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1. Optical characteristics

N	Characteristics	Test conditions	Symbol	Min.	Тур.	Max.	Unit
1	Operation Mode			CW / Modulated			
2	Polarization			Random			
3	Nominal Output Power		P_{nom}	4000		W	
4	Emission Wavelength	Output power: 4000 W	λ	1070		nm	
5	Emission Linewidth	Output power: 4000 W	Δλ	1.5 5		5	nm
6	Short-term Power Instability	Output power: 4000 W Frequency range: 10 kHz – 20 MHz		1.5 3.0		rms %	
7	Long-term Power Instability	Output power: 4000 W Time interval: 4 hrs (T=Constant)			±3	%	
8	Switching ON/OFF Time	Output power: 4000 W 30 50		50	μS		
9	Power Modulation Rate	Output power: 4000 W		10	kHz		
10	Red Guide Laser Power	_		0.1 - 1.0		1.0	mW

2. Optical output

N	Characteristics	Test conditions Symbol		Min.	Typ.	Max.	Unit
		Option 1 – 50 µm core fiber		1.7	2.4	2.8	mm
1	Beam Quality	Option 2 – 100 µm core fiber	BPP	3.4	4.8	5.6	Х
	_	Option 3 – 200 µm core fiber		6	9.6	11.2	mrad
2	Delivery Fiber Length		L		5.0	TBD	m
3	Delivery Cable Bending Radius			80 n		mm	
4	Output Fiber Termination			QBH-compatible connector		ector	

3. General characteristics

N	Characteristics	Min.	Typ.	Max.	Unit
1	Operating Ambient Temperature Range			50	°C
2	Humidity	10		95	%
3	Storage Temperature	- 40		+ 75	°C
4	Dimensions,	4U 19" rack mountable			
7	WxDxH:	448	8 x 801 x	177	mm
5	Weight			80	kg
6	Laser "Cold Start" Temperature	20			°C

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4. Cooling

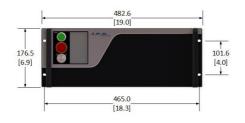
N	Characteristics	Test conditions	Symbol	Min.	Typ.	Max.	Unit
1	Method			Tap or DI-water			
2	Water Temperature *always above dew point			21*	22	25	°C
3	Water Pressure			1.5		3.5	bar
4	Water Flow			15			l/min
5	Chiller Cooling Capacity			7.5			kW

5. Electrical characteristics

N	Characteristics	Min.	Тур.	Max.	Unit
1	Operating Voltage, 3-phase	400)-480 VA	C, 50/60	Hz
2	Maximum Power Consumption		10	11.5	kW
			11	12.7	kVA
3	Control	Analog / RS-232 / Ethernet *			

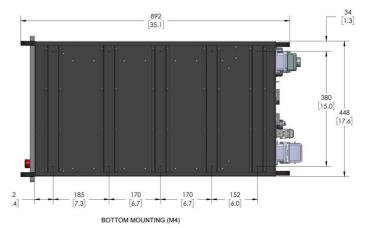
^{*} For details please refer to YLR-Series User Guide.

6. External layout









Laser cabinet

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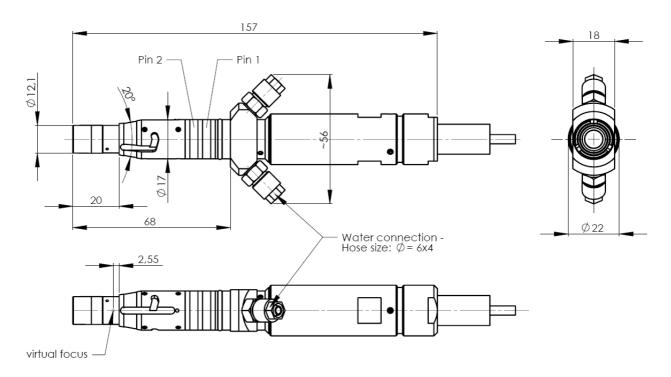
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Standard configuration without touch-screen display



Optional configuration with touch-screen display



QBH-compatible connector, water cooled

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7. Beam management accessories

N	Type	Model
1	Attachable Collimator	D25F50, D25F60, D25F85, D50F100, D50F120, D50F160,
1		D50F200
2	Compact Beam Coupler	BC1x112
2	Compact Poam Switch	BS1xN12
3	Compact Beam Switch	N – number of output channels (1, 2, 3 or 4)

DANGER
INVISIBLE LASER RADIATION
CLASS 4 LASER PRODUCT
CLASS 4 INVISIBLE LASER RADIATION
WHEN OPEN
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION
Per IEC 60825-1:2014; 21 CFR 1040: 10(g)

MAX. AVERAGE OUTPUT POWER: 5 kW CW WAVELENGTH RANGE: 900-1200 nm

Per IEC 60825-1:2014; 21 CFR 1040: 10(g)

MAX. AVERAGE OUTPUT POWER: 1 mW
WAVELENGTH RANGE: 600-700 nm
VISIBLE LASER RADIATION
DO NOT STARE INTO THE BEAM OR VIEW
DIRECTLY WITH OPTICAL INSTRUMENTS
CLASS 2M LASER PRODUCT
Per IEC 60825-1:2014; 21 CFR 1040: 10(g)

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