

# ImageQuant™ LAS 500

## Site Preparation Guide



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>3</b>
<b>2</b>	<b>Site preparation overview .....</b>	<b>5</b>
<b>3</b>	<b>Site preparation checklist .....</b>	<b>10</b>

# 1 Introduction

## Purpose of this document

The purpose of this document is to give the information you need to fully prepare your site for the installation and testing of the system.

A Site preparation checklist is included in this document.

---

## Scope of this document

This Site Preparation Guide covers the ImageQuant LAS 500 imager.

---

## Preparation

Make sure to read the entire Site Preparation Guide and complete the Site preparation checklist in Chapter 3.

If GE support is needed, return the completed Site preparation checklist to the GE service office in your region. You will find E-mail address and fax number to the GE service office in your region under [www.gelifesciences.com/contact](http://www.gelifesciences.com/contact). If your region is not listed, select the nearest region.

---

## Assign personnel for site preparation tasks

The site preparation tasks listed in the following table can be divided between two or three people from the customer.

Personnel	Site preparation tasks
Site preparation/ installation coordinator	<ul style="list-style-type: none"><li>• Review the site preparation guide for safety information and system requirements.</li><li>• Choose the site.</li><li>• Coordinate personnel and tasks.</li><li>• Coordinate the installation timing of the system with any domestic safety procedures and testings.</li><li>• Order required materials.</li><li>• Schedule the installation and inform personnel of the installation date.</li></ul>
Laboratory personnel/ Primary users	<ul style="list-style-type: none"><li>• Review the safety information.</li><li>• Make sure that all customer-provided materials for the installation are present at the site.</li></ul>
Facilities personnel	<ul style="list-style-type: none"><li>• Make sure that the installation requirements are met for:<ul style="list-style-type: none"><li>- Space at the installation site</li><li>- Environmental conditions</li><li>- Biosafety</li><li>- Ventilation and waste collection</li><li>- Electrical supply</li><li>- Safety and installation materials</li></ul></li></ul>

# 2 Site preparation overview

## Introduction

Before the product is delivered, you must prepare the site according to the instructions in this chapter.

---

## Select the site

Select a site that complies with national and international requirements for biosafety.



### WARNING

**Spread of biological agents.** The operator has to take all necessary actions to avoid spreading hazardous biological agents. The facility must comply with the national code of practice for biosafety.

## General site requirements

The following requirements must be fulfilled at the location where the ImageQuant LAS 500 imager will be installed:

- There must not be a heat source such as a radiator near the imager
  - There must be no risk that the imager can get wet or flooded
  - The imager must not be exposed to corrosive gas
  - The imager must not be installed in a dusty environment
  - The imager must not be installed in a place which is constantly or excessively exposed to vibration or impacts.
  - The imager must not be exposed to direct sunlight
-

### Space requirements

Prepare a clean working area on a stable laboratory bench. The bench must comply with the specifications in the following table.

Parameter	Specification
Minimum bench area for operating ImageQuant LAS 500	60 x 60 cm
Free space required around the imager	At least 20 cm free space in front of the imager. 10 cm free space on all other sides.
Load capacity	490 N (50 kg) or higher
Inclination of bench surface	Horizontal $\pm 2^\circ$



#### **WARNING**

**Access to power cord.** Do not block access to the power cord. The power cord must always be easy to disconnect.

**Note:** *There must be additional space on the bench to place samples on the tray.*

---

## Dimensions and weight

The following illustration shows the dimensions of the ImageQuant LAS 500 imager.



The ImageQuant LAS 500 imager weighs 15 kg.

## Environmental requirements

ImageQuant LAS 500 is intended for indoor use only.

The installation site must comply with the following specifications:

Parameter	Specification
Ambient temperature, operation	18°C to 28°C Temperature fluctuation < 10°C per hour
Relative humidity, operation	15% to 70% RH, non-condensing
Ambient temperature, transportation/storage	-25°C to 70°C
Ambient humidity, transportation/storage	5% to 95% RH, non-condensing

## 2 Site preparation overview

Parameter	Specification
Floor vibration conditions	(1) Operating time Oscillation: 0.03G (5 to 60 Hz) Impact :1G (2) Non-operating time Oscillation: 0.4G (5 to 60 Hz) Impact :2G
Altitude, operation	Up to 2000 m
Pollution degree of the environment	Pollution degree 2



### CAUTION

Do not use the instrument in a room with a temperature above +28°C. Higher temperature does not allow the CCD to cool down properly (to -25°C).

## Electrical requirements

Parameter	Specification
Supply voltage	100 to 240 V AC $\pm$ 10%
Frequency	50/60 Hz
Max power	200 W
Transient overvoltages	Overvoltage category II



### WARNING

**Protective ground.** The product must always be connected to a grounded power outlet.



## User-supplied accessories and consumables

The following accessories must be supplied by the user:  
Personal Protective Equipment (PPE) as required (gloves, lab coats, etc.).

---

## Other product specifications

Parameter	Specification
Noise	70 dB(A) or lower Fast L <sub>max</sub> ≤ 60dB(A), and average Leq ≤ 54dB(A) (1 m from the instrument)
Protection provided by the enclosure	IP21

# 3 Site preparation checklist

## Introduction

Read the previous chapters in this Site Preparation Guide before completing the checklist. Complete the checklist in this chapter to make sure that all necessary preparations have been made for the installation of ImageQuant LAS 500.

## Checklist

Requirement	YES	NO	N/A	Comment/specify
<b>General</b>				
If GE support is needed for installation, will the GE service personnel be required to take site EHS (Environment, Health and Safety) or security training before doing the installation?				
<b>Assigned personnel</b>				
Personnel are assigned as specified.				
<b>Site selection</b>				
Site complies with requirements for biosafety				
General site requirements are fulfilled				
<b>Space requirements</b>				
Space is available as specified.				
Imager				
Accessories/additional components				
<b>Environmental requirements</b>				
The proper environmental conditions are fulfilled as specified.				
Ambient temperature				
Relative humidity				

Requirement		YES	NO	N/A	Comment/specify
	Atmospheric pressure (altitude)				
	Pollution degree of the environment				
<b>Electrical requirements</b>					
Electrical requirements are fulfilled as specified.					
<b>Computer requirements</b>					
	Will the ImageQuant LAS 500 imager be connected to a network?				
	Is there on-site IT support available if needed?				
<b>User supplied equipment</b>					
	Personal Protective Equipment (PPE) as required, (e.g., gloves, lab coats, etc.)				

For local office contact information, visit  
[www.gelifesciences.com/contact](http://www.gelifesciences.com/contact)

GE Healthcare Bio-Sciences AB

Björkgatan 30

751 84 Uppsala

Sweden

[www.gelifesciences.com/quantitative\\_imaging](http://www.gelifesciences.com/quantitative_imaging)

GE and GE monogram are trademarks of General Electric Company.

ImageQuant is a trademark of General Electric Company or one of its subsidiaries.

All other third party trademarks are the property of their respective owner.

© 2014 General Electric Company – All rights reserved.

First published Dec. 2014

All goods and services are sold subject to the terms and conditions of sale of the company within GE Healthcare which supplies them. A copy of these terms and conditions is available on request. Contact your local GE Healthcare representative for the most current information.

GE Healthcare Europe GmbH  
Munzinger Strasse 5, D-79111 Freiburg, Germany

GE Healthcare UK Limited  
Amersham Place, Little Chalfont, Buckinghamshire, HP7 9NA, UK

GE Healthcare Bio-Sciences Corp.  
800 Centennial Avenue, P.O. Box 1327, Piscataway, NJ 08855-1327, USA

GE Healthcare Japan Corporation  
Sanken Bldg. 3-25-1, Hyakunincho Shinjuku-ku, Tokyo 169-0073, Japan

