Infini-Light ™
Stabilized Broadband Fiber-Optic Light Source

System Overview

The Infini-Light™ Stabilized Broadband Source is a wideband high power light source. It provides a low degree of polarization, stable light source over a very wide wavelength range of more than 350nm at > -35 dBm/nm power density. It incorporates highly accurate control of high-power luminescence, semiconductor diode sources to achieve superior stability. When all wavelength options installed, one light source unit can be used for all communication windows, including O, E, S, C, and L bands. High speed external modulation allows the use of lock-in amplifiers for high sensitivity measurement and data communications. The low degree of polarization output provides accurate and consistent measurement for high PDL or PD components. And the high power and broadband enhance the quality of optical coherence tomography in the medical applications.

Optical Specifications

Wavelength Peak Options*	1300nm	1400nm	1480nm	1550nm	1620nm
Peak Power Density (dBm/nm)	> -20	> -20	> -20	> -20	> -20
Degree of Polarization	<10%	<10%	<10%	<10%	<10%
Power Stability (15min)	<0.02dB	<0.02dB	<0.02dB	<0.02dB	<0.02dB
-35 dBm/nm Wavelength Range	1270nm~1650nm				
External Modulation Bandwidth	DC – 2 MHz				

800, 920, 940, 980, and 1060nm sources, as well as other power level options available upon request.

Mechanical and Electrical Specifications

Dimension: 1-3 Channels: L264×W210×H125 mm.
             4-5 Channels: L260×W366×H148 mm.
Weight: < 10 lb.
Enclosure: Metal Case, Painted.
Optical Connector: FC/APC.
Fiber Type: SMF-28.
Input Power: 20W, 100-220 VAC, 50/60Hz.
Operating Temp.: $10 - 40\,^{\circ}$C

Applications

Material Absorption Spectroscopy.
WDM Components Manufacturing and Testing.
Telecomm and Datacomm Systems.
Optical Coherence Tomography.
Optical Fiber Sensors.

Ordering Information

Model Number: **IRBL-*abcde*-F**
1300nm: included (*a*=1), not included (*a*=0).
1400nm: included (*b*=1), not included (*b*=0).
1480nm: included (*c*=1), not included (*c*=0).
1550nm: included (*d*=1), not included (*d*=0).
1620nm: included (*e*=1), not included (*e*=0)

Total Spectrum

Individual Spectrum