

Power Combiners

Power Combiners are available in all-fiber Multimode, Polarization-Maintaining, or Single-Mode constructions. There are designed for efficient coupling into cladding pumped fibers. Custom designs and value-added Gain Module or Laser Assemblies are also available. See individual variations below:

Product Description	Typical Applications	Features and Benefits
<p>Multimode</p> <p>Multimode Power combiners couple 7 or 19 multimode high-power sources into cladding pumped fiber.</p> <p>MM Input Fiber (7 shown)</p>  <p>for connection to Broad Area Emitters</p>	<ul style="list-style-type: none"> • High-power fiber lasers for use in the following industries: <ul style="list-style-type: none"> Industrial Military Medical 	<ul style="list-style-type: none"> • Easy splicing • High coupling efficiency • Compatible with pump diodes with multimode input fiber of 0.15 NA or 0.22 NA • Provides scalability
<p>Single-Mode</p> <p>Single-Mode Power Combiners couple 6 or 18 multimode high-power sources and 1 single-mode signal source for combined power output or for use with a cladding pumped fiber.</p> <p>MM Input Fiber (6 shown)</p>  <p>1 or 1.5 μm SM Signal</p> <p>for connection to Broad Area Emitters</p>	<ul style="list-style-type: none"> • This "Signal fiber design" is used for applications in the following industries: <ul style="list-style-type: none"> Industrial Military Medical • A single-mode Power Combiner can be used to construct an amplifier for use in telecommunications • Optimized for 1 μm and 1.5 μm applications 	<ul style="list-style-type: none"> • Compatible with 915 nm and 976 nm pump diodes with multimode pigtail fiber with NA of .15 or .22 • Easy splicing • High coupling efficiency • Provides scalability
<p>Polarization-Maintaining</p> <p>Polarization-Maintaining Power Combiners couple 6 or 18 multimode high-power sources and 1 polarization-maintaining (PM) source for combined power output or for use with a PM cladding pumped fiber.</p> <p>MM Input Fiber (6 shown)</p>  <p>1 or 1.5 μm PM Signal</p> <p>for connection to Broad Area Emitters</p>	<ul style="list-style-type: none"> • This "Signal fiber design" is used to construct high-power amplifiers requiring signal polarization outputs for use in the following industries: <ul style="list-style-type: none"> Industrial Military Medical Telecommunications • Optimized for 1 μm and 1.5 μm applications 	<ul style="list-style-type: none"> • All PM design—PM signal input and output • Compatible with 915 nm and 976 nm pump diodes with multimode pigtail fiber with NA of .15 or .22 • Easy splicing • High coupling efficiency • Provides scalability