

Key Features

- Output power 20 W
- Single frequency operation
- Single mode, $M^2 \approx 1$
- Benchtop or OEM unit
- USB interface
- Shut-off for Loss of Signal
- Operation Temp: 10 to 40°C
- Standard or All-PM version
- Efficient cooling system
- Optional Output collimator

Applications

- High Energy Physics
- Testing and Measurement
- Medical
- Interferometry & spectroscopy

The **CYBEL HELIOS-2100** series is a line of Holmium doped fiber amplifiers designed for amplification of eye-safe light in the range from 2030 to 2130 nm. **HELIOS-2100** has been specifically designed for operation around the important wavelength of 2100 nm for high energy and R&D applications. The amplifier can provide more than 20 W of single transverse mode output power for sub 1 mW input power levels.

The **HELIOS-2100** amplifier comes in a 19 inch benchtop unit design with either a standard or an all polarization maintaining fiber.

This amplifier is also available in an OEM format for easy system integration and deployment. Output power, key monitoring, and operating parameters, such as automatic current control (ACC) and automatic power control (APC) modes, are controlled from the USB port.



Cybel Thulium & Holmium Amplifiers & Laser Products

- ♦ SCIROCCO-AMP1950
- ♦ MAESTRO-AMP2000
- ♦ VULCAN-2000
- ♦ MISTRAL-AMP2051

Turn-Key Rack Mount Benchtop

HELIOS-2100 Specifications

OPTICAL	Unit	Min	Max	Comments
Optical Bandwidth	nm	2030	2130	Single Mode Operation Wavelength
Input Signal Linewidth	MHz	< 2		
Input Signal Power	mW	1	20	
Output Signal Power	W	5	20	With Pin=0 dBm(1 mW)
Output Power Tunability	%	5 - 100		At Pout = 20 W
Output mode, MFD	μm	10-11		
Polarization Ext. Ratio (PER)	dB	≥ 20		PM Version
Output Beam Quality (M ²)	M ²	1.1		
Signal to Noise Ratio (OSNR)	dB	≥ 45		OSA Res. = 1 nm
Output Power Variation (RMS)	%	+/- 3		After 20 Min. Warm-up
Output Fiber Length	m	> 0.7		Longer Fiber at Request
Input Fiber Length	m	> 0.7		Longer Fiber at Request
Output Isolation	dB	20		Optional, External to the OEM
Connectors		FC/APC		Other Connectors and Collimators Available
ELECTRICAL				
Voltage	V	110-220		@ 60-50 Hz
Warm up Time	min	20		
Power Consumption	W	< 30		25 °C, @Pout max = 20 W
Control Interface		RS-232		
Mode of Operation		ACC		
GENERAL				
Dimensions	inch	19		2U Rackmount Benchtop
Storage Temperature	°C	-10 to 65		
Operating Case Temp.	°C	0 to 60		
Humidity	%	5 to 95		Non condensing

CUSTOMIZATION

The **HELIOS** is a laser platform that can be customized to match Customers' specific requirements. Please contact Cybel.

COMPLIANCE with Regulatory Requirements: These benchtop products are Class 4 lasers as designated by the Center for Device and Radiology Health(CDRH). As such they are intended only in integration into other equipment and do not comply with CDRH requirement. It is the customer responsi-



62 Highland Ave.
Bethlehem, PA 18017
Phone: 610-691-7012

Sales: contact@cybel-llc.com

Website: www.cybel-llc.com