

# PAL

# Technical Manual

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# 1. Installation and Hardware

This section will illustrate how to mount the sensor onto a standard tripod mount. Two potential tripod mounting options on the sensor unit are:

1. Using the standard UNC 1/4" mount provided on the top of the camera
2. Using the standard UNC 1/4" mount provided on the bottom of the camera

In both cases, the final position of the central axis of the sensor will be in line with the central axis of the tripod.

Two blind locating holes on each face (top & bottom) of the camera are provided for stability in case the need arises from the customer's end. The UNC 1/4" mount (both top and bottom) is provided in the centre and is compatible with standard tripods.

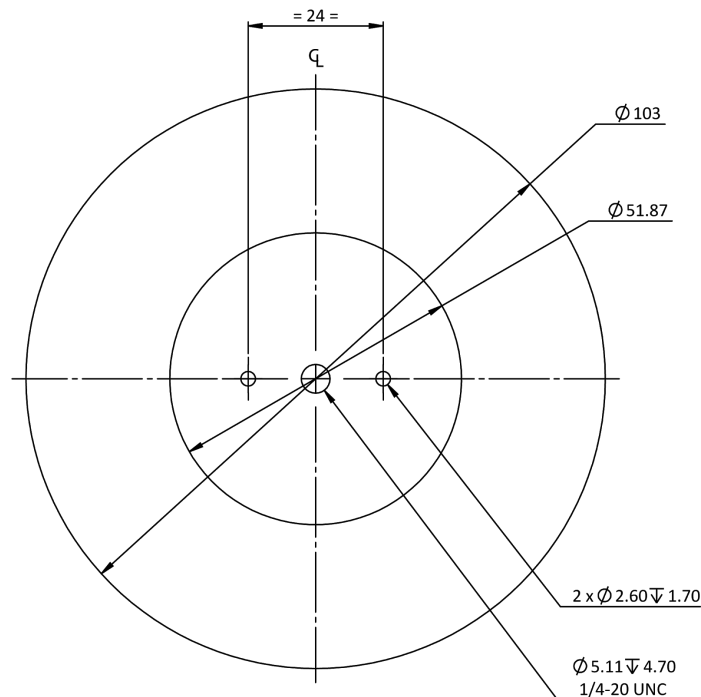


Figure 1.1: Mounting holes on the top

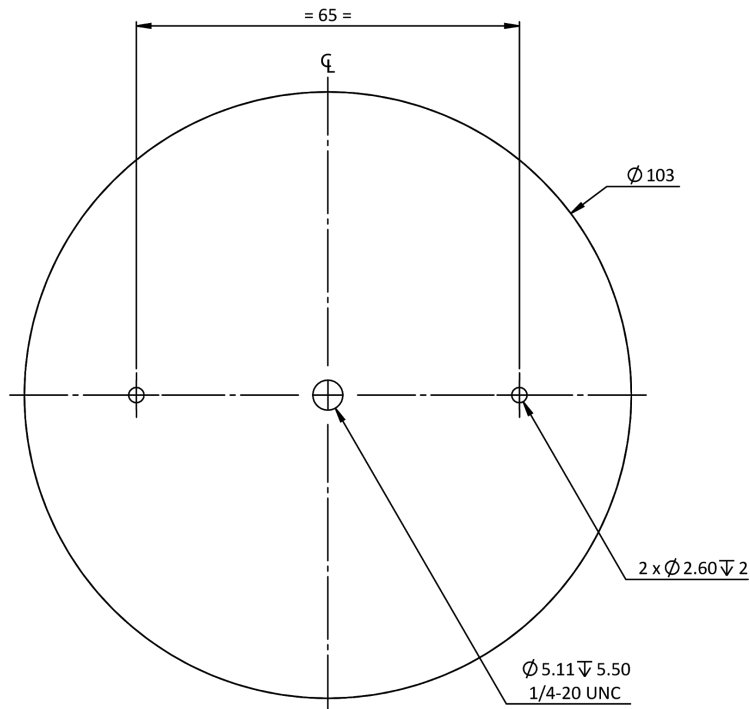


Figure 1.2: Mounting holes on the bottom

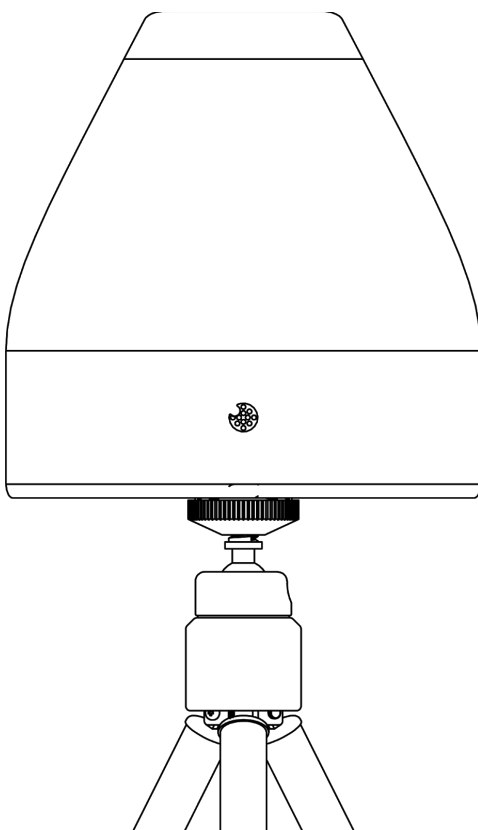


Figure 1.3: Final mounting at the bottom

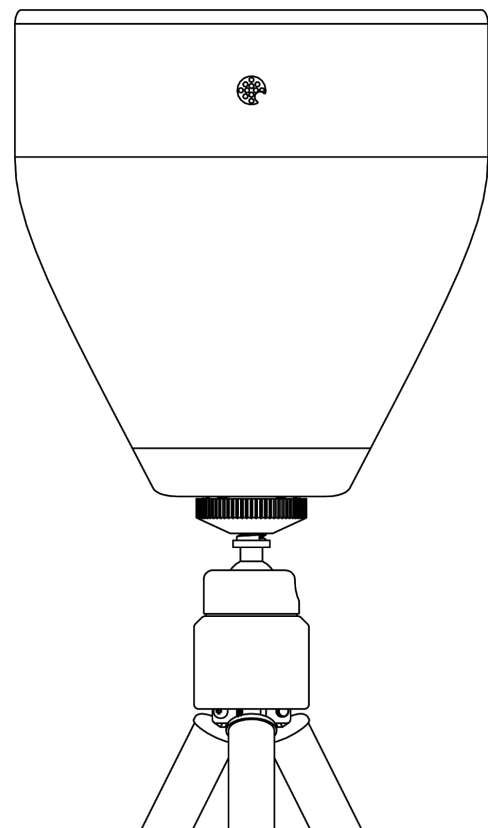


Figure 1.4: Final mounting at the top

Other possible mounting options: 1- At different angles

## 2. Operating Conditions

The sensor works reliably within ambient temperatures of  $-10^{\circ}\text{C}$  ( $14^{\circ}\text{F}$ ) to  $75^{\circ}\text{C}$  ( $167^{\circ}\text{F}$ ). We recommend storing the sensor within a temperature range of  $-40^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$ ) to  $85^{\circ}\text{C}$  ( $185^{\circ}\text{F}$ ).

The sensor is designed to achieve IP67 level ingress protection. Thus the sensor can survive water spray from any direction, and will not permit dirt to enter the enclosure that may harm the equipment.

## 3. Vertical Field of View

The Vertical Field of View of PAL is asymmetric about the central horizontal plane. The field of view covered above and below this plane is depicted in the figures below.

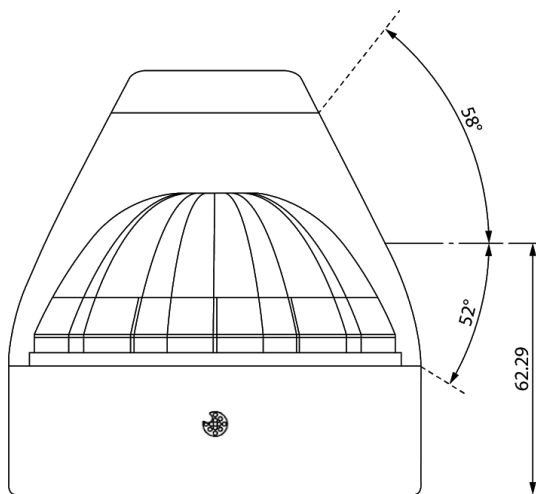


Figure 3.1: VFoV at bottom mount

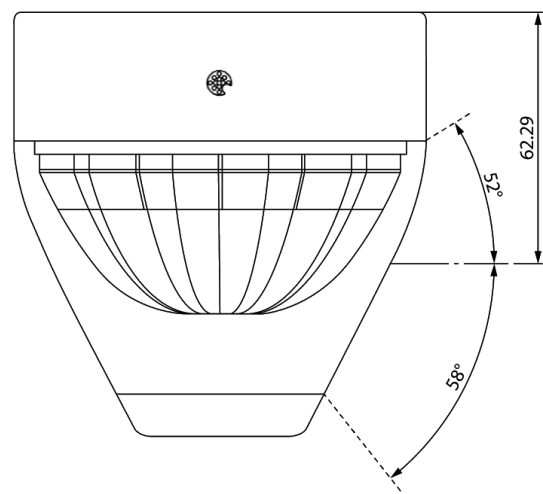


Figure 3.2: VFoV at top mount

## 4. Right Practices

Avoid dropping the sensor in any scenario. It will affect the physical integrity of the product.

Avoid touching the transparent enclosure of the sensor. It may affect the image quality of the sensor. If cleaning is required, use a microfiber cloth to gently clean the surface.

Do not open the transparent enclosure of the sensor. The image will be adversely affected.

## 5. Power Specifications

DC Voltage: 5V (From USB 3.0 port)

Rated Current : 500mA

Rated Power : 2.5W

## 6. Contents of Package

Item	Quantity
PAL 360 ° depth sensor	1
Microfiber cloth	1
USB Type A cable	1
Wet Wipe	1