

**Patara™*****NORTHROP GRUMMAN*****> FEATURES AND BENEFITS****DPSS LASER SYSTEM**

- SilentLight DPSS module technology for ultra stable TEM<sub>00</sub> operation
- Sealed laser head
- Long life diode bars
- Output beam characteristics maintained over power operating range

The Patara laser system is an all-new diode-pumped solid-state (DPSS) laser system that is offered with up to 20 Watts of output power at 532nm. It is rugged, reliable, and is easily integrated into original equipment.

The Patara laser is economically priced, features long life diode bars and is ideally suited for use in industrial manufacturing applications.

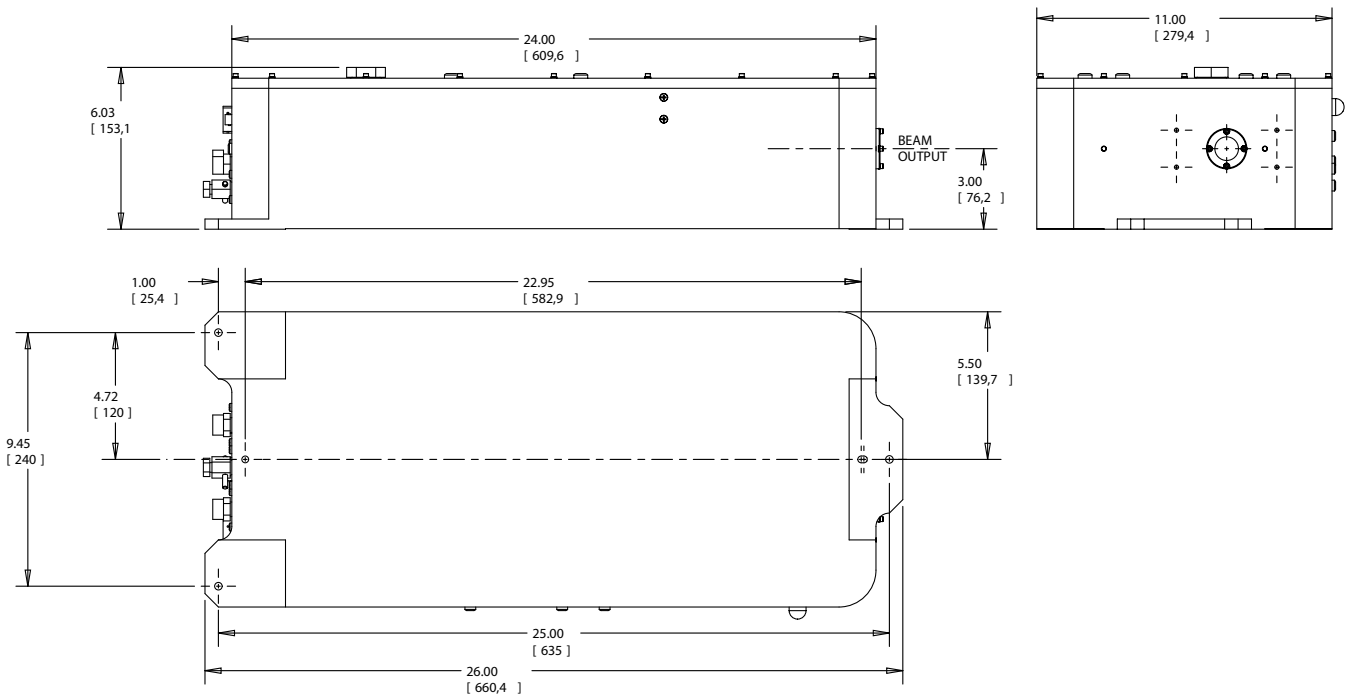
Patara lasers come standard with field proven Northrop Grumman DPSS gain modules, with versions that can operate TEM<sub>00</sub> or multimode, and powered by the eDrive Nitro controller.

We offer a laser cavity design service using our modeling software to create customer specific Patara laser systems. Please contact CEO for more information.

PATARA SPECIFICATIONS

Patara Specifications*				
Parameter	Configurations			Units
Model	PA-020-QT	PA-016-QTG	PA-020-QTGV	—
Laser Type	DPSS Nd:YAG	DPSS Nd:YAG	DPSS Nd:YVO4	—
Wavelength	1064	532	532	nm
Repetition Rate	5-30	4 to 15	10 to 50	kHz
Output	20 @ 10 kHz	16 @ 9 kHz	20 @ 25 kHz	W
Spatial Mode	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>	—
Beam Diameter @ Output Window	< 1.5 @ 10 KHz	< 0.9 @ 9 kHz	< 1.0 @ 25 kHz	mm
Beam Quality (M <sup>2</sup> )	< 1.3 @ 10 kHz	< 1.3 @ 9 kHz	< 1.3 @ 25 kHz	—
Beam Divergence (Full Angle)	< 1.7 @ 10 kHz	< 1.7 @ 9 kHz	< 2.5 @ 25 kHz	mrad
Pulse Width (FWHM)	< 100	< 80 @ 9 kHz	< 45 @ 25 kHz	nsec
Pulse-to-Pulse Stability	< 1.5 @ 5 kHz	< 1.5 @ 9 kHz	< 2 @ 25 kHz	% rms
Output Stability Over 8 hr	< 3 @ 10 kHz	< 3 @ 9 kHz	< 3 @ 25 kHz	% rms
Polarization	Linear	Linear	Linear	—
Electrical @ 50/60 Hz (Auto Ranging)	85-264	85-264	85-264	VAC
Operating Temperature (non-condensing)	18-30°C	18-30°C	18-30°C	°C
Dimensions	26 x 11 x 6	26 x 11 x 6	26 x 11 x 6	in
Cooling @ 20°C	500 @ 1.5	500 @ 1.5	500 @ 1.5	W @ GPM
Pump Module	RBA24T-1C2-CA1	RBA24T-1C2-CA1	RBA20-1C2-FR1	—

\*Preliminary Specifications - Please contact CEO® if you require different specifications



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This Product is covered by one or more of the following Patents: 5,898,211 5,985,684 5,913,108 6,310,900 Other US and Foreign Patents Pending.

DANGER

VISIBLE  
LASER RADIATION

AVOID EYE OR SKIN EXPOSURE TO DIRECT  
OR SCATTERED RADIATION

Type	Wavelength	Energy	Pulsewidth	PRF
YAG	532 nm	7 mJ	60 ns	4-15 Hz
YVO4	532 nm	3 mJ	30 ns	10-50 Hz

CLASS IV LASER PRODUCT

Rev. A 10/09 ISO 9001:2000 REGISTERED