SAFIBRA

Solutions, When the Conventional Ones Run Out of Breath

OFLS-B

OPTICAL FIBER LIGHT SOURCE - BROADBAND

Broadband diodes to light up your application

The OFLS-B series deploys the standard universal OFLS driving platform for broadband fiber optic light sources. It is based on super luminescent light emitting diodes (SLD or SLED) within different wavelength ranges covering visible (VIS) and near infrared regions (NIR) with different output power and bandwidth coming from single mode optical fiber.

The SLED diodes features make the light source ideal for a very large scale of application ranging from civil engineering, through structural analysis to composite material manufacturing. Particularly, the advantage of their wide bandwidth, high optical power spectral density, low ripple, high polarization extinction ratio and operating wavelengths are mostly demanded in these fields.

Spectral range

The light emitted by the SLED modules is distributed over a wide spectral range starting at 400 nm up to 1700 nm.

High output power

Optical power at the output of the single mode fiber is typically from few mW up to 30+ mW, depending on chosen SLD diode.

Large bandwidth

The typical values of the BW range between 3 nm and 20 nm for VIS region and between 20 nm and 160 nm for NIR region.

PRODUCT VERSIONS

The light source can be delivered either in standard compact version for handheld operation and easy storage or OEM version for further integration into customer's systems.

KEY PRODUCT FEATURES & BENEFITS

Fiber output
The device output is characterized by single mode optical fiber, terminated by FC/APC connector. Either standard SMF is used for the 1230-1700 nm range or special small diameter SMF for the 400-1200 nm range.

Spectral ripple
The variation of the spectral power-density exhibits extremely low values even at the highest power levels.

Superior performance
Optical light source exhibits very high stability and performance in various environments and over long periods of time.

Low coherence length
The SLED modules exhibit low coherence length which is typically in μm range demanded in medical imaging applications like OCT.

Optional features
The light sources can be equipped by optional components for output isolation, depolarization or any other.

Diode packages
The laser sources can deploy various types of diodes in different packing, such as BTF, DIL, H8, TOSA and many others.

PRODUCT APPLICATIONS

PRODUCTION, TELECOMMUNICATION
Fiber optic component testing, CD & PMD measurements

FIBER OPTIC GYROSCOPE
Rotation measurement, navigation systems, avionics, aerospace, sea, terrestrial

FIBER OPTIC SENSING
SHM, temperature, strain, static and dynamic measurements

RESEARCH AND DEVELOPMENT
Novel and undiscovered applications

MEDICAL IMAGING
OCT, confocal microscopy, dental and skin tissue examinations

INDUSTRY
Lightning source, machine vision and imaging systems

METROLOGY
Prototyping, reverse engineering, tool inspection

TECHNICAL SPECIFICATION

Optical

Other optical parameters are dependent on chosen diode type	Central wavelength, bandwidth, optical power, spectral ripple, etc.
Fiber type	SMF
Fiber output	FC/APC connector other connectors on request
Optional features	Output isolation Output depolarization

GET IN TOUCH WITH US

and we will recommend you the most suitable solution for your project.

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20+ YEARS

LIST OF LIGHT SOURCES

Part number	Central wavelength [nm]	Typ. optical power from SMF [mW]	Typical FWHM [nm]	Note
OFLS-B-40-02-20-C	405±15	2	3	
OFLS-B-45-02-20-C	450±10	5	6	
OFLS-B-51-01-10-C	510±10	1.5	10	
OFLS-B-63-03-6-C	635±15	3	6	
OFLS-B-65-03-6-C	650±20	3	6	
OFLS-B-75-02-20-U	750±20	2	20	TOSA with external cooling
OFLS-B-75-05-20-U	750±20	5	20	
OFLS-B-79-05-20-C	790±20	5	20	
OFLS-B-80-10-40-C	800±20	10	40	Flat top
OFLS-B-82-02-25-U	820±20	2	25	TOSA with external cooling
OFLS-B-83-12-20-C	830±20	12	20	
OFLS-B-84-02-50-U	840±20	2	50	TOSA with external cooling
OFLS-B-84-15-48-C	840±20	15	48	Flat top
OFLS-B-85-05-35-C	850±20	5	35	
OFLS-B-85-05-55-C	850±20	5	55	Flat top
OFLS-B-88-12-70-C	880±20	12	70	
OFLS-B-91-15-40-C	910±20	15	40	
OFLS-B-15-10-70-C	1050±20	10	70	Flat top
OFLS-B-15-20-60-C	1050±20	20	60	
OFLS-B-16-20-70-C	1060±20	20	70	Flat top
OFLS-B-17-10-90-C	1070±20	10	90	Flat top
OFLS-B-23-10-45-C	1230±20	10	45	
OFLS-B-27-25-30-C	1270±20	25	30	
OFLS-B-28-8-80-C	1280±20	8	80	
OFLS-B-29-2-60-C	1290±20	2	60	
OFLS-B-30-10-110-C	1300±20	10	110	Flat top
OFLS-B-30-06-120-C	1300±20	6	120	Flat top
OFLS-B-30-15-70-C	1300±20	15	70	
OFLS-B-30-20-50-C	1300±20	20	50	
OFLS-B-31-03-40-U	1310±20	3	40	TOSA with external cooling
OFLS-B-31-20-90-C	1310±20	20	90	Flat top
OFLS-B-31-30-60-C	1310±20	30	60	
OFLS-B-35-25-50-C	1350±20	25	50	
OFLS-B-38-10-40-C	1380±20	10	40	
OFLS-B-48-15-40-C	1480±20	15	40	
OFLS-B-52-02-60-U	1520±20	2	60	TOSA with external cooling
OFLS-B-52-08-60-C	1520±20	8	60	
OFLS-B-55-02-60-U	1550±20	2	60	TOSA with external cooling
OFLS-B-55-05-60-C	1550±20	5	60	
OFLS-B-55-05-160-C	1550±20	5	160	Flat top
OFLS-B-55-10-60-C	1550±20	10	60	Flat top
OFLS-B-55-10-100-C	1550±20	10	100	
OFLS-B-55-15-45-C	1550±20	15	45	
OFLS-B-55-15-90-C	1550±20	15	90	
OFLS-B-55-20-60-C	1550±20	20	60	Flat top
OFLS-B-55-30-40-C	1550±20	30	40	
OFLS-B-57-10-65-C	1570±20	10	65	
OFLS-B-58-20-60-C	1580±20	20	60	
OFLS-B-60-8-60-C	1600±20	8	60	
OFLS-B-61-8-60-C	1615±15	8	60	
OFLS-B-65-10-50-C	1650±15	10	50	
OFLS-B-69-10-50-C	1690±20	10	50	

LOOKING FOR OTHER LIGHT SOURCE?

Feel free to contact us and share your demands.

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