



Technical Specifications

Model No. BG-TNL-M2-1550.12-3K-13-0.9L-1m-FC/APC

Product Name Tunable PM Ultra Narrow Linewidth Laser

Technical File BG.04.0051-000

Version V1.2

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1 Specifications

1.1 Optical Specifications

Parameter	Min.	Typ.	Max.	Unit
Center Wavelength	-	1550.12	-	nm
Output Power	-	10	13	dBm
Linewidth	-	-	3	kHz
Relative Intensity Noise @1Hz-100Khz	-	-	-110	dB/Hz
Output Power Stability	-	-	1	%
Wavelength Stability	-0.5	-	0.5	pm
SMSR	-	>50	-	dB
Stabilization Duration	-	<15	-	Min
Polarization Extinction Ratio	23	-	-	dB
Wavelength Tuning Speed	-	-	5	KHz
Wavelength Tuning Range	-	1	2.5	GHz

1.2 Working Environment

Parameter	Min.	Typ.	Max.	Unit	Remarks
Working Temperature Range	-10	-	+50	°C	
Storage Temperature Range	-20	-	+60	°C	
Relative Humidity	0	-	90	%	

1.3 Electrical Specifications

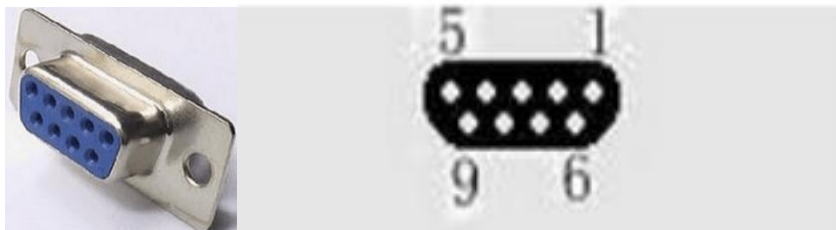
1.3.1 Power Specifications

Parameter	Min.	Typ.	Max.	Unit	Remarks
Power Supply	+4.75	+5	+5.25	V	
Power Consumption	-	5	15	W	

1.3.2 Connector Type

RS232 communication connector

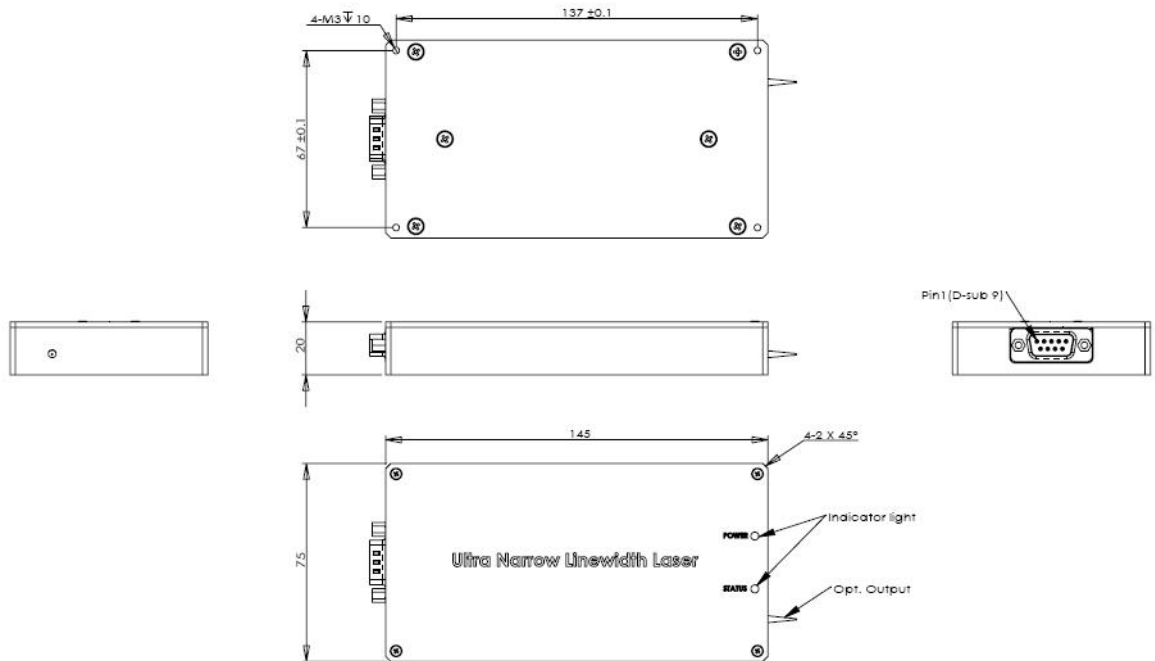
DB9 Female		Color
2	TX	Red
3	RX	Yellow
5	GND	Black



2 Mechanical Structure and Pigtail

2.1 Mechanical Structure

Dimensions in mm: 145x75x20mm



2.2 Pigtail

Item	Specifications
Fiber Type	PandaPM fiber 900um Tube
Pigtail Length	1000mm
Fiber Colour	Red
Fiber Connector	FC/APC

3 Software Protocol Definition

3.1 Serial Communication Protocol




Item	Value	Unit
Baudrate	9600	Bit/s
Data Bits	8	Bit
Stop Bits	1	Bit
Parity	None	-

4 Labeling



4.1 Interface Label

Fiber Interface	Labeling	Label Type
Fiber Output	Output	Tube

4.2 Warning Label

Warning Label	Labeling	Label Type and Location
Laser Safety Warning Label		
Anti-Static Warning Label		

4.3 Identification Label

Label	Labeling	Label Type and Location
SN/PN		

5 Parts and Accessories

Item	Quantity
Ultra Narrow Linewidth Laser Module	1 PC
User Manual	1 PC
Test Report	1 PC
Serial Interface Cable	1 PC
Control Software	1 PC