

## Design Tool for AXIS Perimeter Defender

## About this Document

This manual is intended for administrators and users of Design Tool for AXIS Perimeter Defender. It includes instructions for using and managing the product on your network. Previous experience of networking will be of use when using this product. Later versions of this document will be posted at [www.axis.com](http://www.axis.com). See also the product's online help, available through the web-based interface.

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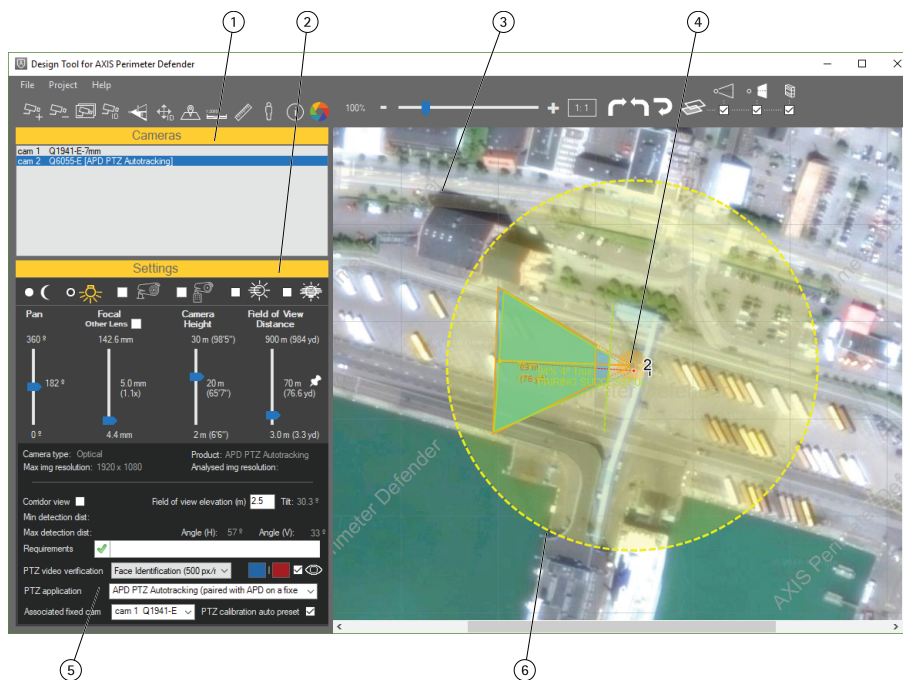
# Design Tool for AXIS Perimeter Defender

## About the Design Tool for AXIS Perimeter Defender

### About the Design Tool for AXIS Perimeter Defender

The design tool for AXIS Perimeter Defender is a self-contained application that can run on any Windows machine. The tool allows you to place cameras compatible with AXIS Perimeter Defender on a map. The tool then provides information on detection ranges, blind spots and camera placement when designing a perimeter protection system. The tool takes into account camera features, like focal range, as well as the requirements from AXIS Perimeter Defender.

If you use AXIS Perimeter Defender PTZ Autotracking, the tool can help you with the placement of the paired cameras.



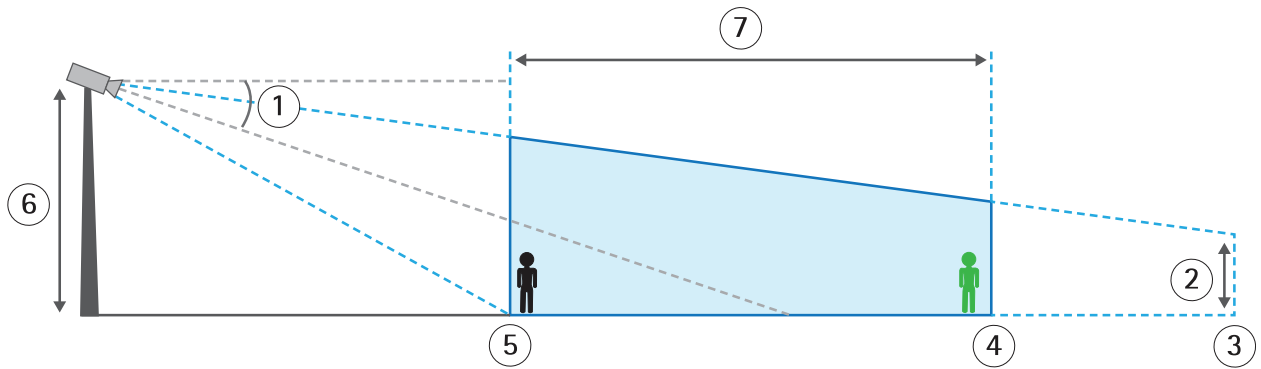
- 1 List of cameras added to the map
- 2 Settings
- 3 Map
- 4 Cameras on map
- 5 AXIS Perimeter Defender PTZ Autotracking settings
- 6 Field of view distance for PTZ camera

# Design Tool for AXIS Perimeter Defender

## About the Design Tool for AXIS Perimeter Defender

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### Terminology



- 1 Tilt
- 2 Field of view elevation
- 3 Field of view distance
- 4 Maximum detection distance
- 5 Minimum detection distance
- 6 Camera height
- 7 Detection zone

# Design Tool for AXIS Perimeter Defender



## How to...

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### How to...


This chapter explains how to use the Design Tool for AXIS Perimeter Defender.

### Add a map


1. Click .
2. Browse to find your map and click **Open**.
3. Set the scale of the map:
  - 3.1 Click .
  - 3.2 Draw a line on the map.
  - 3.3 Enter the number of meters or yards that the line corresponds to.
  - 3.4 Click **OK**.

### Add a camera

1. Click .
2. Choose a camera from the menu and click **OK**.

If you have added one camera and want to add an identical one with the same settings, click .

### Remove a camera

1. Choose a camera in the list of cameras.
2. Click .

### Pair cameras for PTZ Autotracking

To pair a PTZ camera with a fixed camera for AXIS Perimeter Defender PTZ Autotracking:

1. Add one PTZ camera and one fixed or thermal camera.
2. Select the PTZ camera in the list of cameras.
3. In **PTZ video verification**, select the desired level.
4. In **PTZ application**, select **PTZ Tracking**
5. In **Associated fixed cam**, select the fixed or thermal camera to pair with.

### Change or move the camera's ID number


Every camera placed on the map gets an ID number.

To change the start number for the ID number sequence:


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## How to...

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1. Click .
2. Enter the desired sequence start number.
3. Click the 1,2,3... button.

To move the ID number of a camera on the map:


1. Click .
2. Choose a camera in the list of cameras.
3. Drag-and-drop the ID number to the desired location.

## Measure

To measure the distance between two points on the map:

1. Click .
2. Draw a line that covers the distance you want to measure.
3. The distance appears in the Ruler Tool pop-up.

To measure the size (in percentage of the image height) of a person in the camera's field of view:

1. Click .
2. Choose a camera in the list of cameras.
3. Hover the map to see the size of a person in the Human Size Measure Tool pop-up.

## Adjust the camera settings

To change the location of the camera on the map, click it and drag.

Under **Settings**, you can make adjustments for each camera.

**Pan** – Adjust the direction of the camera.

**Focal** – Adjust the focal length of the camera.

**Camera height** – Adjust the mounting height of the camera. See *Terminology on page 5*.

**Field of view distance** – Adjust the field of view distance of the camera. See *Terminology on page 5*.

### Note

If the installation of the camera does not meet the requirements of AXIS Perimeter Defender, information is shown in the **Requirements** field.





### About maximum detection distance

The maximum detection distance for a camera depends on several factors, such as camera type, maximum image resolution, and focal length. Also, some environmental factors can degrade the detection performance and reduce the maximum detection distance. Examples of such factors are: the level of illumination in the scene, the use of infrared lights, or the presence of fog.

To adjust the maximum detection distance to different conditions, select one or more of the following:



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## How to...






-  For scenes with low illumination (less than 50 lux).
-  For scenes with good illumination (more than 50 lux).
-  For cameras using built-in IR illumination.
-  For cameras using external IR spot illumination.

The selected IR spot illumination must reach at least twice the maximum detection distance and cover the camera's field of view.

For example, if the expected maximum detection distance is 50 m (54 yards) and the horizontal field of view of the camera is 30 degrees, the IR spot illumination used must be able to reach at least 100 m (109 yards) and cover 30 degrees.

-  For conditions with medium-density fog.
-  For conditions with high-density fog.

### Maximum possible detection distance in different conditions

	Thermal Camera	Optical Camera Good illumination at night (>50 lux), no IR used 	Optical Camera Low illumination at night (<50 lux), suitable external IR spot used 	Optical Camera Low illumination at night (<50 lux), built-in IR used (only for -L cameras) 
No fog	600 m	300 m	80 m	20 m
Medium-density fog 	400 m	100 m	50 m	0 m
High-density fog 	200 m	50 m	0 m	0 m

## Hide areas from the camera's field of view

To activate or deactivate the tool to hide areas from the field of view:

- Click 

To hide an area:

1. Click to start a line.
2. Click to end the line.
3. Create more lines until the area is surrounded by lines.

To move a line's endpoint:

1. Hover the endpoint of a line.
2. When the end of the line is highlighted in yellow, drag-and-drop it to a new location.
3. Click again to release the endpoint in its new location.



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## How to...

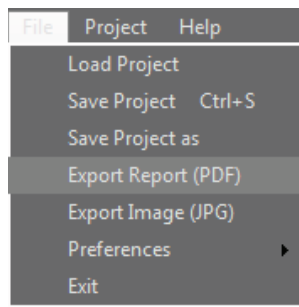
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To delete a line:

1. Hover the line.
2. When the line is highlighted in yellow, press DELETE.

## Export a project

To export the project to a pdf:



- Click File > Export Report (PDF)

This generates a report of two pages. One page has a picture of the map and cameras, and the other one has a table with the details.

To export an image of the map and cameras:

- Click File > Export Image (JPG)

## Save or load a project

To save the project:

1. Click File > Save Project
2. Give the file a name and click Save.

To load an existing project:

1. Click File > Load Project

## Find help

For more help on how to place the cameras, click 