



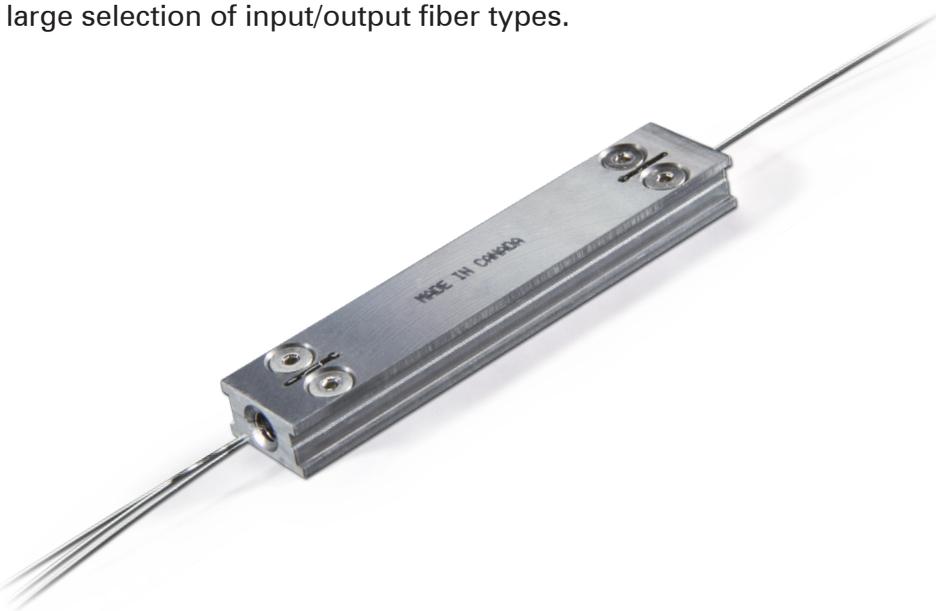
**(6+1)x1, (18+1)x1 and (24+1)x1**

## High Power Pump and Signal Combiners

For Co-Pumped Laser and Amplifier Designs

ITF Technologies' High Power Multimode Pump and Signal Combiners feature exceptional optical performance. These devices can be used to combine the power from several multimode laser diodes with a signal feed into a double clad fiber (DCF) or triple clad fiber (TCF). These combiners are designed to address industrial and research applications.

ITF Technologies' High Power Multimode Pump and Signal Combiners also offer extremely efficient pump power transmission for applications such as fiber lasers and fiber amplifiers, with optimal signal transmission quality when necessary or in lower cost solutions when the signal port is used for a visible tracker or monitoring. They are designed to meet a wide range of power handling needs and a large selection of input/output fiber types.



### KEY FEATURES

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

### APPLICATIONS

- Fiber Lasers
- Fiber Laser Seed Amplifiers
- Fiber Laser Power Amplifiers
- kW Class Fiber Lasers
- Industrial & Research

### FOR MORE INFO

Website: [www.itftechnologies.com](http://www.itftechnologies.com)  
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**(6 + 1)x1, (12 + 1)x1, (18 + 1)x1 and  
(24 + 1)x1 High Power Pump and Signal  
Combiners**

**FOR CO-PUMPED LASER AND  
AMPLIFIER DESIGNS**

| CONFIGURATION      | PUMP POWER HANDLING  | OUTPUT DIAMETER | NOTES   |
|--------------------|----------------------|-----------------|---|
| (6 + 1)x1          | Up to 100 W/port     | 250 um DCF      | Standard operating bands: 1.0 um, 1.5 um. 2 um possible in certain cases.                                 |
|                    | Up to 400 W/port     | 400 um DCF      |   |
| (12 + 1)x1         | Up to 150 W/port     | 400 um DCF      | When needed, signal optimized for fundamental mode transmission:<br>Typical <0.5 dB fundamental mode loss |
| (18 + 1)x1         | Up to 200 W/port     | 400 um DCF      | Cost effective total core loss solutions also available<br>PER value of PM components: > 15 dB            |
| (24 + 1)x1         | Up to 140 W/port     | 400 um DCF      |   |
|                    | Up to 270 W/port     | 600 um TCF      |   |
| PACKAGE DIMENSIONS | 60.0 x 12.0 x 6.5 mm |                 | DCF - Double-clad fiber TCF - Triple-clad fiber   |

**ADDITIONAL INFORMATION**

Compatible with most standard fibers.  
Power handling is provided for general reference only.  
Polarization-maintaining versions (PM) available on demand.  
Custom designs and prototypes also available on demand.

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**ORDERING INFO**

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