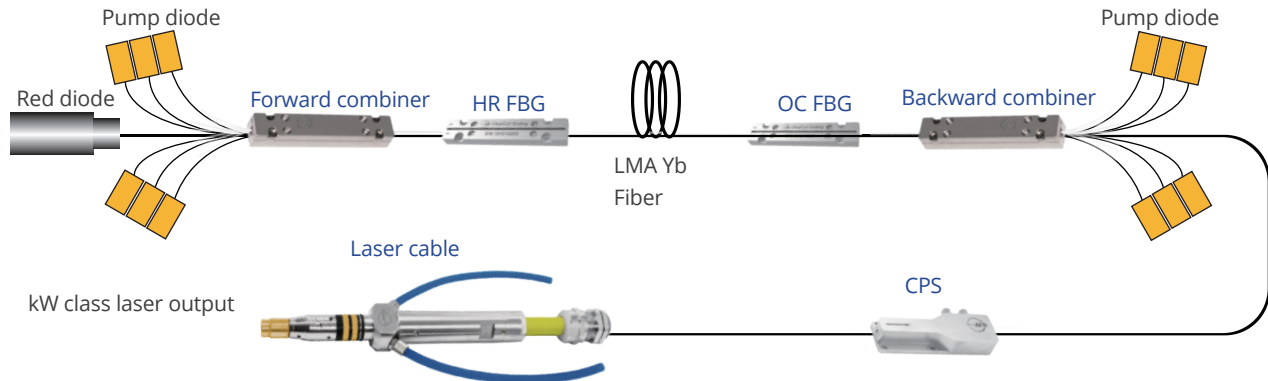


CONTINUOUS WAVE LASERS APPLICATION



AFR Components for CW Lasers

Combiner Series

Product	Handling Power	Pump Efficiency	Pump/Laser Number
(N+1)x1 Forward Pump Combiner	Up to 3kW	>98%	≤36, specified
(N+1)x1 Backward Pump Combiner	Up to 3kW	>98%	6, specified
Nx1 Laser Combiner	Up to 10kW	>98%	≤19, specified

Others

Product	Handling Power	Center Wavelength
High Power Laser Cable	Up to 10kW	1080nm, specified
Cladding Power Stripper	Up to 800W	
High Power Fiber Bragg Grating	Up to 3kW	1018, 1080, 1917, 1030, 1064, 1070, 1925, 1939nm, specified

We can customize wavelength, power handling, fiber type, beam diameter, aperture, package size and any other parameters to suit your specific needs.

Dragon™ 10kW Laser Cable

Optical Parameter	Unit	Value		
Operation wavelength	nm	900 - 1100, specified		
Fiber core diameter	μm	20 - 400		
Numerical aperture (NA)	-	≤ 0.22		
Max. transmission loss	%	2		
Max. power handling	kW	3	6	10
Max. stripping cladding power	W	500		
Backward power handling	W	500		
Max. Z-position tolerance	μm	50		
Fiber concentricity	μm	≤ 50		
Max. angular deviation	mrad	20		

Cooling Water Requirements	Unit	Value		
Max. water pressure	L/min	1.5-3.0		
Water temperature	Mpa	0.8		
Flow rate	°C	10-25		
Water PH value	-	5.6-7.9		
Water hose diameter	mm	ID/OD=4/6		

Others	Unit	Value		
Mechanical interface	-	Compatible with the Standard QBH Interface		
Armor cable diameter	mm	13.3		
Storage Temperature	°C	-20 to +70		



19XXnm ClearCut™ Fiber Bragg Grating

Parameter	Unit	Value	
Center wavelength	nm	1917, 1925, 1939	
Tolerance on center wavelength	nm	1.0	
Max. wavelength mismatch (OC relative HR)	nm	0.2	
High reflector (HR) / output coupler (OC)		HR	OC
Peak reflectivity	%	≥99.0	(5.0 - 30.0) ± 2.0
Reflection bandwidth at 95%	nm	1.5~3.0	
Reflection bandwidth at 50%	nm		0.5~1.0
Tolerance on reflection bandwidth	nm	0.1~0.3	0.1
Min. side mode suppression ratio	dB	20	10
Min. core signal power handling	W	100	
Min. clad pump power handling	W	200	
Fiber type		PM or Non-PM	
Package dimensions	mm	60 (L) × 12 (W) × 5 (H)	
Cooling bottom plate temperature	°C	≤25	
Storage temperature	°C	-40 to +85	

