

# **Quuppa LD-7L**

**Installation Guide and Safety Information** 



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# For your safety

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete installation guide for further information.

### **SWITCH ON SAFETY**

Do not switch the device on when the use of wireless devices is prohibited of when it may cause interference or danger

### **INTERFERENCE**

All wireless devices may be susceptible to interference, which could affect performance

### **QUALIFIED SERVICE**

Only qualified personnel may install, configure, or repair this product

### **ACCESSORIES**

Use only approved accessories. Do not connect incompatible products

When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.



### Introduction

Quuppa LD-7L (HAIP Locator) is a part of the Quuppa HAIP System. Other parts of the Quuppa HAIP system are Quuppa LD-6T (HAIP Tag) and Quuppa Positioning Engine software. The Quuppa HAIP System allows you to locate and track any objects equipped with HAIP Tags in an environment equipped with HAIP Locators. Quuppa LD-7L is designed for use in indoor and outdoor environments.

Read this guide carefully before having the Quuppa LD-7L professionally installed. Also, watch the Quuppa Site Planner and Quuppa Deployment tutorial videos before starting to use the HAIP system. For the latest guides, additional information, and downloads related to your Quuppa product, go to <a href="https://www.quuppa.com/support">www.quuppa.com/support</a>.



# Quuppa LD-7L dimensions

Figures 1 and 2 show the dimensions of the Quuppa LD-7L.

Figure 1. Rear view of the Quuppa LD-7L

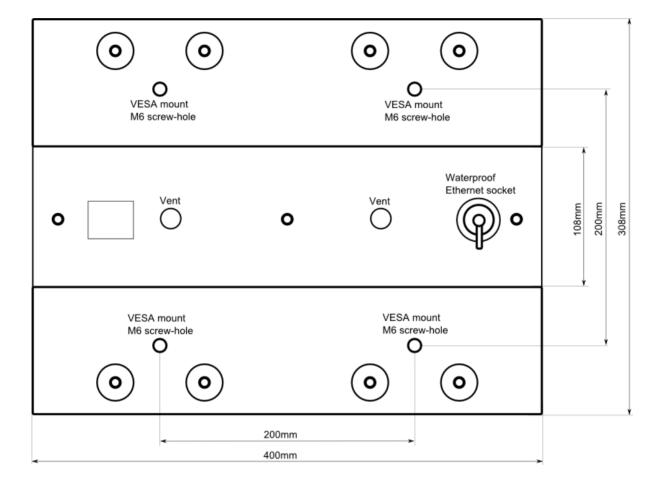
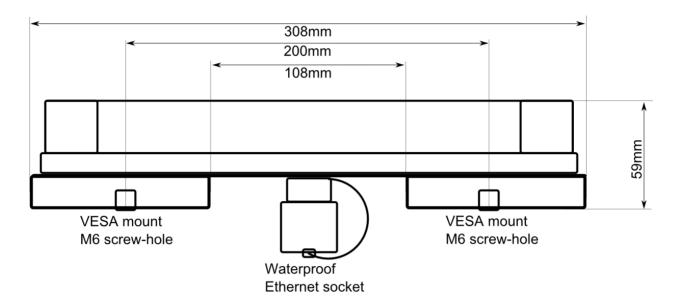




Figure 2. Side view of the Quuppa LD-7L



## **Safety Information**

Observe the following safety guidelines when installing Quuppa LD-7L.

- Only a qualified service technician should install or service Quuppa LD-7L. Faulty installation or service may be dangerous and may invalidate any warranty which may apply to Quuppa LD-7L.
- End users should remember that Quuppa LD-7L comprises of complex technical equipment that requires professional installation using special tools and expert know-how.
- Instructions given in this guide are general guidelines that apply to the installation
  of Quuppa LD-7L. However, due to the wide variety installation environments and
  mounting surfaces, this guide cannot consider the individual technical
  requirements relevant for any particular installation. Consult Quuppa in case you
  are uncertain about installation in a specific environment.
- Quuppa LD-7L is designed to operate with a standard PoE (Power over Ethernet) compatible network component connected at the Ethernet socket. For your safety, and to prevent any damage to Quuppa LD-7L, only use standard certified PoE network components.



- When installing Quuppa LD-7L, make sure the installation surface can safely carry the weight of the equipment and possible wind loads.
- Your service technician or dealer may be able to provide you with information on alternatives for mounting the equipment suitably in different types of environments.
- Do not smoke when installing the equipment. Make sure there is no source of fire or flame nearby.
- Make sure cables are placed so that they will not be subject to mechanical wear and tear.

### Installation notes

Quuppa LD-7L should be mounted clear of any metal obstructions (such air-conditioning ducts, large ceiling trusses, building superstructures) to the side or front of the enclosure. In case needed, use a rigid conduit to lower the Quuppa LD-7L away from these obstructions.

Quuppa LD-7L should be aimed into the intended coverage area, therefore mount the device so that the desired mechanical tilt can be achieved.

### Selecting compatible mounting bracket

The mounting holes of Quuppa LD-7L are arranged according to *VESA MIS-F, 200, Y, 6* standard (Four M6 threaded holes in 200x200mm pattern). Select your mounting bracket according to the requirements set by the installation environment. Make sure that the mounting bracket can carry the weight of Quuppa LD-7L and possible wind loads.



## Installing Quuppa LD-7L

- Attach the Quuppa LD-7L to compatible VESA mounting bracket. Use M6 bolts and assembly torque of 2 nM (max allowed torque is 2.5 nM).
- 2. Attach the VESA mounting bracket to the wall, ceiling, or mast.
- 3. Aim the Quuppa LD-7L towards the intended coverage area and tighten all fasteners.
- 4. Connect the ethernet cable to the Quuppa LD-7L. Make sure the other end of the ethernet cable is connected to a device connected to Quuppa HAIP system.

**WARNING**: Always make sure that the installation surface or mast can carry the weight of the equipment and possible wind loads before installation.

Not following general safety regulation can cause damage to objects or injuries to people. Rely on qualified personnel for carrying out the installation of Quuppa LD-7L.

### Suggested cable and connector for outdoor use

In case you are installing Quuppa LD-7L outdoors or to other humid environments use an ethernet cable and an ethernet connector that are designed for outdoor use. The ethernet socket of Quuppa LD-7L is *Conec 17-10020* and it accepts both bayonet and M28 threaded waterproof Ethernet connectors from Conec, for example 17-100464.

In indoor environments normal Ethernet cable with RJ45-connector (Modular 8P8C) can be connected directly to the waterproof socket in Quuppa LD-7L.



# Painting Quuppa LD-7L

If you wish to paint the Quuppa LD-7L do not use metallic or metallic-flake paints, which will degrade the performance of the locator.

Remember to cover the vents on the back of the Quuppa LD-7L before painting.

## **Product information**

Operating frequency range	24002483 MHz
Maximum transmit power	+6 dBm EIRP
Operating temperature range	-20°C+60°C
Storage temperature range	−30°C+70°C
IP protection class	IP65, dust and jetting water immunity
Operating voltage	Power over Ethernet, 48V
Typical power consumption	2 W
Length	400 mm
Width	380 mm
Thickness	59 mm
Weight	3.8 kg
Mounting	VESA MIS-F, 200, Y, 6



### Care and Maintenance

Your Quuppa LD-7L is a product of superior design and craftsmanship and should be treated with care. The following suggestions will help you protect your warranty coverage.

- Do not attempt to open the Quuppa LD-7L.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the Quuppa LD-7L. Only use a soft, clean, dry cloth to clean the surface of Quuppa LD-7L.

# Recycle

Always return your used electronic products, batteries, and packaging materials to dedicated collection points. This way you help prevent uncontrolled waste disposal and promote the recycling of materials.



The crossed-out wheeled-bin symbol on your product, battery, literature, or packaging reminds you that all electrical and electronic products, batteries, and accumulators must be taken to separate collection at the end of their working

life. This requirement applies in the European Union. Do not dispose of these products as unsorted municipal waste.



## Copyright and other notices

### **DECLARATION OF CONFORMITY**

Hereby, Quuppa Oy declares that this Quuppa LD-7L product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the Declaration of Conformity can be found at

http://www.quuppa.com/declaration-of-conformity



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### **FCC NOTICE**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1. This device may not cause harmful interference; and 2. This device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help. NOTE: FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.



NOTE: Changes or modifications not expressly approved by Quuppa could void the user's authority to operate the equipment.

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