



## MULTIMODE COMPONENTS

## (6+1) x 1 PM HIGH POWER Pump and Signal Combiners

ITF Labs' Multimode Pump and Signal Combiners feature exceptional optical characteristics. These devices can be used to combine the power from several multimode laser diodes and couple that power with a signal feed, delivering the combined power for applications in industrial, military, medical and telecommunications markets.

ITF Labs' Multimode Combiners offer efficient power transfer for high power applications like fiber lasers and fiber amplifiers, with a maximum conservation of brightness. The Multimode Combiners can be designed to meet a wide range of power handling configurations, number of input fibers and adaptation to different fiber types.



For more information on this or other products and their availability, please contact our customer service at **514.748.4848** (Int'l) / **1.888.922.1044** (Canada & USA only) or via e-mail at [info@itflabs.com](mailto:info@itflabs.com)

### KEY FEATURES

- High Power Transfer Efficiency
- Preservation of Modal Content
- Wavelength Insensitive
- High PER
- Custom Configurations Available
- RoHS Compliant

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### SPECIFICATIONS

#### STANDARD CONFIGURATIONS

Product Code	PMC06112631	PMC06113521	PMC06113921	PMC06112231
<b>Optical Specifications</b>				
Signal Operating Wavelengths	1040-1080 nm			
Pump Operating Wavelengths	800-1000 nm			
Number of Multimode Inputs	6			
Number of Signal Ports	1			
Number of DCF Ports	1			
Pump Input Fiber Core/clad diameter NA	105/125 $\mu$ m 0.22	200/220 $\mu$ m 0.22		105/125 $\mu$ m 0.22
Signal Input Fiber Core/clad diameter NA	PM 25/250 $\mu$ m 0.11/0.46	PM 20/400 $\mu$ m 0.06/0.46	PM 10/125 $\mu$ m 0.08	PM 980
Output Fiber Core/clad diameter NA	PM 25/250 $\mu$ m 0.11/0.46	PM 20/400 $\mu$ m 0.06/0.46	PM 20/400 $\mu$ m 0.06/0.46	PM 25/250 $\mu$ m 0.11/0.46
Power per Multimode Input Total Power	25 W 150 W	50 W 300 W	100 W 600 W	
Maximum Pump Insertion Loss	< 0.75 dB		< 0.3 dB	
Maximum Signal Insertion Loss	< 0.5 dB	< 0.2 dB	< 0.5 dB	< 0.7 dB
Optical Return Loss	35 dB		45 dB	
Polarization Extinction Ratio	20 dB	25 dB	15 dB	
<b>Mechanical Specifications</b>				
Dimensions	60 x 12 x 6.5 mm			
Fiber Pigtail Length Input/Output (1)	A= 1000 mm B= 2000 mm C= 3000 mm			

(1) Pricing is dependant on fiber pigtail length.

PATENT PENDING

### ORDERING INFORMATION

For standard products, please use product codes specified above.  
ITF Labs can also develop custom multimode power combiners to meet  
a wide range of technical requirements.



**ITF Labs**

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