



## MULTIMODE COMPONENTS

## (2+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
- Custom Configurations Available
- RoHS Compliant

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### STANDARD CONFIGURATIONS

Product Code	PMC02112A71	PMC02112411	PMC02112631	PMC02113631
<b>Optical Specifications</b>				
Signal Operating Wavelengths	1040-1080 nm			
Pump Operating Wavelengths	800-1000 nm			
Number of Multimode Inputs	2			
Number of Signal Ports	1			
Number of DCF Ports	1			
Pump Input Fiber Core/clad diameter NA	105/125 µm 0.22			200/220 µm 0.22
Signal Input Fiber Core/clad diameter NA	PM 10/125 µm 0.08/0.46	PM 15/130 µm 0.08/0.46	PM 25/250 µm 0.11/0.46	PM 25/250 µm 0.11/0.46
Output Fiber Core/clad diameter NA	PM 10/125 µm 0.08/0.46	PM 15/130 µm 0.08/0.46	PM 25/250 µm 0.11/0.46	PM 25/250 µm 0.11/0.46
Power per Multimode Input	50W			
Total power	100W			
Maximum Pump Insertion Loss	< 0.5 dB			< 0.75 dB
Maximum Signal Insertion Loss	< 0.35 dB			< 0.5 dB
Optical Return Loss	35 dB			
Polarization Extinction Ratio	20 dB			25 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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