MULTIMODE COMPONENTS

3x1, 4x1, 7x1 and 19x1 High Power Pump Combiners

For Co-Pumped Laser Designs and Direct Diode Applications

ITF Technologies' High Power Multimode Pump Combiners feature exceptional optical performance. These devices can be used to combine the power from several multimode laser diodes into a single clad or double clad fiber (DCF). These combiners are designed to address industrial, research and medical markets. They can meet a wide range of power handling configurations and a large selection of input/output fiber types.

ITF Technologies also offer "all glass" High Power Multimode Combiners for direct pumping with a maximum conservation of brightness for high power applications like direct diode materials processing and "combiner tree" fiber laser designs.



KEY FEATURES

- High Power Transfer Efficiency
- Wavelength Insensitive
- Custom Configurations Available
- ROHS Compliant

APPLICATIONS

- Fiber Lasers
- Fiber Laser Combination
- kW Class Fiber Lasers
- Industrial & Research

itf Technologies
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LIGHTING THE WAY

MULTIMODE COMPONENTS

3x1, 4x1, 7x1 and 19x1 High Power Pump Combiners

FOR CO-PUMPED LASER DESIGNS AND DIRECT DIODE APPLICATIONS

3x1and4x1 - Double Clad Fiber Output

PUMP FIBER	OUTPUT FIBER	POWER HANDLING (PUMPS)	PRODUCT CODE
105/125 0.22	125 0.46	100 W/port	MMC03012011
105/125 0.22	125 0.46	100 W/port	MMC04012011

7x1 - Double Clad Fiber Output

PUMP FIBER	OUTPUT FIBER	POWER HANDLING (PUMPS)	PRODUCT CODE
105/125 0.15	125 0.46	100 W/port	MMC07011011
105/125 0.15	25/250 um NA=0.11/0.46	100 W/port	√
105/125 0.15	20/400 um NA=0.06/0.46	100 W/port	√
105/125 0.22	125 0.46	100 W/port	MMC07012011
105/125 0.22	25/250 um NA=0.11/0.46	100 W/port	MMC070120D1
105/125 0.22	20/400 um NA=0.06/0.46	100 W/port	MMC07012021
200/220 0.22	20/400 um NA=0.06/0.46	200 W/port	MMC0701C3561
220/242 0.22	20/400 um NA=0.06/0.46	200 W/port	MMC0701C3866

19x1 - Double Clad Fiber Output

PUMP FIBER	OUTPUT FIBER	POWER HANDLING (PUMPS)	PRODUCT CODE
105/125 0.22	25/250 um NA=0.11/0.46	40 W/port	MMC190120D1
106.5/125 0.22	20/400 um NA=0.06/0.46	140 W/port	MMC1901C8605

Custom feature : Visible light tracker with optimal transmission is available as (6+1)x1 and (18+1)x1 configurations upon request

Typical power handling presented
Custom designs and prototypes also available

3x1 and 4x1 - Direct Pumping Combiners - High Brightness Output

PUMP FIBER	OUTPUT FIBER	POWER HANDLING (PUMPS)	PRODUCT CODE
105/125 0.22	200/220 0.22	100 W/port	MMC03012081
105/125 0.22	200/220 0.22	100 W/port	MMC04012081
105/125 0.22	220/242 0.22	100 W/port	MMC0301C5362
105/125 0.22	220/242 0.22	100 W/port	MMC040120E1

7x1 - Direct Pumping Combiners - High Brightness Output

PUMP FIBER	OUTPUT FIBER	POWER HANDLING (PUMPS)	PRODUCT CODE
105/125 0.22	220/242 0.22	50 W/port	MMC070120E4
105/125 0.22	400/440 0.22	100 W/port	MMC07012091
200/220 0.22	600/660 0.22/0.46	200 W/port	MMC0701C10040

√: Product available - product code not yet defined

PACKAGE DIMENSIONS
High Power:60.0x12.0x6.5 mm
Operating wavelength:800 - 1000 nm

Typical power handling presented
Custom designs and prototypes also available

O-Net Communications

Sales: contact@cybel-llc.com Website: www.cybel-llc.com 62 Highland Avenue, Bethlehem, PA 18017 Phone: 610-691-7012