

Key Features

- Output power up to 5W
- Single frequency operation
- Single mode, $M^2 \sim 1$
- Large input signal dynamic
- USB interface
- Shut-off for Loss of Signal
- Operation Temp: -10 to 50°C
- Standard or All-PM version
- Efficient cooling system
- Optional Output collimator

The CYBEL HELIOS-2100 series is a line of Holmium doped fiber amplifiers designed for amplification of eye-safe light in the range from 2000 to 2130nm. HELIOS-2100 has been specifically designed for operation around the important wavelength of 2100nm for high energy and R&D applications. The amplifier can provide more than 5W of single transverse mode output power for sub 1mW input power levels.

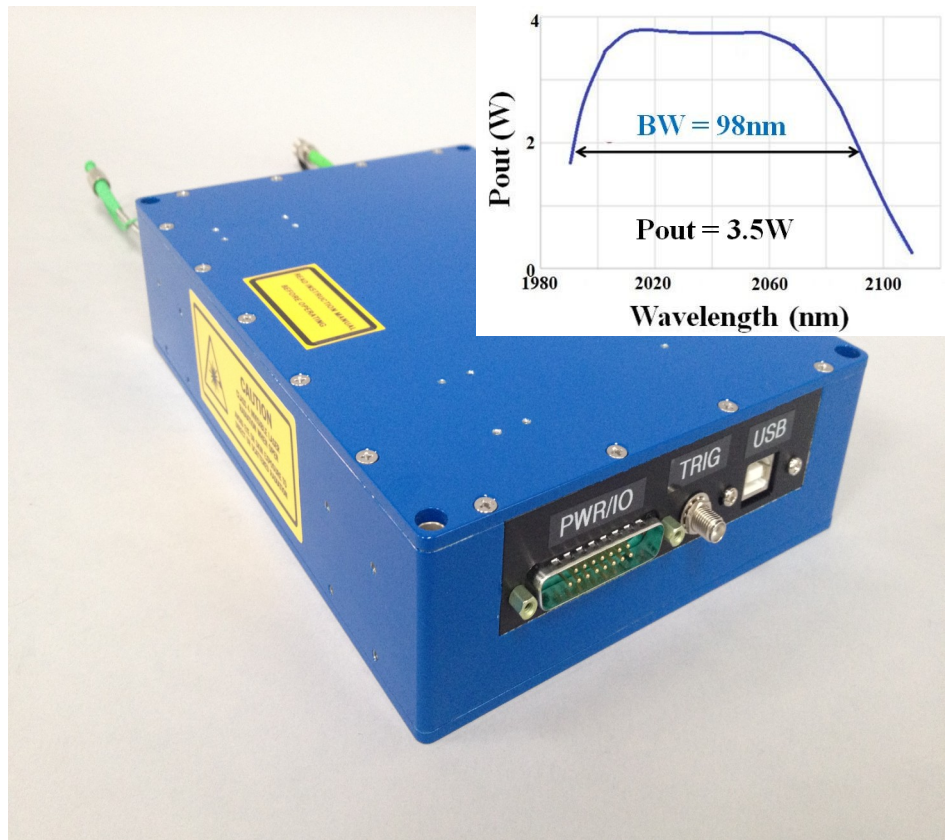
The HELIOS-2100 amplifier comes in a OEM design with either a standard or an all polarization maintaining fiber. Output power, key monitoring, and operating parameters, such as automatic current control (ACC) and automatic power control (APC) modes, are controlled from the USB port.

Applications

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

Cybel Thulium & Holmium Amplifiers & Laser Products

- ◆ MISTRAL-AMP-2051
- ◆ SCIROCCO-AMP-1950
- ◆ MAESTRO-AMP-2000
- ◆ VULCAN-2000



HELIOS-2100 Specifications

OPTICAL	Unit	Value	Comment
Wavelength	nm	2100	2000 to 2130nm
Input signal power	mW	1	@2100-lower Pin (-20dBm)
Input signal linewidth	MHz	<3	
Output power	W	1 to 5	Higher power available
ASE output power	mW	20	@Pout=5W, Pin=3mW
Polarization Ext. Rattio	dB	≥ 18	PM version
Beam quality (M ²)		<1.1	
Output isolator	dB	30	Output collimator as an option
In/out fiber length	m	1	SM or PM 1950-armored cable
Connectors	m	FC/APC	Other connectors available
ELECTRICAL			
Voltage	V	18 to 30	
Warm-up Time	min	20	
Control mode		ACC and APC	Automatic shut-off with LOS (loss of signal or low preset input power level)
Supply power consumption	W	200	@Pout max=1W
Control interface		USB	
GENERAL			
Dimensions	mm	200x150x43	
Storage temperature	°C	-20 to 65	
Operating case temp.	°C	-10 to 50	
Humidity	%	0 to 95	Non-condensing

CUSTOMIZATION

The HELIOS-2100 is an amplifier platform that can be customized to match Customers' specific requirements. Please contact Cybel.

COMPLIANCE with Regulatory Requirements: These OEM 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 responsibility for CDRH certification of the full system that incorporates this industrial laser.



1195 Pennsylvania Ave
Bethlehem, PA 18018
Phone: 610-691-7012

Sales: contact@cybel-llc.com

Website: www.cybel-llc.com