

Chameleon Ultra-Vision-VisionS

Preinstallation Reference

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1.0 WARNING INFORMATION

Refer to the Safety Section in the Operator's Manual before installation or operation. Failure to follow the safety section can cause accidental exposure to laser radiation which may result in severe bodily injuries and/or damage to the laser. Use of the system in a manner different from described in this guide or the operator's manual can impair the protection provided by the system.



WARNING!

Direct and indirect eye contact with the output beam from the laser will cause serious damage and possible blindness.

Wear appropriate laser safety glasses to protect against the radiation generated from the laser. It is expected that the operator has read the Chameleon Operator's Manual Safety Section and knows laser safety practices and the possible danger. Make sure all personnel in the area are wearing appropriate laser safety glasses.

2.0 PURPOSE

The purpose of this document is to act as a generic reference for the pre-installation requirements for the Chameleon Ultra, Vision, and VisionS systems.

This document is not intended to act as a replacement for the Chameleon User Manual. Users are expected to refer to the User Manual before using the laser.



3.0 SCOPE

- This document reflects current practice for the Chameleon Ultra/Vision/VisionS system.
- The intended audience is Chameleon Ultra/Vision/VisionS customers prior to delivery and installation of their laser system. For any further questions, have your local Coherent service representative contact factory service for guidance.

4.0 SITE PREPARATION

De-crating and installation of the laser equipment must be carried out by Coherent Field Service. However, the customer should plan ahead for the installation, bearing in mind the following information.

4.1 Shipping Crate Dimensions

The system is delivered in crates of the following dimensions, fully loaded.

Item	Dimensions (L x W x H), mm	Weight, kg	Material
Laser head + PSU crate	1860 x 760 x 530	178	NW
Miniature Recirculating Unit (MRU)	580 x 550 x 210	12	CB
Chiller (SMC model HEC002)	340 x 685 x 560	26	CB
CoolFlow IGE (coolant, 5litres)	200 x 200 x 300	6	CB

4.2 Storage

- After the equipment is delivered, the crates should be protected from extremes of heat/cold/moisture during storage.
- If the storage area is very different in temperature/humidity from the intended lab location, it is advised that the equipment be allowed to thermalise in the lab environment overnight before connecting power.
- Non-operating temperature range 5 to 40°C (41 to 104°F)

4.3 Access

- The customer should pre-visualise how the laser equipment will be moved to the lab location.
- The individual crates do not have to be moved to the lab location: the equipment can be de-crated at a remote location, e.g. goods receiving area, but covered access must be provided between the de-crating area and the lab location.
- A wheeled trolley should be provided.
- Note that it is not recommended to carry the laser head up stairways. Access to higher/lower floors within a building should be via a lift (elevator) wherever possible.

4.4 Lab Requirements

- It is assumed that the customer will provide a suitable lab environment (please refer to the product datasheet), a correctly-sized optical table for installation (refer to product datasheet for component dimensions), and a standard PC.

4.5 Location of Ancillary Equipment (power supply, chiller, and MRU)

- The customer should pre-visualise where the ancillary equipment will be located in the lab. Due to the length of the various umbilicals, the PSU, MRU, and chiller must be sited less than 3 m from the laser head. For alternative arrangements, please consult your Coherent representative.
- Remember that physical access to the keyswitch on the PSU is required on a regular basis. Access to the chiller and MRU is required on a semi-regular basis (refer to “Regular Maintenance” in the system User Manual).

4.6 Utilities

- The system requires 3 x single-phase power outlets, 90-250 Vac auto-ranging, 50-60 Hz.
- A customer-provided PC is required to run the system control software. Software installers are provided on our website at coherent.com or from your Coherent representative.

4.7 Electrical Consumption

- Maximum approx. 2300 W
- Typical approx. 1300 W

4.8 System Cooling

- The system is provided with a dedicated water-to-air closed-loop chiller and approved coolant. Do NOT plan to use house cooling loops. Do NOT connect the chiller to any other heat loads.
- Special requirements relating to your lab configuration should be discussed with your Coherent representative as early as possible in the Sales process.

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