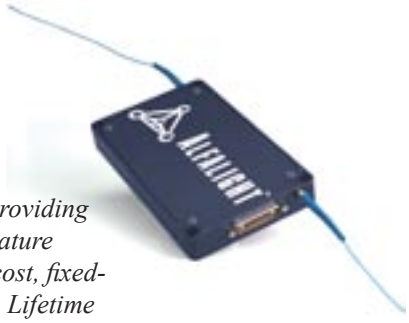
Wavelength Stabilized CPM II

21W 6+1:1 Pump / Signal Combiner



The CPM-II products are ideal high-brightness fiber laser pump sources providing precision wavelength control of the pump light through integrated temperature stabilization. The compact 4.5 × 7 × 1 inch solution requires only a low-cost, fixed-voltage supply to drive the temperature control and a laser current supply. Lifetime exceeds 10,000 hours. Wavelength is adjustable from the factory-set 976.0 nm via an on-board potentiometer or optional external voltage input. A 2-meter cable is included.

The AC2-976-31-213 provides 21 watts of 976 nm power in a convenient pass-through configuration, with 5/125 micron signal input and 5/125/245 micron pump-plus-signal.

NEW! 33% Higher Power

Features

- 21 watts output power
- 5/125um signal fiber in, 5/125/245um pump+signal double-clad fiber out
- Stable 976.0nm output with integrated controller requires only fixed 3.3/5V power supply
- Advanced diode protection circuitry
- Highly reliable hermetic design

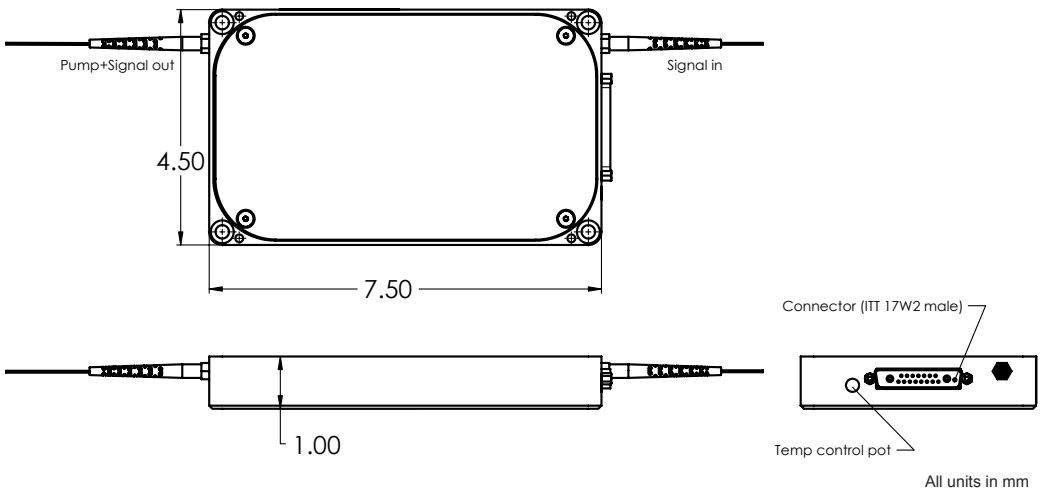
Applications

- Fiber laser pumping
- Pulsed fiber lasers
- Power amplifiers
- LIDAR/LADAR
- Pulsed and CW operation

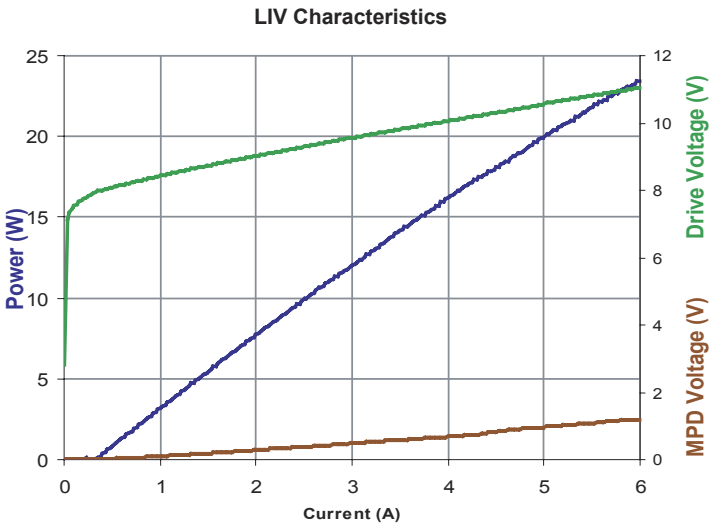
Device Characteristics

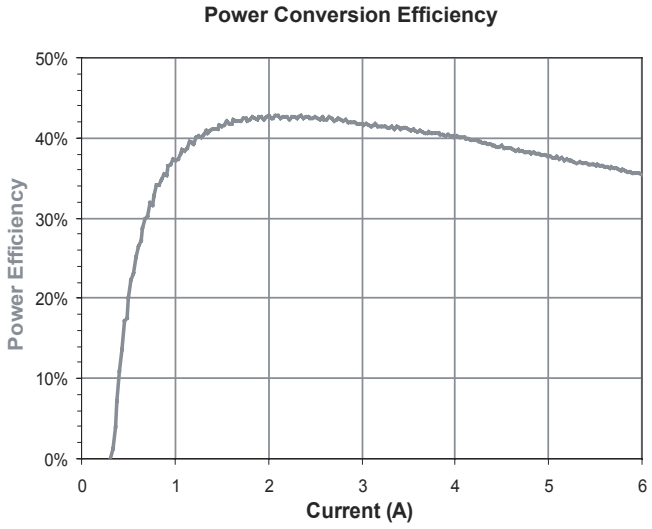
Optical Performance - Pump	Symbol	AC2-976-31-213	Unit
CW optical output power	P_{op}	21	W
Center wavelength, operating	λ_c	976 ± 0.5	nm
Wavelength adjustment control	nm	± 2	nm
Spectral width, FWHM	$\Delta\lambda$	3.5	nm
Operating current	I_O	5.5	A
Operating voltage	V_O	10.5	V
Operating mode	R_S	CW or pulsed	
Overvoltage/overcurrent protection		Provided	
Encircled flux		> 95%	
Pump power optical monitor		50	mV/W
Fiber jacket		900 µm furcation	
Optical Performance - Signal			
Input port		5/125/245 PM	µm
Output port		5/125 PM + 125/250 DCF	µm
Operating wavelength	λthru	1060 (typical)	nm
Optical transmission		> 80%	
Fiber length		1.0	m
Thermal Performance			
Power requirements		Fixed voltage source required to drive TEC and contol circuit	
Supply voltage		3.3 - 5.0	V
Supply current		7.5 (typical)	A
Laser operating temperature	T_{set}	10 - 40	ºC
Case operating temperature	T_{case}	15 - 45	ºC
Dissipation		50 W (typical) at 25ºC	

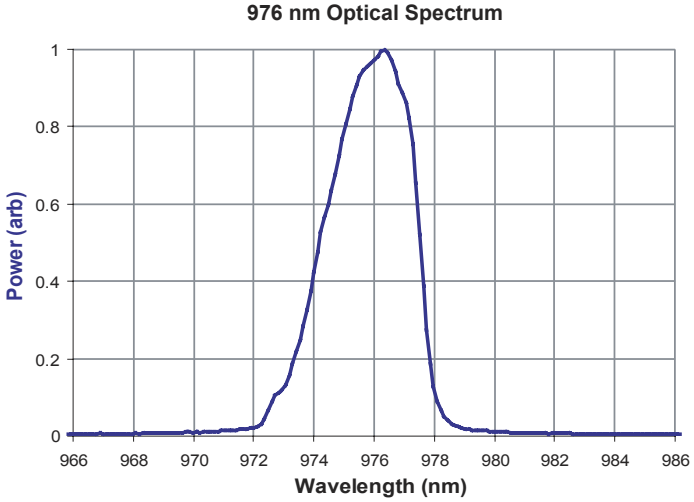
Package Dimensions



Typical Performance







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