

High Power Fiber Collimator (100W CW, SM, LMA, DCD, PM Fibers)

(protected by patents: US7920763B1 US7715664B1)

Product Description

Agiltron's 100W Fiber Collimators are fabricated with Agiltron's proprietary high power handling process and proven advanced end-cap design, it features low insertion loss, large beam size, long work distance and high stability.

Agiltron can provide customized beam size for a wide choice of operating wavelength.



Performance Specifications

High Power Collimator	Min	Typical	Max	Unit
Operating Wavelength (λ_c)		1800-2000		nm
Power Handling			100	W
Insertion Loss		0.4	0.6	dB
Return Loss ^[1]	50			dB
Divergence ^[2]		0.4	0.6	mrad
Extinction Ratio ^[3]		25	50	dB
Beam Roundness	90			%
M^2			1.2	
Beam Diameter		1-5		mm
Operating Temperature	0		+70	°C
Storage Temperature	-40		+85	°C
Package Dimension		$\Phi 30 \times 50$		mm

[1] For LMA fiber or double cladding fiber, return loss may be higher.

[2] Divergence depends on beam size.

[3] For PM fiber.

Features

- High Power Handling
- High Isolation
- High Reliability
- Low IL, PDL & TDL
- Cost Effective

Applications

- Laser Pump Source
- Optical Fiber Amplifier
- Laser Manufacturing
- Laser Marking

High Power Fiber Collimator (100W CW)

Mechanical Footprint Dimensions (mm)



Ordering Information

HPFC-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Power handling	Beam size	Fiber Type		Fiber Length	Connector
	SM=1 PM=2 Special=0	1060nm=1 2000nm=2 1550nm=5 Special=0	10W=01 20W=02 30W=03 50W=05 100W=10	1.0mm=1 2.0mm=2 3.0mm=3 4.0mm=4 5.0mm=5 Special=0 (@1/e ²)	SMF28=2 PM 1550=3 SM1950=4 SM2000=5 PM1950=6 Hi1060=1 PM980=9 Special=0	Bare fiber=1 900um loose tube=3 3 mm loose cable=4 Armor cable (3 mm)=6 Armor cable (5 mm)=7 Special=0	0.25M=1 0.5M=2 1.0 M=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC/PC=7 LC/APC=8 SMA905=9 Special=0