

Pre-installation Guide for Patara Laser

This document is to provide information necessary for smooth system installation/integration.

1. E-Driver dimensions, power requirement and mounting

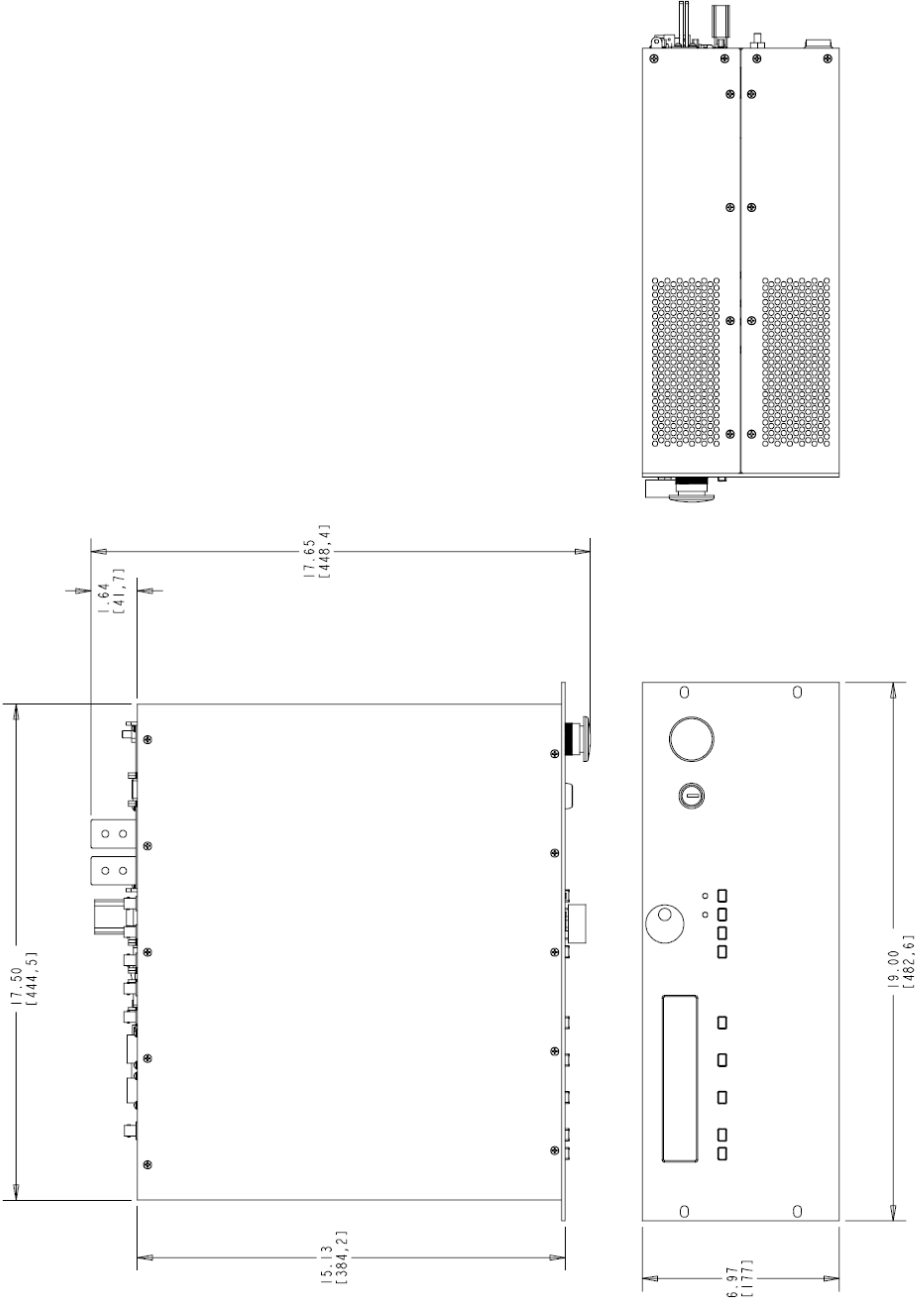


Figure 1, Dimensions of eDrive Nitro for Patara laser

Input Power

Use only power cords suitable for your driver. Use a power source that delivers power in the range of 90 to 250 VAC-RMS, 47 to 63 Hz. Power switching is done automatically; there are no configuration switches to set for high or low power ranging. Observe recommended fuse selection for each voltage range.

AC Input		Frequency	Fuse Ratings (F1, F2)
120V	15A	47-63 Hz	15A
240V	7A	47-63 Hz	8A

Rack Mounting

When installing the eDrive Nitro into an EIA-310D-compliant rack, always install rack mounting screws into the two bottom holes of the front panel flanges first and then install screws into the top holes. This will help to minimize any potential damage that might occur to the eDrive front panel if the driver were to shift during installation.

For the eDrive Nitro, it is recommended that two people install the unit into a rack. Supporting rails should be used. Lift the driver into place and then fasten the front panel flanges into place.

WARNING. Using the eDrive Nitro without mounting rails can result in serious damage to the driver or personal injury.

Weight

The total weight of eDrive Nitro for Patara laser is approximately 52 pound (23.6kg).

2. Laser head dimensions, beam height and mounting requirements

Laser head dimensions

The detailed dimensions of the Patara laser are shown in the next page. The laser head has dimensions of 26 inch (L) x 11 inch (W) x 6.03 inch (H).

Beam height

The beam height of the Patara laser is 3 inch.

Mounting requirement

The laser has to be mounted on a flat optical table or equivalent bench. There are three mounting holes with size of 0.28 inches (7.1mm) in diameter. Two mounting holes are located at the back of the laser head and one at the front. There are holes designed for 0.25 inch dowel pins to confine the position of the laser head. These are on the center line of the laser head.

Weight

The weight of the laser head is approximately 35 pound (15.9kg).

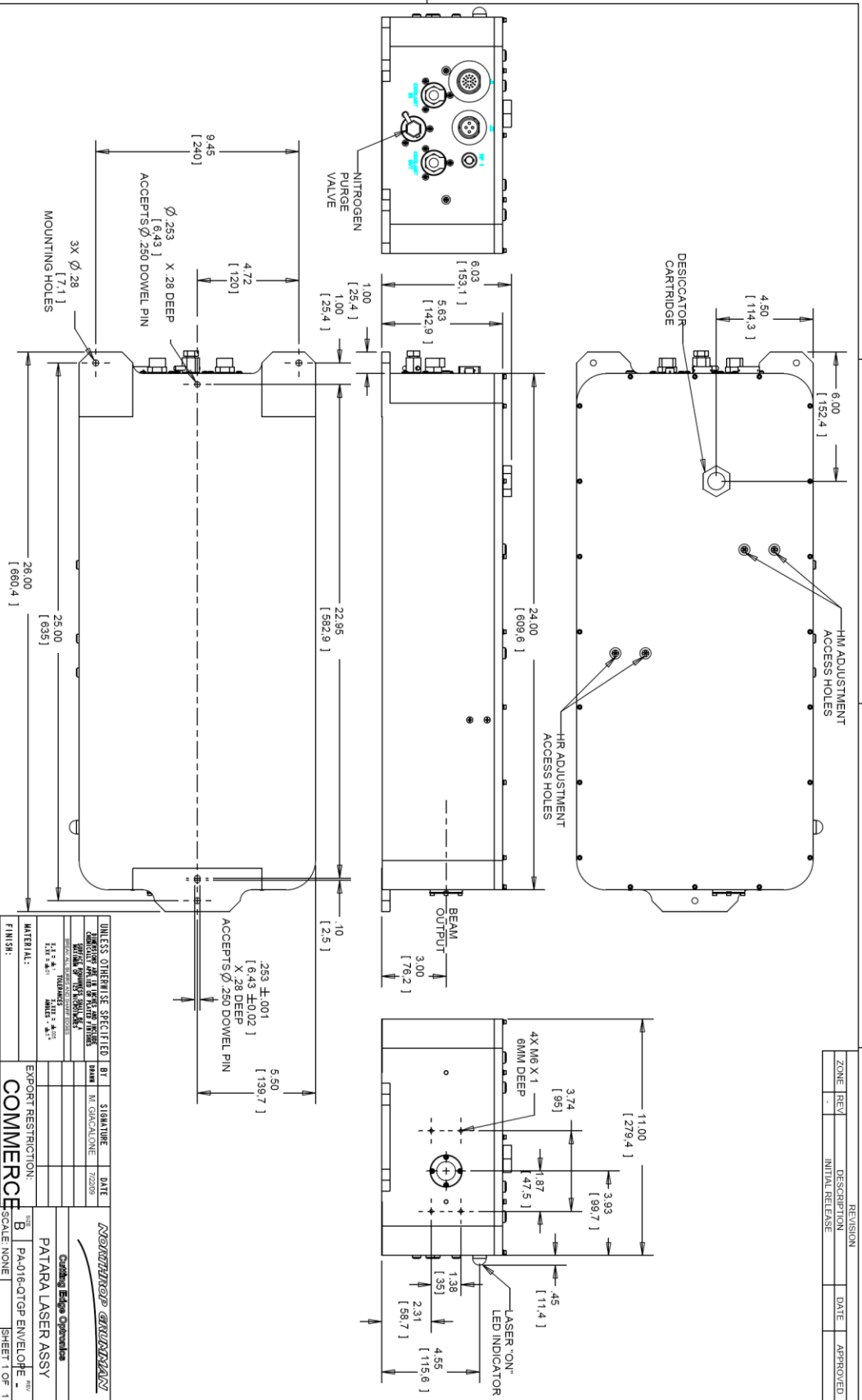


Figure 2, Patara Laser Head Dimensions

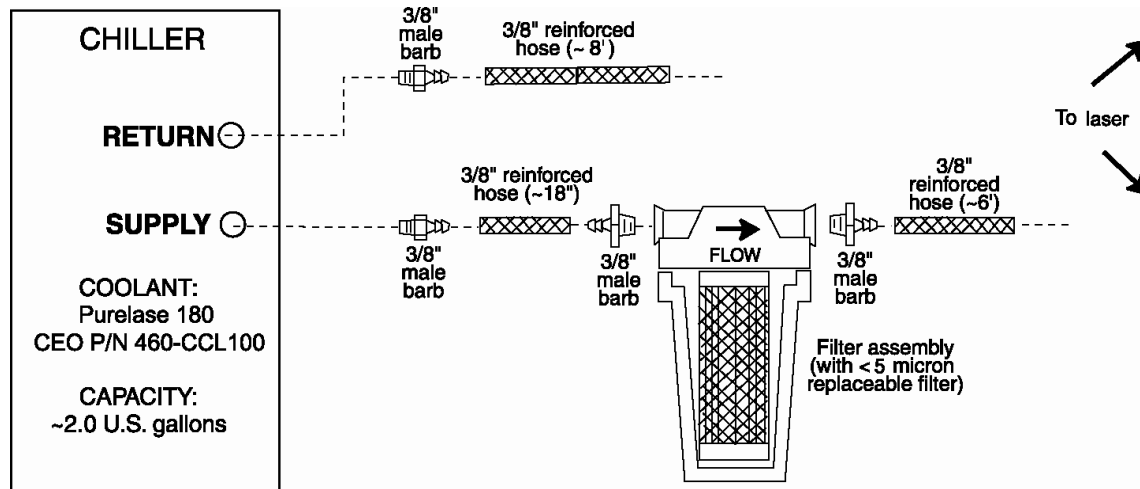
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COMMERCE

Patara Laser Assy
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3. Chiller and coolant



What CEO will provide:

- 1) Laser head P/N PA-016-QTGP
- 2) eDrive P/N ED4C-AXA-2440N
- 3) TEC controller
- 4) Laser signal cable
- 5) Diode power cable
- 6) Hoses and filter for chiller
- 7) US power Cord for Chiller
- 8) US power Cords for eDrive and TEC controller

Suggested Chiller models:

The suggested chiller for Patara laser is Polyscience P/N 6350T21CE30E for 240V/50Hz (P/N 6360T11CE20C for 120V/60HZ), turbine pump. Or other chiller with similar specifications may be used. It is the customer's decision to buy chiller through CEO or directly buy from the third party.

Suggested coolant:

Purelase 180 (CEO P/N 460-CCL-100) is the proper coolant for the laser system.

If Purelase 180 is not available, CEO recommends distilled water and the combined algacide and corrosion inhibitor Optishield Plus from Opti Temp, Inc (Traverse City, MI, phone number 231-946-2931).

Coolant amount needed:

2 Gallons.

4. Umbilical and water hoses lengths

- Diode Power Cable – 7 ft.
- Laser signal cable – 7 ft
- Hose Length – 8 ft