

(2+1)x1 and (1+1)x1 Pump and Signal Combiners

For Fiber Lasers and Amplifiers

ITF Technologies' Multimode Pump and Signal Combiners feature exceptional optical performance. These devices can be used to combine the power from one or two laser diodes with a signal feed into a double clad fiber (DCF). These combiners are designed to address the industrial, medical and telecommunications markets.

ITF Technologies' Multimode Pump and Signal Combiners offers very efficient pump power transmission in applications such as fiber lasers and fiber amplifiers, with the best signal quality transmission. They are designed to meet a wide range of power handling configurations and a large selection of input/output fiber types.



KEY FEATURES

High Power Transfer Efficiency

Preservation of Modal Content

Wavelength Insensitive

Custom Configurations Available

Multiple power handling available

ROHS Compliant

Suitable for co- and counter-pump
applications

APPLICATIONS

Fiber Lasers

Fiber Laser Seed Amplifiers

Fiber Laser Power Amplifiers

CATV Amplifiers

Industrial, Telecom & Research

FOR MORE INFO

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(2 + 1)x1 and (1 + 1)x1 Pump and Signal Combiners

FOR FIBER LASERS AND AMPLIFIERS CONFIGURATION / PACKAGE

Standard signal operating wavelength range: 1040-1080 nm

SIGNAL AND OUTPUT FIBER	(2+1)X1 / HIGH POWER 50 W/PUMP PORT	(2+1)X1 / MID POWER 25 W/PUMP PORT	(2+1)X1 / VALUE LINE 7 W/PUMP PORT	(1+1)X1 / INJECTOR 15 W/PUMP PORT
5/130 μm NA=0.14/0.46	MMC02112DF1	MMC02112DF3	MMC02112DF0	MMC01112DF0
PM 5/130 μm NA=0.14/0.46	PMC02112341	PMC02112343	PMC02112340	PMC01112340
10/125 μm NA=0.08/0.46	MMC02112CC1	MMC02112CC3	MMC02112CC0	MMC01112CC0
PM 10/125 μm NA=0.08/0.46	PMC02112A71	PMC02112A73	PMC02112A70	PMC01112A70
15/130 μm NA=0.08/0.46	MMC02112BA1	MMC02112BA3	MMC02112BA0	MMC01112BA0
PM 15/130 μm NA=0.08/0.46	PMC02112411	PMC02112413	PMC02112410	PMC01112410
25/250 μm NA=0.06/0.46	MMC0211C3867	n/a	n/a	n/a
PM 25/250 μm NA=0.06/0.46	PMC0211C4430	n/a	n/a	n/a
25/250 μm NA=0.11/0.46	MMC021129D1	n/a	n/a	n/a
PM 25/250 μm NA=0.11/0.46	PMC02112631	n/a	n/a	n/a

Standard signal operating wavelength range: 1530-1570 nm

SIGNAL AND OUTPUT FIBER	(2+1)X1 / HIGH POWER 50 W/PUMP PORT	(2+1)X1 / MID POWER 25 W/PUMP PORT	(2+1)X1 / VALUE LINE 7 W/PUMP PORT	(1+1)X1 / INJECTOR 15 W/PUMP PORT
SM 1550 DCF	MMC02112EG1	MMC02112EG3	MMC02112EG0	MMC01112EG0
PM 1550 DCF	PMC02112861	PMC02112863	PMC02112860	PMC01112860
8/125 μm NA=0.14/0.46	MMC02112A61	MMC02112A63	MMC02112A60	MMC01112A60
PM 8/125 μm NA=0.14/0.46	√	√	√	√
25/300 μm NA=0.10/0.46	MMC0211C6313	n/a	n/a	n/a
PM 25/300 μm NA=0.10/0.46	PMC0211C6713	n/a	n/a	n/a

Standard signal operating wavelength range: 1980-2020 nm

SIGNAL AND OUTPUT FIBER	(2+1)X1 / HIGH POWER 50 W/PUMP PORT	(2+1)X1 / MID POWER 25 W/PUMP PORT	(2+1)X1 / VALUE LINE 7 W/PUMP PORT	(1+1)X1 / INJECTOR 15 W/PUMP PORT
10/125 μm NA=0.15/0.46	MMC0211C4057	√	MMC0211C3658	√
PM 10/130 μm NA=0.15/0.46	PMC0211C3962	√	PMC0211C7377	√

√: Product available - product code not yet defined

Pump fiber in all presented product codes: 105/125 μm NA=0.22

PACKAGE DIMENSIONS

High Power: 60.0 x 12.0 x 6.5 mm

Mid Power: 60.0 x 5.0 x 5.0 mm

Value Line and Injector: 65.0 x 3.5 (D) mm

Injector: 40.0 x 3.0 (D) mm

Signal optimized for fundamental mode transmission

Maximum pump insertion loss: 0.5 dB (typical)

Pump Optical Return Loss: > 35 dB

PER value of PM components: > 20 dB

Typical power handling presented

Custom designs and prototypes also available

ORDERING INFO

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