

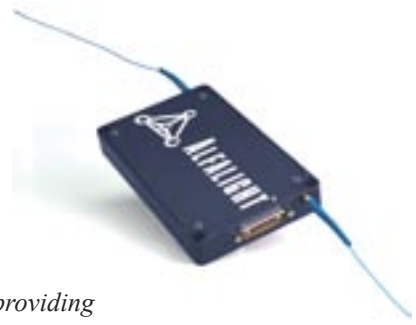


# Wavelength Stabilized CPM II

## 12W 6+1:1 Pump / Signal Combiner

### Integrated Grating Stabilization

(Preliminary Specification)



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  $4.5 \times 7 \times 1$  inch solution requires only a laser current supply. Lifetime exceeds 10,000 hours. A 2-meter cable is included.

The AC2-976-31-121 includes patented Alfalight WST stabilization technology. No TEC or power supply is required. It provides 12 watts of 976 nm power in a convenient pass-through configuration, with 5 micron PM signal input and 125 micron pump cladding.

**NEW!**

#### Features

- 12 watts output power
- 5/125 $\mu$ m signal fiber in, 5/125/245 $\mu$ m pump+signal double-clad fiber out
- Stable 976.0nm output using Alfalight WST diodes.
- Advanced diode protection circuitry
- Highly reliable hermetic design
- No TEC required

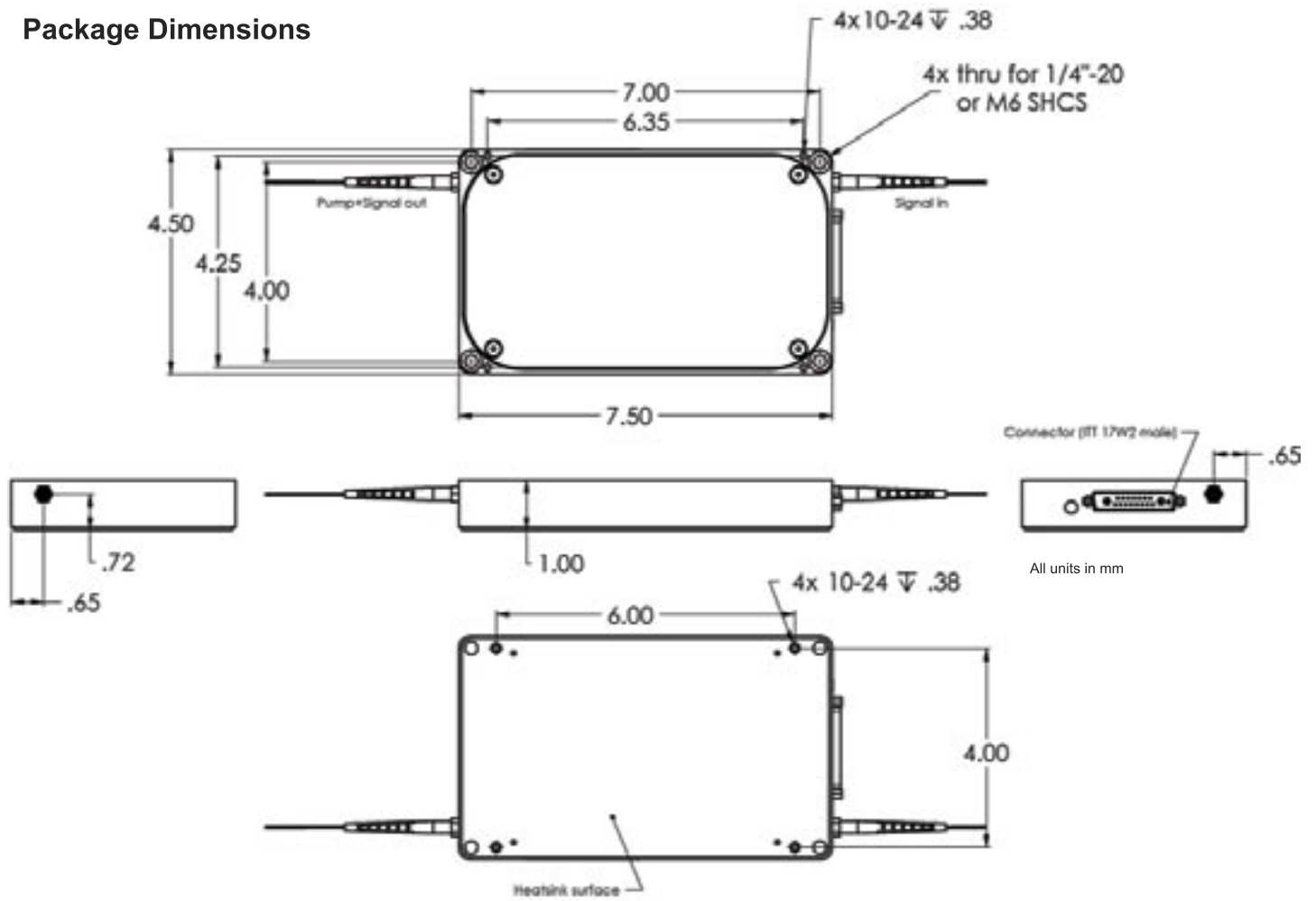
#### Applications

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

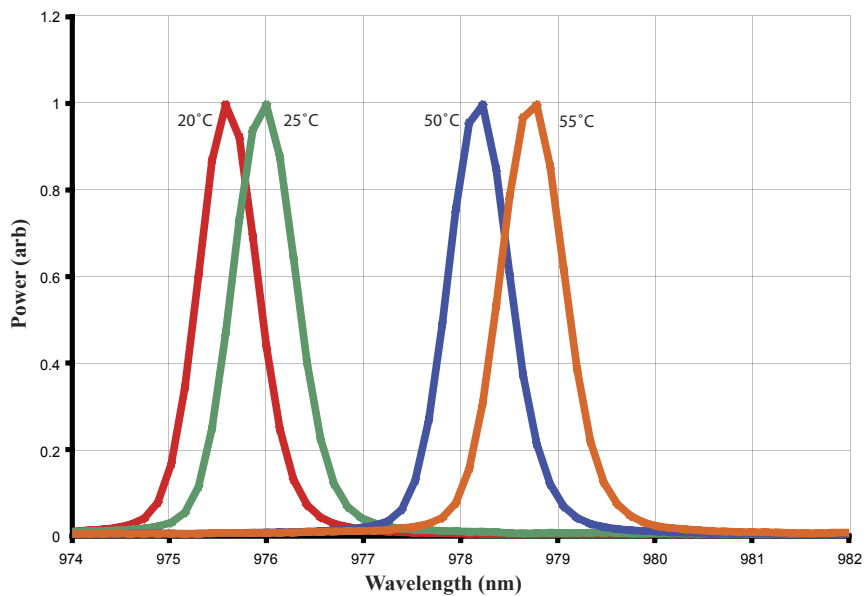
#### Device Characteristics

Optical Performance - Pump	Symbol	AC2-976-31-121	Unit
CW optical output power	$P_{op}$	12	W
Center wavelength, operating	$\lambda_c$	$976 \pm 1.5$	nm
Spectral width, FWHM	$\Delta\lambda$	0.5	nm
Operating current	$I_o$	3.8	A
Operating voltage	$V_o$	10	V
Operating mode	$R_s$	CW or pulsed	
Overvoltage/overcurrent protection		Provided	
Encircled flux		> 95%	
Pump power optical monitor		50	mV/W
Power requirements		5.0V @ 10mA for monitor photodiode only	
Fiber jacket		900 $\mu$ m PVDF furcation	
<b>Optical Performance - Signal</b>			
Input port		5/125/245 PM	$\mu$ m
Output port		5/125 PM + 125/250 DCF	$\mu$ m
Operating wavelength	$\lambda_{thru}$	1060 (typical)	nm
Optical transmission		> 80%	
Fiber length		Input 1.0m, output 2.0m	
<b>Thermal Performance</b>			
Case operating temperature	$T_{case}$	15 - 50	$^{\circ}$ C
Dissipation		26 W (typical) at 35 $^{\circ}$ C	

## Package Dimensions



Spectrum - WST CPM Constant Power over Temperature



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