

# ARCTIC-1550

### Self-Heterodyne System

### **Key Features**

- Bandwidth from 1500-1600nm
- CW Operation
- Pulsed mode operation for selected f/τ combinations
- Pin < 200 mW</li>
- Linewidth > 500kHz
- All-PM Fiber
- Operation Temp: 15 to 35°C
- Efficient cooling system

The CYBEL ARCTIC-1550 is a benchtop self-heterodyne system, that allows the linewidth measurement of lasers operating at wavelengths between 1500-1600nm in CW or pulsed mode for selected frequency and pulse length combinations. The self-heterodyne signal must be recorded by an external photodiode allowing for linewidth measurement. Heterodyne operation is also possible.

The system is a highly reliable all-fiber design with a simple user interface 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 with an all polarization maintaining (PM) fiber.

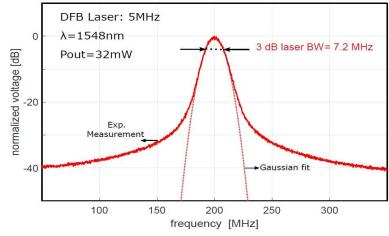


### **Applications**

- Laser Linewidth measurement
- · Heterodyne of two signals

#### Cybel Products

ARCTIC-1064



5MHz Linewidth DFB Measurement

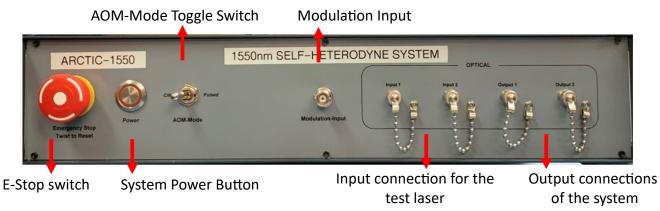


1195 Pennsylvania Ave. Bethlehem, PA 18018 Phone: 610-691-7012 Sales: contact@cybel-llc.com

Website: www.cybel-llc.com

# ARCTIC-1550 Self-Heterodyne System

OPTICAL	Unit	Value	Comment
Center wavelength	nm	1550	1500 to 1600
Input power	mW	200	Scalable ; High power available
Spectral width	kHz	>500	With 3Km delay fiber
Fiber Type		PM Fiber	
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	٧	0 to 5	TTL 50Ω impedance
Warm-up time	min	20	
Mechanical package	inch	19 "	2U-Rack mount Benchtop
Supply power consumption	W	20	
Connector		BNC	
ENVIRONMENTAL			
Operating temperature	°C	15 to 35	
Operating relative humidity	%	5 to 95	Non-condensing



#### **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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