	<b>PRODUCT SPECIFICATION LASER Model ELR-30-1550-SF</b>	Spec: Revision: Page:	PS-ELR-30-1550-SF 1 1 of 5
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# Product Specification

## MODEL

### ELR-30-1550-SF

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	<b>PRODUCT SPECIFICATION</b>			Spec:	PS-ELR-30-1550-SF
	<b>LASER</b>			Revision:	1
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## 1.0 Optical Characteristics

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Mode of Operation				CW		
Output Beam Mode				TEM <sub>00</sub>		
Polarization State				Random		
Nominal Output Power		P <sub>nom</sub>	30			W
Central Emission Wavelength (in vac)			1549	1550	1551	nm
Emission Linewidth	FWHM; P <sub>nom</sub>	Δν		15	50	kHz
Adjustable Output Power Range	to Full Power		3		100	%
Long-Term Output Power Instability	P <sub>nom</sub> , over 8hrs, T=20°C (const) T=20+/-2°C			0.5 1.5	1.5 3.0	%, peak-to -peak
RIN	P <sub>nom</sub> , ν>100kHz				-140	dB/Hz
Ratio of Peak Amplified Signal to ASE Background	P <sub>nom</sub> , RBW=0.01nm over Δλ		50			dB
Relative Level of Residual Pump Power to the Amplified Output Power	P <sub>nom</sub>				-50	dB
Permissible Level Of Specular Back Reflected Power	P <sub>nom</sub>				100	mW


## 2.0 Optical Cables and Connectors

Characteristic	Test condition	Symbol	Min.	Typ.	Max.	Unit
Output Cable Length				1		m
Output Metal Jacket OD				7		mm
Output Cable Bending Radius			10			cm
Output Termination			Collimator with Attached Isolator			
Beam quality, M <sup>2</sup>				1.08	1.15	
Beam ∅	At 1/e <sup>2</sup> level			1.1		mm

## 3.0 Electrical Characteristics

Characteristics	Min.	Typ.	Max.	Unit
Operating Voltage, single-phase	100-120/200-240 VAC, 50/60 Hz			
Maximum Power Consumption		380	420	W

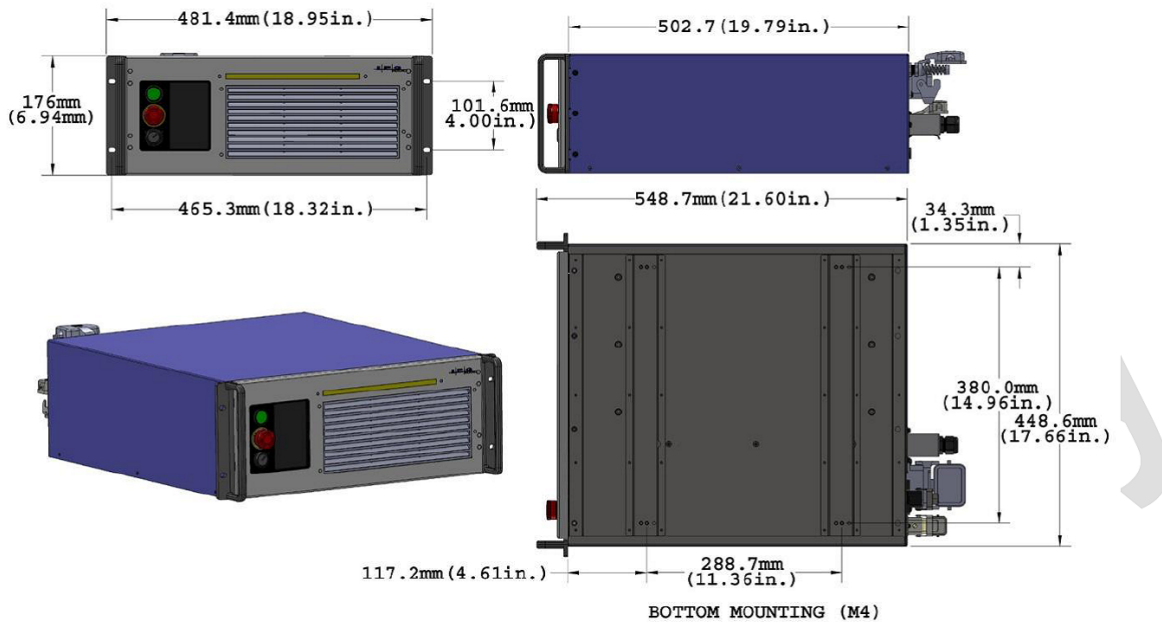
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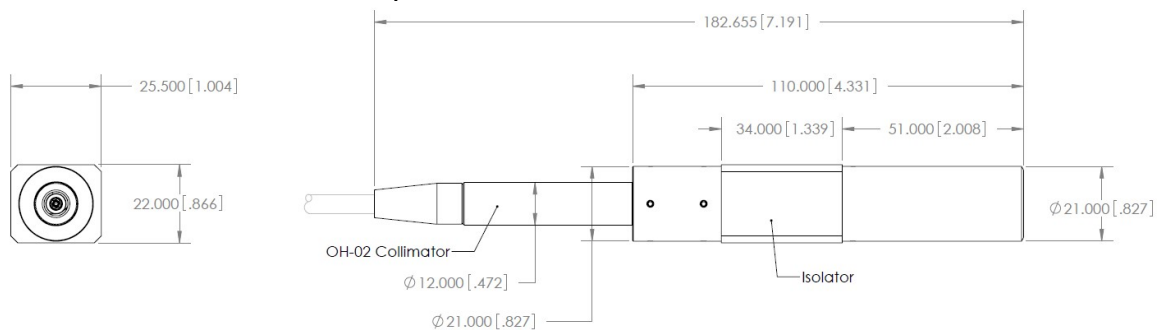
#### 4.0 General Characteristics

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Operating Ambient Temperature Range			10		30	°C
Storage Temperature			-10		65	°C
Warm-up Time to Full Stabilization			1	15	30	min
Humidity			20		95	%
Cooling Method			Forced air			
Dimensions W x H x D			482 x 177 x 503			mm
Weight				31		kg

#### 5.0 Outline Drawings

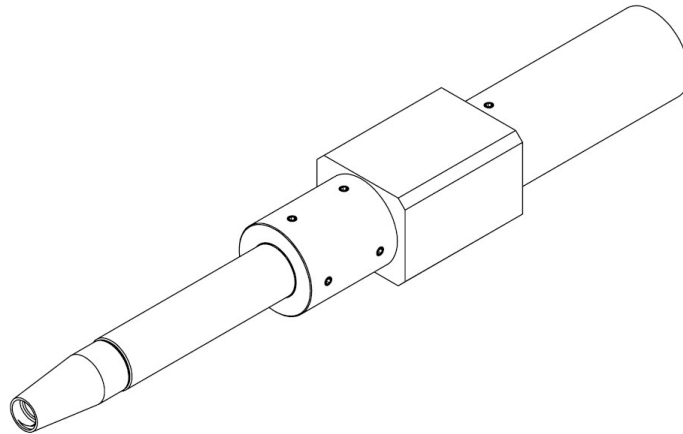


#### Output Collimator with Attached Optical Isolator:



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## 6.0 Certification

Test data shipped with each laser.

- Serial number
- Output Power Set Point
- Output Power Stability (over 8 hours)
- Output Spectrum

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