	SPECIFICATION YTTERBIUM FIBER LASER Model YLR-150/1500-QCW-AC-Y14	Spec:	G22-29547
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1. Optical characteristics

N	Characteristics	Test conditions	Symbol	Min.	Typ.	Max.	Unit
1	Operation Mode			Pulsed / CW			
2	Polarization			Random			
3	Maximal Average Power	Pulsed mode CW mode	$P_{average}$ P_{CW}	150 250			W
4	Maximal Peak Power	Pulsed mode	P_{peak}	1500			W
5	Duty Cycle	Pulsed mode	DC			50*	%
6	Pulse Duration	Pulsed mode	τ	0.05**		50***	ms
7	Maximal Pulse Energy	Pulsed mode	E_{max}	15			J
8	Emission Wavelength		λ		1070		nm
9	Emission Linewidth	Pulsed mode, max. output power	$\Delta\lambda$		5	6	nm
10	Long-term Power Instability	Time interval: 4 hrs T= const, max. output power CW & Pulsed modes			± 0.5	± 1	%
11	Red Guide Laser Power			0.1		1.0	mW

* Maximum duty cycle limit is inversely proportional to peak power: 10% for 1500W, 15% for 1000W, ..., 50% for 300W and lower.

** 10 μ s optional.

*** Maximum pulse duration limit is inversely proportional to peak power: 10ms for 1500W, 15ms for 1000W, ..., 50ms for 300W and lower.

2. Optical output


N	Characteristics	Test conditions	Symbol	Min.	Typ.	Max.	Unit
1	Beam Quality		M^2		1.05	1.1	mm
2	Delivery Fiber Length		L		3.0	TBD	m
3	Output Fiber Termination			QBH-compatible connector			
4	Beam Divergence	Full angle, 86% level	θ	90	100	110	mrاد
5	Delivery Cable Bending Radius			50			mm

3. General characteristics

N	Characteristics	Min.	Typ.	Max.	Unit
1	Cooling method	Forced Air			
2	Operating Ambient Temperature Range	10		40	°C
3	Humidity	10		95	%
4	Storage Temperature	- 40		+ 75	°C
5	Dimensions, WxDxH:	4U 19" rack mountable 449 x 503 x 177			mm
6	Weight			40	kg

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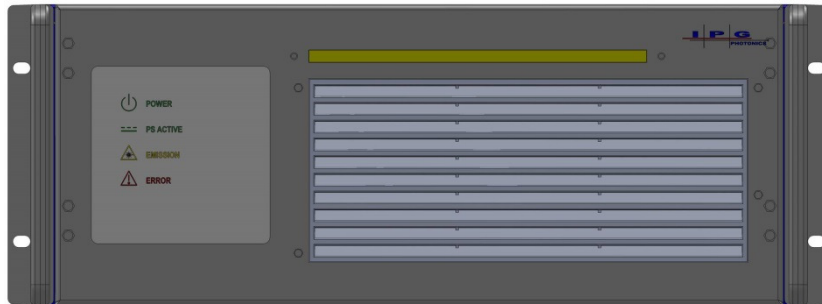
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4. Electrical characteristics

N	Characteristics	Min.	Typ.	Max.	Unit	
1	Operating Voltage, single-phase	100-120/200-240 VAC, 50/60 Hz				
2	Maximum Power Consumption		Pulsed mode	700	800	W
			CW mode	900	1100	W
				1000	1200	VA
3	Control	Analog / RS-232 / Ethernet*				

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

5. External layout



Standard configuration without touch-screen display



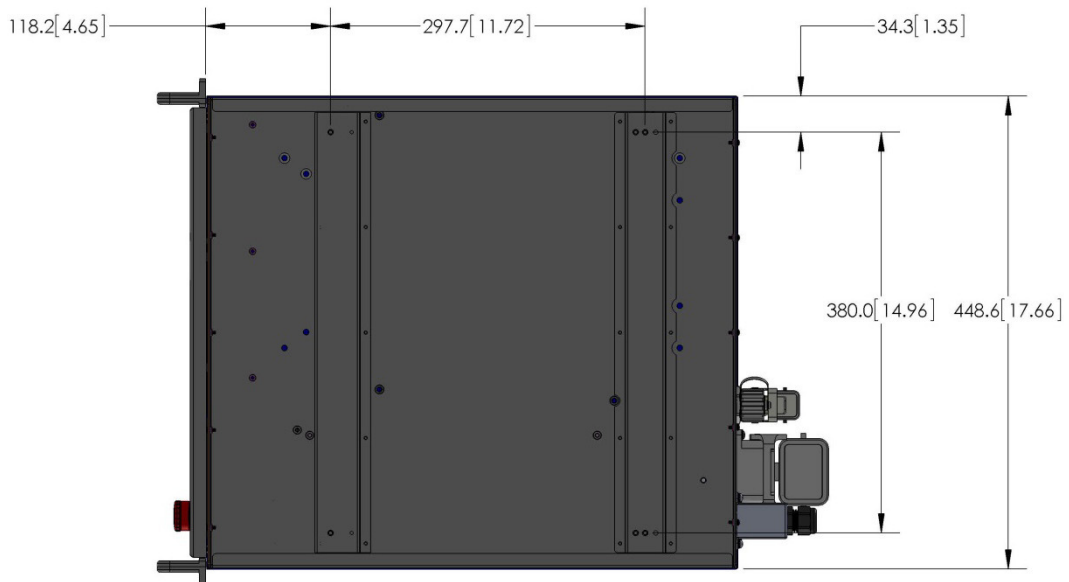
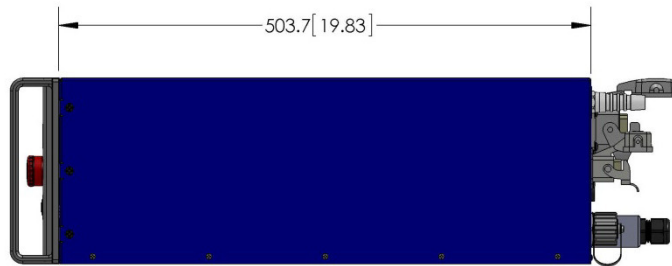
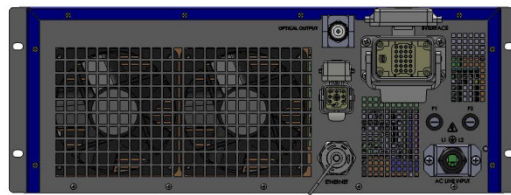
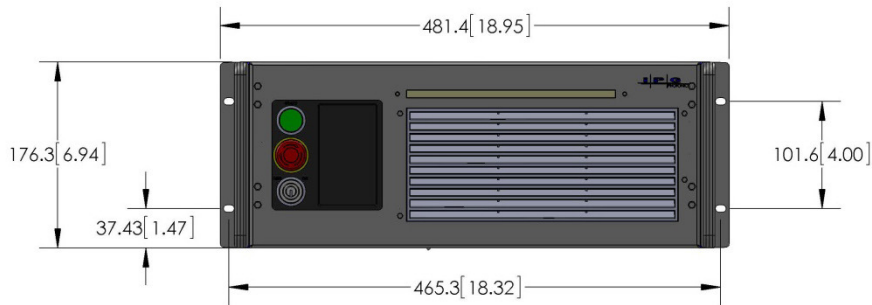
Optional configuration with touch-screen display

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**SPECIFICATION
YTTERBIUM FIBER LASER
Model YLR-150/1500-QCW-AC-Y14**

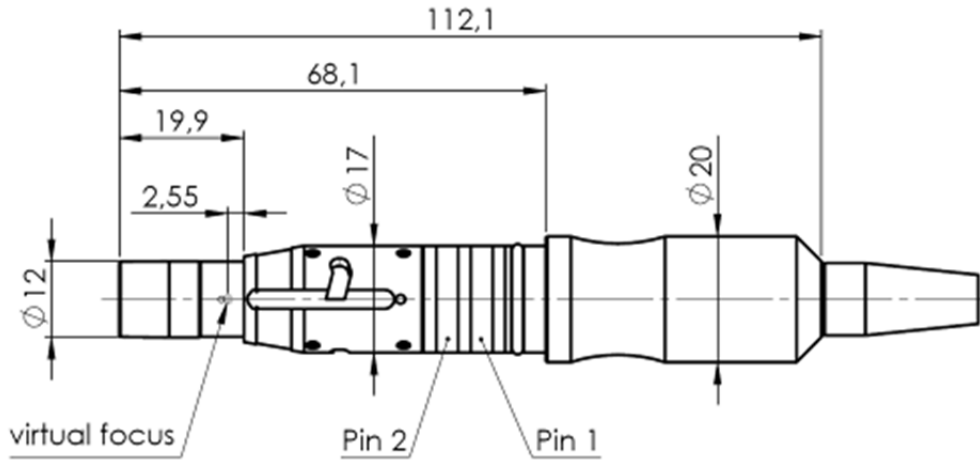
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BOTTOM MOUNTING (M4)

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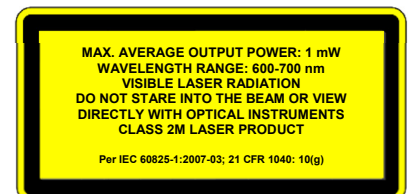
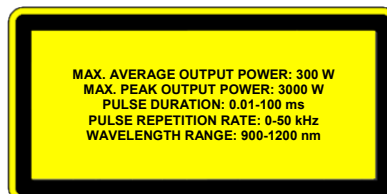
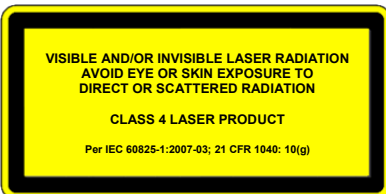


QBH-compatible connector, without water cooling

6. Beam management accessories

N	Type	Model
1	Attachable Collimator	D25F50, D25F60, D25F85, D50F100, D50F120, D50F160, D50F200
2	Compact Beam Coupler	BC1x112
3	Compact Beam Switch	BS1xN12

N – number of output channels (1, 2, 3 or 4)



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