



4 Pin Laser Module

High Power Multi-Mode SemiNex Lasers
 3.8 Watts of CW Power in a single fiber
 1300, 1480, 1570, and 1650 nm
 Custom Wavelengths Available

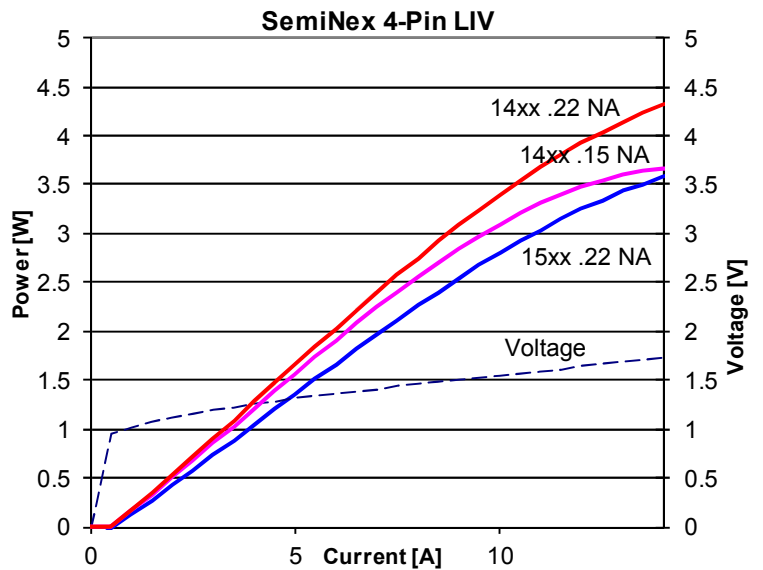
Features

- High output power
- High dynamic power range
- High efficiency
- Standard Low Cost Package

Applications

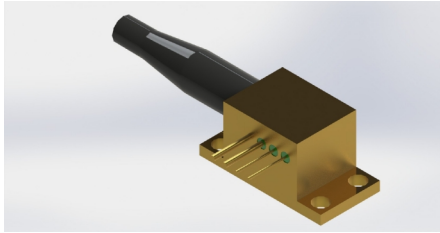
- Medical laser equipment
- LIDAR
- Free Space Optical Communication
- DPSS pump lasers
- Military / Aerospace

SemiNex delivers the highest available power at infrared wavelengths between 13xx and 17xx nm. When necessary we will further optimize the design of our InP laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and market performance demands. Typical results and packaging options are shown. Contact SemiNex for additional details or to discuss your specific requirements



All statements, technical information and recommendation related to the product herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness hereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. SemiNex Incorporated reserves the right to change at any time without notice, the design, specification, deduction, fit or form of its described herein, including withdrawal at any time of a product offered for sale herein. SemiNex Incorporated makes no representations that the products herein are free from any intellectual property claims of others. Please contact SemiNex Incorporated for more information. © 2012 Copyright SemiNex Incorporated. All rights reserved.



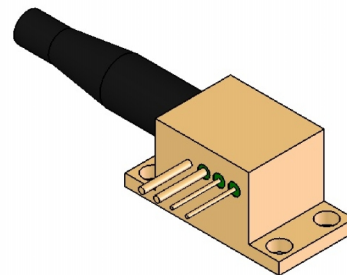
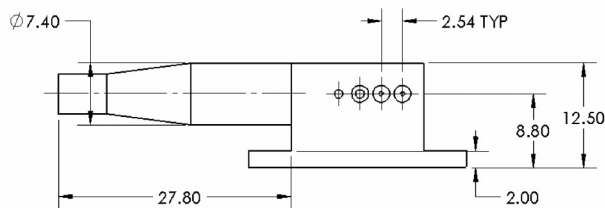
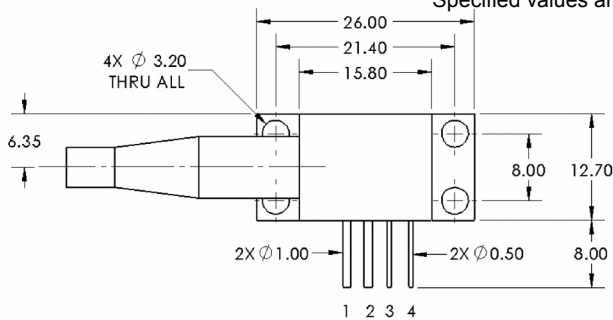


4 Pin Laser Module



	Symbol	4PN-104	4PN-106	4PN-108	4PN-109	Units
Optical						
Center Wavelength	λ_c	1480	1480	1550	1560	nm
Output power (CW)	P_o	3.8	3.4	3.3	3.3	watts
Spectral Width	$\Delta\lambda$	10	10	10	10	nm 3dB
Slope Efficiency	η_o	0.35	0.3	0.3	0.3	W/A
Optical Fiber Core Diameter		105	105	105	105	μm
Optical Fiber NA		0.22	0.15	0.22	0.22	
Electrical						
Power conversion Efficiency	η	0.2	0.16	0.17	0.17	%
Threshold Current	I_{th}	0.6	0.6	0.6	0.6	A
Operating Current	I_{op}	12	12	12	12	A
Operating Voltage	V_{op}	1.6	1.6	1.7	1.7	V
Series Resistance	R_s	0.05	0.05	0.05	0.05	ohm
Lead Soldering Temperature	$^{\circ}\text{C}$	250	250	250	250	$^{\circ}\text{C}$
Mechanical						
Weight		25.0	25.0	25.0	25.0	grams
Operating Temperature		10 to 30	10 to 30	10 to 30	10 to 30	$^{\circ}\text{C}$
Storage Temperature		-20 to 80	-20 to 80	-20 to 80	-20 to 80	$^{\circ}\text{C}$
Fiber Length		1.5	1.5	1.5	1.5	meters
Connector		SMA-905	SMA-905	SMA-905	SMA-905	

Specified values are rated at constant heat sink temperature of 20°C



PIN OUT: (FOR REFERENCE ONLY, REFER TO DOCUMENTATION SUBMITTED WITH PRODUCT FOR ACTUAL PIN OUT)

1. LD ANODE (+)
2. LD CATHODE (-)
3. PD (-)
4. PD (+)

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