

# AI High Resolution Counting App

EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports based on the AI High Resolution Counting neural network for object classification of persons and vehicles



The AI High Resolution Counting App and the underlying AI High Resolution Counting neural network were developed for the direct counting of people and vehicles in large crowds<sup>1)</sup>. Typical use cases include counting people in airport waiting areas or counting vehicles in large parking lots.

## AI High Resolution Counting App

The AI High Resolution Counting App allows the definition of several counting zones and the setting of the counting interval for the neural network. A limit value for the counted objects can be defined for each zone, which triggers a message to the client software defined via the event management if it is exceeded or undershot.

## AI High Resolution Counting Net

The AI High Resolution Counting neural network has been specially trained for object classification of people and vehicles that are simultaneously visible in large numbers and not isolated in the captured image. The neural network analyzes the high-resolution image in an adjustable interval (5 to 60 seconds) and makes the results available for direct evaluation with the AI High Resolution Counting App.

## Compatibility

The AI High Resolution Counting App and the associated neural network can be used with all Domera® cameras of the RDF6000 series as well as with all Panomera® S/W 4 and 8 cameras.

## Client Software

For small to medium-sized systems, SeMSy® Compact is ideal for the evaluation of counting results and corresponding recordings, also graphically supported with the optional SeMSy® Compact Dashboard. The messages defined on the camera when limit values are reached can be received as event messages via the Dallmeier Event Manager or via Dallmeier recording systems with the option of automatically displaying the live image or the corresponding recordings.

## Client System

Larger Hemisphere® SeMSy® systems support the reception and processing of messages defined on the camera with the Enterprise Event Processing Module. In addition, the People Counting Module enables the independent processing of pure counting results. The module supports the creation of multiple counting zones, the fill levels of which can be displayed color-coded in the map view. Different limit values can be defined for each zone, which trigger a message in the Alarm Inbox Application when they are reached. The messages and counting results can be displayed graphically in individual dashboards and evaluated with definable workflows.

## Licensing

The AI High Resolution Counting App is activated after entering the corresponding license code on the camera<sup>2)</sup>. The neural AI High Resolution Counting network must be installed additionally after licensing.

## Note for the App

The AI High Resolution Counting App cannot be used simultaneously with the EdgeAnalytics AI Essential Apps. However, switching between the two operating modes is supported.

## Note for the Net

The neural AI High Resolution Counting network requires visual conditions for object recognition that are comparable to human perception. Deviating counting results are to be expected in unfavorable lighting conditions or when objects are heavily obscured.

1) A Domera® camera can detect up to 500 objects (people and vehicles) in the overall image, a Panomera® S/W 4 up to 2000 objects and a Panomera® S/W 8 up to 4000 objects.  
2) The AI High Resolution Counting App can be used independently. A license for the EdgeAnalytics AI Essential Apps is not required.

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License	
009293	<b>DLC – Domera® AI High Resolution Counting App</b> License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Domera® camera.
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009295	<b>DLC – Panomera® S/W 8 AI High Resolution Counting App</b> License for the use of the EdgeAnalytics AI High Resolution Counting App for the definition of counting zones and fill level reports. License for the use of the AI High Resolution Counting neural network for object classification of persons and vehicles in the entire captured image at higher resolution and adjustable count rate on a Panomera® S/W 8 camera.