

ARCTIC-1550

Self-Heterodyne System

Key Features

- Bandwidth from 1500-1600
- CW or Pulsed modes
- Ave. Pout 100 mW
- Linewidth > 500kHz
- Single mode, M² ≃ 1
- · Standard or all-PM version
- Operation Temp: 15 to 35°C
- Efficient cooling system

The CYBEL ARCTIC-1550 is a benchtop self-heterodyne system, it allows for the linewidth measurement of lasers operating at wavelengths between 1500-1600nm in CW or pulsed mode. The self-heterodyne signal is recorded by photodiode and measures linewidth, stability in time by ESA under two modes: CW and pulse a the wavelength of 1550nm.

The system is a highly reliable all-fiber design with a simple user interface for controlling output power and capable of reliably measuring the linewidth within the range of 0.5-50MHz.

The ARCTIC-1550 system comes in a 19 " 2U rack mount benchtop unit either a standard or an all polarization maintaining (PM) fiber. Benchtop control is done from the front panel.

ARCTIC-1550 1550nm SELF-HETERODYNE SYSTEM OPTICAL Power Pursed Modulation-Input Imput 1 Imput 2 Output 1 Output 2 Modulation-Input Imput 2 Output 1 Output 2 Imput 3 Output 2 Imput 4 Imput 2 Output 1 Imput 5 Output 1 Imput 6 Output 1 Imput 7 Output 7 Imput 8 Output 1 Imput 8 Output 1 Imput 9 Output 9 Output 1 Imput 9 Output 1 Imput 9 Output 1 Imput 9 Output 9 Out

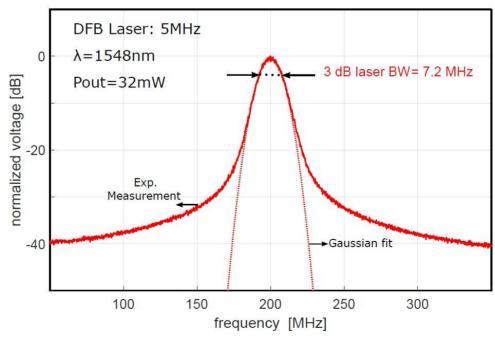
Front Panel of Turn Key Rack Mount Benchtop

Applications

- Laser Linewidth measurement
- Heterodyne of two signals

Cybel Products

ARCTIC-1064





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ARCTIC-1550 Self-Heterodyne System

OPTICAL	Unit	Value	Comment
Center wavelength	nm	1550	1500 to 1600
Input power	mW	100	Scalable ; High power available
Spectral width	kHz	>500	
Output fiber stability	%	<1	With 30dB output isolator
Fiber Type		PM Fiber	SM available
Fiber delay length	km	3	FC/APC connector, up to 10km of delay fiber can be used.
ELECTRICAL/MECHANICAL			
Voltage	V	90-264	
Modulation voltage	V	0 to 5	TTL 50Ω impedance
Warm-up time	min	20	
Mechanical package	inch	19 "	2U-Rack mount Benchtop
Supply power consumption	W	200	@Pout max=1W
Connector		BNC	
ENVIRONMENTAL			
Operating temperature	°C	15 to 35	
Operating relative humidity	%	5 to 95	Non-condensing







E-Stop switch

System Power Button

Input connection for the test laser

Output connections of the system

CUSTOMIZATION

The **ARCTIC-1550** is a self-heterodyne 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 responsibility for CDRH certification of the full system that incorporates this industrial laser.





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