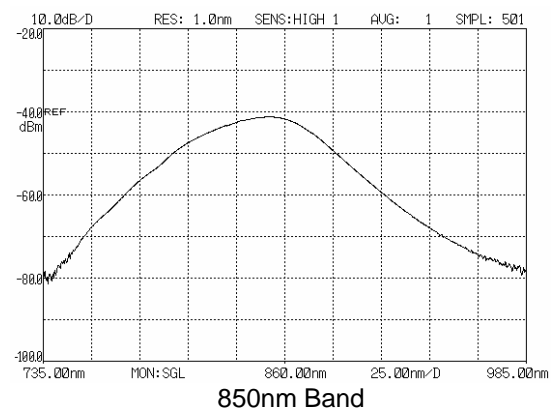
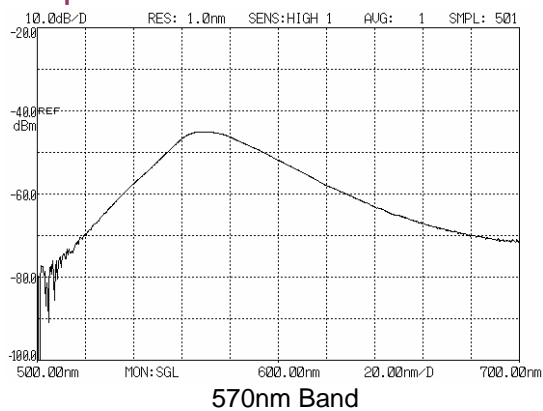


OELED - 100

Applications

- Instrumentation
- Sensor
- Passive optical component testing,
- Patchcord verification
- Biomedical illumination
- Datacomm network installation and maintenance testing
- Other applications requiring the use of a fiber optic LED light source

Power Spectrums



OELED-100/OELED-200 Fiber Coupled LED Light Source

Available Wavelength Bands

Wavelength (nm)	Bandwidth (nm, Typ.)	Output Power 62.5um Core (μ W, Typ.)	Output Power 100um Core (μ W, Typ.)	Output Power 200um Core (μ W, Typ.)
365	10	2	7	16
375	17	3	8	22
385	17	4	12	26
395	15	5	16	35
400	17	5	16	35
405	17	5	16	35
430	20	2	5	12
450	20	2	7	16
470	20	7	25	55
490	25	2	7	16
505	25	2	7	16
530	25	4	12	26
570	25	1	4	9
590	15	2	7	16
600	15	2	6	14
610	15	2	6	14
625	20	4	12	26
630	20	7	21	43
645	20	4	13	28
650	20	7	21	43
660	20	4	13	28
670	25	5	15	32
680	20	5	15	32
700	20	10	30	65
720	20	2	6	14
740	30	10	30	65
750	30	7	25	55
760	30	7	25	55
770	30	10	30	65
780	30	10	30	65
785H	30	100	-	-
810	35	12	36	75
850	40	13	40	83
870	40	13	40	83
880	35	65	200	400
910	60	12	36	75
920	60	12	36	75
940	50	10	30	65
970	55	3	10	23
1050	100	2	6	14
1070	55	2	6	14
1200	100	3	10	23
1300	100	3	10	23
1300H	40	200	500	800
1450	100	5	15	32
1550	100	5	15	32
1550H	50	50	80	100
1650	120	-	1	-

OELED-100/OELED-200 Fiber Coupled LED Light Source

OELED-100 Specifications

Center wavelength accuracy	Typ. +/- 5nm
Power stability ^{1,2}	Typ. 0.02dB
Output Connector	ST™, FC, Pigtail, SMA
Output Fiber	Multimode fiber (50μm, 62.5μm, 100μm, 200μm)
Protection	Over current limit

OELED-200 Specifications

Center wavelength accuracy	Typ. +/- 5nm
Output Connector	ST™, FC, Pigtail, SMA
Output Fiber	Multimode fiber (50μm, 62.5μm, 100μm, 200μm)
Protection	Over current limit
Control Voltage/LED Current Coefficient ³	15 ± 0.25 V/A
LED Current Offset	±0.1mA with ±1μA/°C
LED Current Range	0-50mA
Control Voltage Range ⁴	0-750mV
Control Voltage Input Impedance	20KΩ
Control Voltage Waveform	Any type
Electronic Modulation Rise Time ⁵	0.3μs

General Specifications

Operating temperature	0°C to 40°C (32°F to 104°F)
Storage temperature	-30°C to 70°C (-22°F to 158°F)
Relative humidity	0% to 95% non condensing
Size (H x W x L)	50mm x 80mm x 100mm
Power supply	+4.8 to +5.0 VDC, 70mA

Notes:

- Over one hour after one hour warm up at a fixed ambient temperature.
- The stability is expressed as ± half the difference between the maximum and minimum values during one hour.
- This coefficient is stable over whole linear modulation range excepting the cases of over-voltage and over-frequency.
- Over control voltage will cause the saturation on the top of LED current.
- Normally, Electronic modulation speed is much faster than LED response speed.
All specifications are subject to change without notice.

Operation Panel of OELED-200

