

# CYFL-TERA HP

CW YTTERBIUM FIBER LASER  
WITH TERAHERTZ LINEWIDTH HIGH-POWER



## Optical Specifications @ 25 °C

	CYFL-TERA-HP								
	CS250	CS450	CF1000	CF2000	CF3000	CF4000	CF6000	CF8000	CF10000
Mode of operation	CW or QCW modulated								
Operating wavelength (nm)	1070			1080					
Average output power (W)	250	450	1000	2000	3000	4000	6000	8000	10000
Linewidth at FWHM (nm)	4								
Modulation frequency (kHz)	DC to 5								
Polarization	Random (RP)								
Output power stability (%)	+/- 1 at constant temperature								
Output power tunability (%)	10 - 100								
Laser guide (LG option)	520 nm, < 1 mW			635 nm, < 1 mW					
Output fiber type	12 µm (N.A 0.08)		20 or 50 µm	25 or 50 µm	100 µm (N.A 0.22)				
Output fiber length (m)	5 +/- 3 %			25 +/- 3 %					
Output termination	RQB or QBH			QBH					
Beam parameter at 1/e <sup>2</sup> (mm x mrad)	0.37 - 0.39		0.4 - 0.7		2.7 - 3.4				
Power consumption (kW), typical (EOL)	0.35 (0.8)	0.7 (1.6)	3.3 (4)	6 (6.6)	10 (12)	12.5 (16)	20 (22)	26.7 (29.3)	33.3 (38.6)
Associated platform	CS01	CS02	CF01	CF02	CF03			CF04	

## Platform Specifications

	Platform Specifications						
	CS01	CS02	CF01	CF02	CF03	CF04	
Voltage (VAC)	100 - 240 (1-phase)		90 - 364	360 ~ 510 (3-phase)			
Laser cooling 35% glycol mix	Cooling cap (kW)	0.8	1.5	2.3	5.5	9 - 14	18.5 - 23
	Pressure (Bar)	6		< 7			
	Flow (L/min)	4		7 to 10	20	35 - 50	80 - 100
	Temperature (°C)	20 +/- 1					
Process fiber cooling	Cooling cap (kW)	0.3					
	Pressure (Bar)	From 1.5 to 4					
	Flow (L/min)	From 1 to 2					
	Temperature (°C)	20 - 33					
Cooling interface	10 mm OD quick disconnect fittings (x2)		10 mm push lock fitting (x2)	1 inch hose barb (x2)			
Electronic shutter ON/OFF time (ms)	1200			200			
Dimensions W x H x L (mm)	440 x 125 x 540		600 x 1000 x 1200	600 x 900 x 1000		910 x 1230 x 1400	
Weight typical (kg)	20	22	400	200	240	470	
Operating temperature (°C)	5 to 50						
Relative Humidity (%)	< 95, non condensing						
Safety	PLd			PLe			
Protection degree (IEC60529)	IP44			IP54 (NEMA13 equivalent)			

<sup>1</sup> Depending on the model, other fiber length available upon special request

Output power (W)	Polarization	Center Wavelength (nm)	Amplitude Modulation	Laser guide	Platform	Output termination
0 2 5 0 250	R P Random	1 0 7 0 1070	1 Yes	1 635 nm	C S 0 1	R Q B RQB
0 4 5 0 450		1 0 8 0 1080		2 520 nm	C S 0 2	Q B H QBH
1 0 0 0 1000					C F 0 1	
2 0 0 0 2000					C F 0 2	
3 0 0 0 3000					C F 0 3	
4 0 0 0 4000					C F 0 4	
6 0 0 0 6000						
8 0 0 0 8000						
10 0 0 0 10000						



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