

## ***FFC (Fiber to Fiber Couplers) products family: high power optical couplers for multimode fibers***

**FFC** is a **Fiber to Fiber Coupler** family of products ideal to efficiently couple the single or combined wavelength power laser beam(s) into the user (output) fiber.

Its coupling design based on free space lens ensures a reliable and repeatable delivery of laser power into the user fiber, hence right to the working area. This device is suitable to couple laser power into larger core output fibers with output fiber/input fiber core ratio  $\geq 1.5$ .

Additionally to the efficient coupling of the power (primary) laser beam, **FFC-R** integrates the wavelength combination of a bright red secondary (aiming) beam coaxially coupled into the user (output) fiber.

**FFC-R** can be provided without the red beam pointer (**FFC**), as simple Fiber to Fiber Coupler.

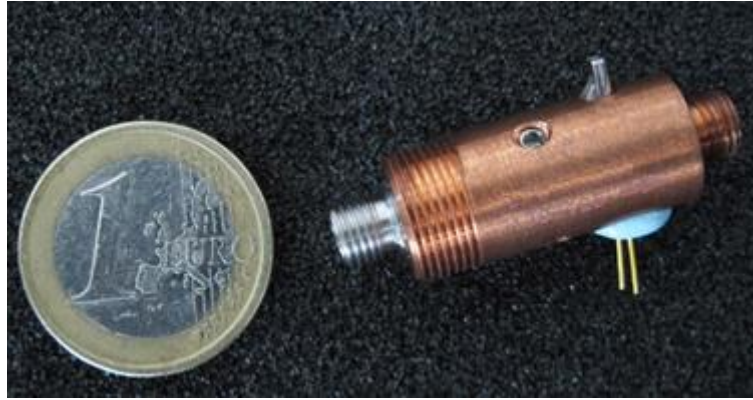
Furthermore, Class III B laser diodes with therapeutic function operating at 660nm can be efficiently coupled as an option using the same mechanical design of the coupler, **FFC-660** code.



**FIBER TO FIBER COUPLERS, NO OPTIONS : FFC**



**FIBER TO FIBER COUPLERS WITH RED BEAM POINTER : FFC-R**



**FIBER TO FIBER COUPLERS WITH THERAPEUTIC DIODE : FFC-660**

**PRODUCTS FAMILY SPECIFICATIONS (specifications are subject to change without notice)**

**FFC NO OPTIONS**

<b>INPUT OPTICAL POWER</b>	W	MAX	10
PRIMARY BEAM WAVELENGTH OPERATING RANGE	nm	MAX	1000
		MIN	800
<b>MAGNIFICATION FACTOR</b>		TYP.	1:1
OUTPUT FIBER N.A. (input fiber with N.A. = 0.22)		MIN	0.22
<b>Fiber OUT / Fiber IN Core RATIO</b>		MIN	>1.5
COUPLING EFFICIENCY (OUTPUT FIBER WITH AR COATING)	%	MIN	95
<b>INPUT PORT CONNECTOR</b>			SMA 905
<b>OUTPUT PORT CONNECTOR</b>			SMA 905
OPERATING TEMPERATURE	°C	MIN	15
		MAX	40

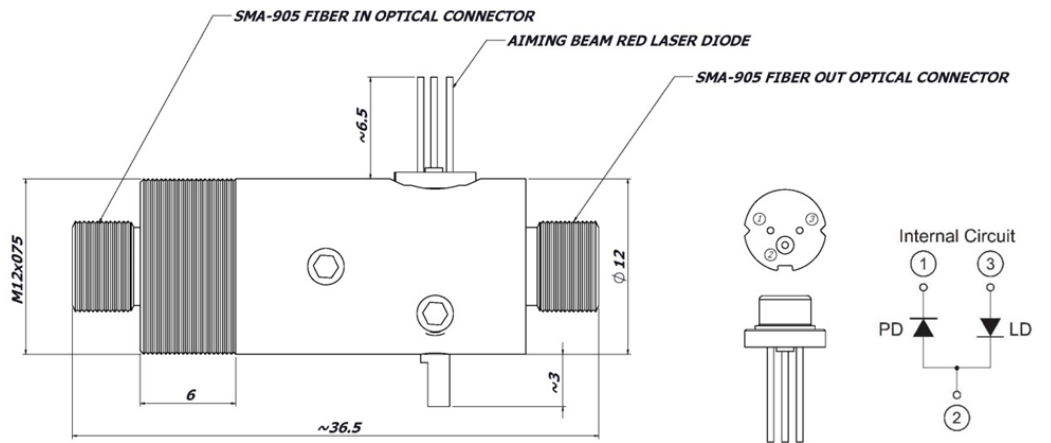
**FFC-R RED AIMING BEAM OPTION**

<b>RED POINTER BEAM POWER RANGE</b>	mW	MAX	1
		MIN	0.35
<b>PACKAGE TYPE</b>			S3

**FFC-660 INTEGRATED THERAPEUTIC LASER OPTION**

<b>INTEGRATED LASER - WAVELENGTH RANGE</b>	nm	MAX	652
		MIN	664
<b>INTEGRATED THERAPEUTIC LASER - OUTPUT POWER</b>	W	MIN	0.02
<b>OUTPUT FIBER CORE</b>	µm	MIN	400
<b>PACKAGE TYPE</b>			S4

**S3 PACKAGE (FFC-R):**



**S4 PACKAGE (FFC-660)**

