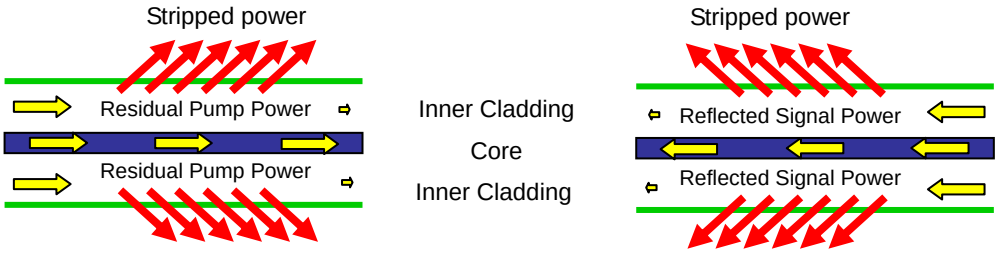
Cladding Power Stripper (CPS)

Description

The multimode optical power stripper (Cladding Power Stripper - CPS) is designed for high power fiber laser and amplifier applications.

This device is ideal for stripping residual pump power, ASE and escaped core modes from inner cladding of double cladding fibers while preserving minimal degradation of signal power and beam quality (M^2). Reflected signal power into the inner cladding can be stripped out as well.

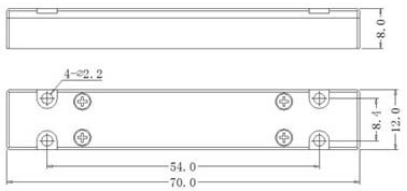
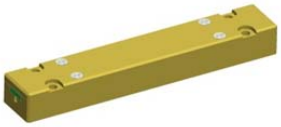
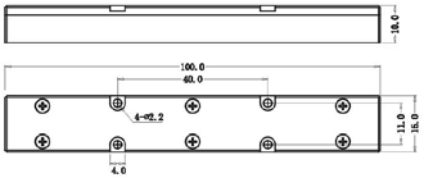
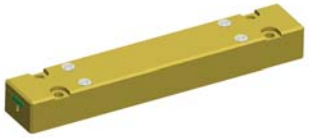
Stripping power handling capability is up to 800W or even higher.

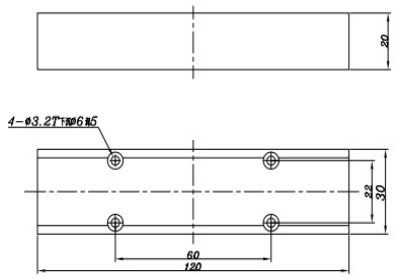
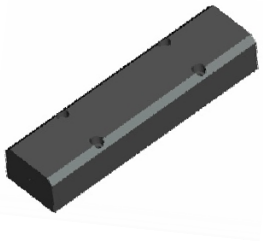
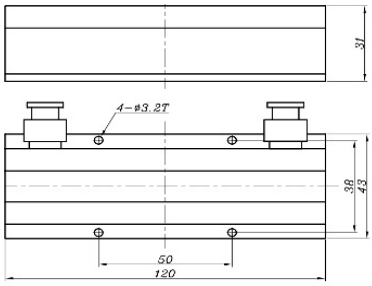


Key Features

- High Stripping Efficiency & High Stripping Power Handling Capability
- Low Signal Loss and Beam Quality Degradation
- Wavelength Insensitive
- High Extinction Ratio (for PM version)
- Customized Configurations Available

Mechanical Dimension

Stripping Power	Package and Fiber Type	Package Mechanical Dimensions	Package Appearance
≤20W	**PKG Type:**C4 (70x12x8mm) **Fiber Type:** x/125 DCF x/250 DCF		
21W~40W	**PKG Type:** C7 (100x15x10mm) **Fiber Type:** x/125 DCF x/250 DCF x/400 DCF		

Stripping Power	Package and Fiber Type	Package Mechanical Dimensions	Package Appearance
41W~150W	**PKG Type: H5** (120x30x20mm) **Fiber Type:** x/250 DCF x/400 DCF		
151W~800W	**PKG Type: H6** (120x43x31mm) **Fiber Type:** x/250 DCF x/400 DCF		 **Water cooled**

Specifications

	Parameters/Test conditions		Min	Typ	Max	Unit	Note
1	Operating Signal Wavelength		800		2000	nm	
2	Stripping Efficiency*	PM or non-PM x/125 DCF	20			dB	x=6, 10, 15, 20, etc.
3		PM or non-PM x/250 DCF	17			dB	x=25, 30, etc.
4		PM or non-PM x/400 DCF	17			dB	x=10, 20, 25, etc.
5	Signal Insertion Loss			0.05	0.20	dB	
6	Signal Output Beam M^2			1.2		-	Input Signal $M^2 \leq 1.05$
7	Polarization Extinction Ratio		17			dB	Input PER≥25dB
8	Fiber Length		0.8			m	
9	Power Handling		Refer to stripping power in mechanical dimensions above				Refer to stripped inner cladding power
10	Operating Temperature		-20		+70	°C	
11	Operating Humidity		5		95	%RH	
12	Storage Temperature		-40		+85	°C	
13	Package		C4, C7, H5, H6				

Note:

- Bottom side of device must be mounted onto heat sink with good interface contact and active cooling.
- Stripping efficiency means cladding power attenuation, is defined as $-10lg\ (P_o / P_{in})$, P_{in} is the input power injected into the inner cladding and P_o is the output power from the inner cladding.

Ordering Information

CPS-1x1-Fiber-Stripped power-Wavelength-Package type-Fiber length

Fiber: Please refer to Lightcomm fiber codes.