

# Kit PM(6+1)\*1&PMCPs Multi-Mode Pump Combiner (PMMPC&PMCPs)

## Description

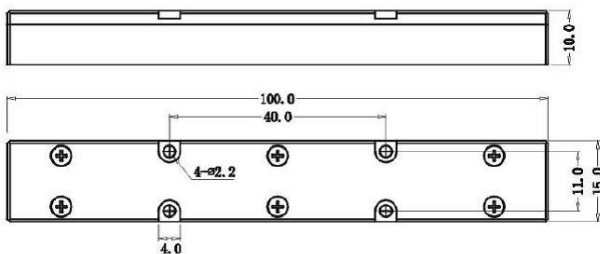
This PM(6+1)\*1 multi-mode fiber combiner is designed for high power fiber laser application. It combines six pump lasers and one signal channel into one double cladding output fiber. And have multimode optical power stripper (Cladding Power Stripper- CPS) at the Signal Input or output fiber. Fiber type can be customized.

## Key Features

- High Signal Transfer Efficiency
- High Pump Efficiency
- High PER
- Wavelength Insensitive
- Custom Configurations Available

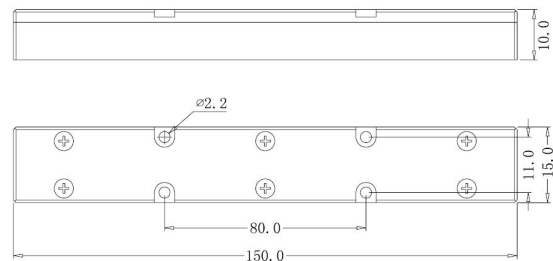
## Mechanical Dimension

(1) C7: 100x15x10 (PM(6+1)\*1)



Total Pump Power Handling  $\leq 2400W$

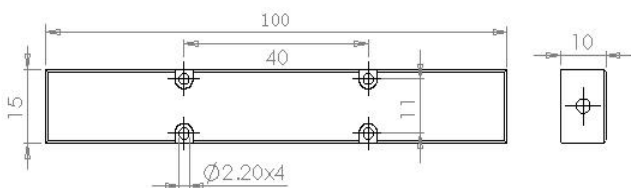
(2) H2: 150x15x10 (PM(6+1)\*1)



Total Pump Power Handling  $\leq 4200W$

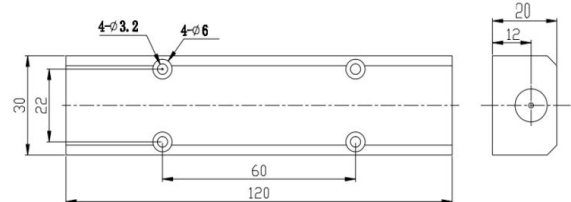
Unit: mm

(3) C7: 100x15x10mm (PMCPs)



Stripped Power  $\leq 100W$

(4) H5: 120x30x20mm (PMCPs)



Stripped Power  $\leq 300W$

Unit: mm

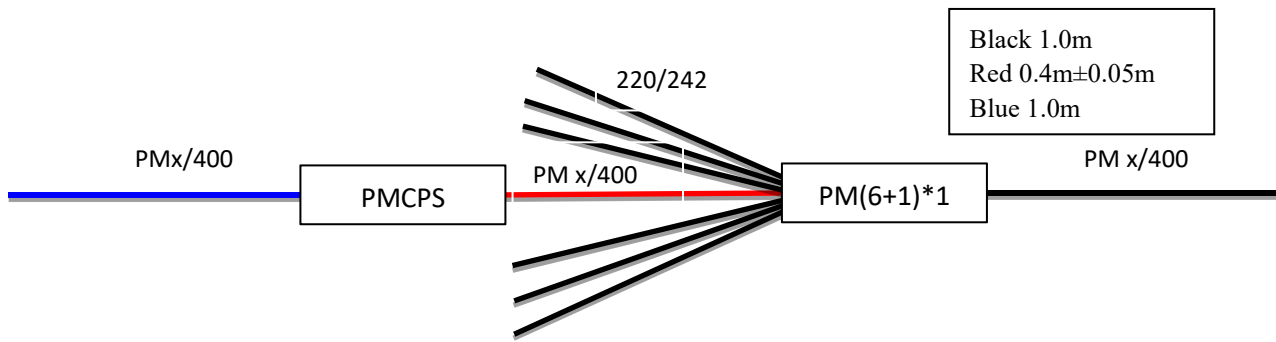
## Specifications

Parameters/Test conditions		Min	Typ.	Max	Unit	Note
1	Signal Operating Wavelength	1000	1064	1100	nm	
2	Pump Operating Wavelength	800	915	1000	nm	
3	Pump Fiber	Core Diameter	220		μm	MM 220/242 0.22NA DC Refer to fiber code
		Cladding Diameter	242		μm	
		Numerical Aperture	0.22		-	
4	Signal Fiber	Core Diameter	x		μm	PMx/400 DCF Refer to fiber code
		Cladding Diameter	400		μm	
		Numerical Aperture	-		-	
5	Output Fiber	Core Diameter	x		μm	PMx/400 DCF Refer to fiber code
		Cladding Diameter	400		μm	
		Numerical Aperture	-		-	
6	Pump Efficiency	97			%	915nm pump test
7	Signal Insertion Loss			0.30	dB	1mW light source (Input M2<1.05)
8	M2			1.3	-	
9	ER	20			-	light source PER>25dB
10	Pump Power Handling			300 or 600	W	Each port (PM(6+1)*1)
11	Stripping Efficiency	20			dB	PMCPS
12	Stripping Cladding Power			100 or 200	W	
13	Fiber Length	Pump Fiber	1.0		M	Each port
		Signal Input	1.0		M	
		Between PMMPC and PMCPS	0.35	0.4	0.45	M
		Signal Output	1.0		M	
14	Operating Environment Temperature	-5		+70	°C	
15	Operating Humidity	5		95	%RH	Not recommend in high humidity for long time.
16	Storage Temperature	-20		+70	°C	
17	Package	(1) C7 (PMMPC) or (2) H2 (PMMPC) (3) C7 (PMCPS) or (4) H5 (PMCPS)			-	Handling power is different with PKG

Note:

(1) Parameters above are specified at room temperature.

(2) Bottom side of device must be mounted onto heat sink with good interface contact and active cooling.



## Ordering Information

PMMPc-(N+1)\*1-F(B)-Pump wavelength/Pump power-Signal wavelength-Pump fiber codes/Signal Input fiber codes-Signal Output fiber codes-Package type+PMCPs-Signal fiber codes-Stripped power-Package type-Fiber length

Fiber: Please refer to Lightcomm fiber codes.

Note:

F=Forward pump, B=Backward pump.

Document		Version	1.0	Date	
Prepared by		Checked by		Approval	