

### 6+1x1 SIGNAL PATH HIGH POWER COMBINERS

AOFR's fused biconic taper coupler technology and advanced production platform has been extended to laser power combiners. AOFR's signal path power combiners enable high efficiency coupling for high power lasers into a single double-clad output fiber with a low loss signal path.

All AOFR combiners conform to stringent environmental and mechanical standards to give high reliability and long lifetime for all field applications.



#### FEATURES

- All fiber construction with high efficiency
- High Reliability
- Up to 25W per port power handling
- Different fiber sizes and fiber numerical apertures available
- Stable environmental performance
- Metal packaging to maximize heat dissipation
- Suitable for air or water cooled applications

#### APPLICATIONS

- Fiber lasers for a range of applications including
  - Industrial
  - Military
  - Medical
- Fiber Amplifiers

#### SPECIFICATIONS

Pump	Fiber	105/125 $\mu$ m, 0.22NA or 0.15NA
	Operating Wavelength	790 -1000nm
	Efficiency	>90%
	Power per input port *	25W
Signal	Fiber	HI1060, SMF28e, LMA, PLMA
	Operating Wavelength	1064nm, 1550nm and 2050nm
	Efficiency	>85%
	PER	>20dB
Output	Fiber	0.45NA Dual Clad with matched signal path

\* with appropriate heat sinking

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### 6+1x1 ORDERING INFORMATION

Catalog Number	Input fiber core dia.(NA)/clad dia.	Signal fiber	Output fiber core dia.(NA)/clad dia.(NA)/coat dia.
LC7010105UP	105(0.22)/125µm	HI1060	5(0.14)/125(0.45)/250µm
LC7020105UP	105(0.15)/125µm	HI1060	5(0.14)/125(0.45)/250µm
LC7010202UP	105(0.22)/125µm	SMF28e	7(0.12)/125(0.45)/250µm
LC7020202UP	105(0.15)/125µm	SMF28e	7(0.12)/125(0.45)/250µm
LC7010415UP	105(0.22)/125µm	PMF1060	5(0.14)/130(0.45)/250µm
LC7020415UP	105(0.15)/125µm	PMF1060	5(0.14)/130(0.45)/250µm
LC7011024UP	105(0.22)/125µm	PMF1550	7(0.12)/130(0.45)/250µm
LC7021024UP	105(0.15)/125µm	PMF1550	7(0.12)/130(0.45)/250µm
LC7011306UP	105(0.22)/125µm	LMA 10(0.075)/125µm	10(0.075)/125(0.45)/250µm
LC7021306UP	105(0.15)/125µm	LMA 10(0.075)/125µm	10(0.075)/125(0.45)/250µm
LC7011125UP	105(0.22)/125µm	LMA 15(0.08)/130µm	15(0.08)/130(0.45)/250µm
LC7021125UP	105(0.15)/125µm	LMA 15(0.08)/130µm	15(0.08)/130(0.45)/250µm
LC7010923UP	105(0.22)/125µm	PLMA 15(0.08)/130µm	15(0.08)/130(0.45)/250µm
LC7020923UP	105(0.15)/125µm	PLMA 15(0.08)/130µm	15(0.08)/130(0.45)/250µm
LC7010529UP	105(0.22)/125µm	PLMA 10(0.085)/125µm	25(0.06)/250(0.45)/400µm
LC7020529UP	105(0.15)/125µm	PLMA 10(0.085)/125µm	25(0.06)/250(0.45)/400µm

The above combiners have 5x5x50mm aluminum packaging with 1 meter pigtailed as standard.  
Non-standard fiber types, packaging and pigtail lengths are available on request.

### PACKAGE OUTLINES

