



## MULTIMODE COMPONENTS

## (2 + 1) x 1 Pump and Signal Combiners (PM and non-PM)

Avensys Tech's 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.

Avensys Tech's 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@avensysotech.com](mailto:info@avensysotech.com)

### KEY FEATURES

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



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### SPECIFICATIONS

#### STANDARD CONFIGURATIONS

Product Code	MMC02112A60	MMC02112CC0	PMC02112340	PMC02112860
<b>Optical Specifications</b>				
Signal Operating Wavelengths	1530-1575 nm	1040-1080 nm	1040-1080 nm	1530-1575 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 $\mu$ m 0.22			
Signal Input Fiber Core/clad diameter NA	8/125 $\mu$ m 0.14/0.46	10/125 $\mu$ m 0.08/0.46	PM 5/130 $\mu$ m 0.14/0.46	PM 9/125 $\mu$ m 0.12/0.46
Output Fiber Core/clad diameter NA	8/125 $\mu$ m 0.14/0.46	10/125 $\mu$ m 0.08/0.46	PM 5/130 $\mu$ m 0.14/0.46	PM 9/125 $\mu$ m 0.12/0.46
Power per Multimode Input	7 W			
Total power	14 W			
Maximum Pump Insertion Loss	< 0.5 dB			
Maximum Signal Insertion Loss	< 0.35 dB			
Optical Return Loss	35 dB			
<b>Mechanical Specifications</b>				
Length x Diameter	65 x 3.5 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.  
Avensys Tech can also develop custom multimode power combiners  
to meet a wide range of technical requirements.



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