

# MOBOTIX 7: The New MOBOTIX Solution-Platform

MOBOTIX – Configuration of the A.I.-Tech App „AI-Traffic“



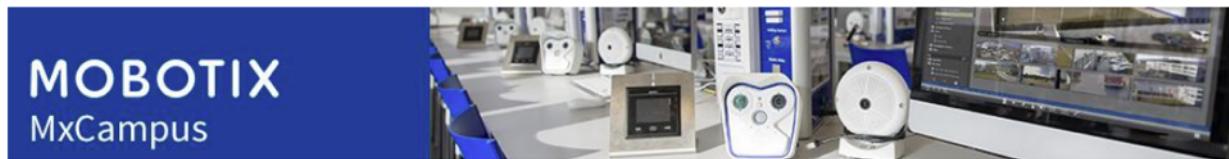
V 2.1-EN



This webinar is being recorded

Recording available on our eLearning platform **eCampus**

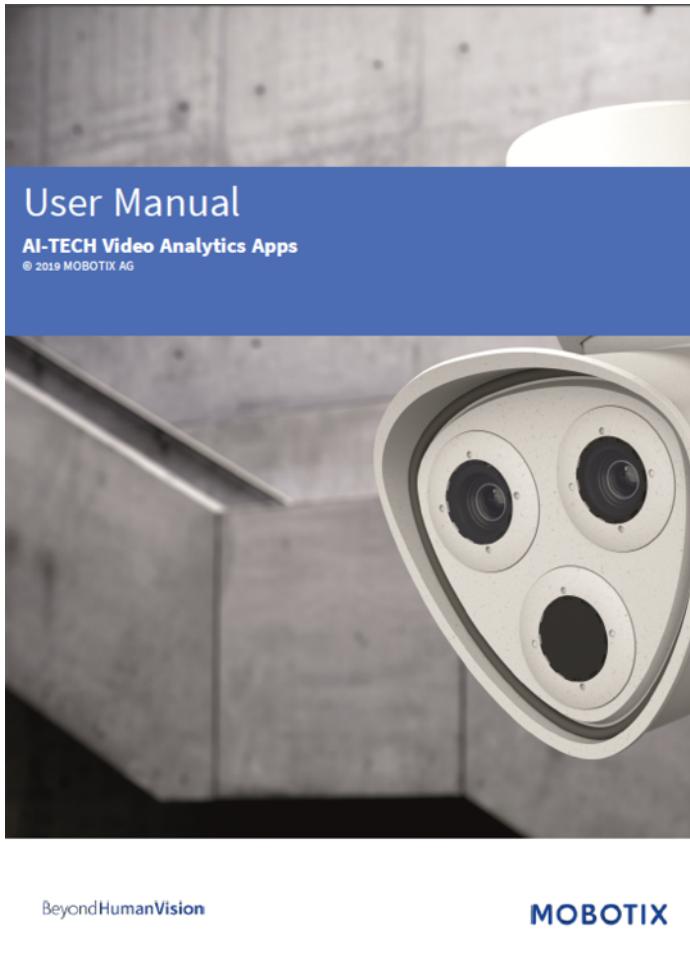
[www.mobotix-ecampus.com](http://www.mobotix-ecampus.com)

A screenshot of the eCampus login page. It has a dark blue header with the word 'LOGIN' in white. Below it is a light gray form with two input fields: 'Benutzername' and 'Passwort', each with a corresponding text input box. At the bottom left is a link 'Logindaten vergessen?'. On the far right is a dark blue 'Login' button.

No login yet? Register for free per e-mail to: **[ecampus@mobotix.com](mailto:ecampus@mobotix.com)**

- **Preparation and relevant documents**
- **Contents of the bundle**
- **App configuration**

## User Manual



## Checklist Traffic

**Checkliste „Traffic“**

**Aus dem User Manual / from the User Manual:**

- Winkel zur Straße / Angle between street and camera
- Ansicht der Fahrzeuge vom Heck / Frame the vehicles from behind
- Bildwinkel / Viewing angle
- Stabile Montageart (Mast o.ä.) / Vibration free mounting (pole or similar)
- Kamerahöhe mind. 5m/ Camera mounting height minimum 5 m
- Mindestgröße Objekt in Pixel / Minimum size of object in pixel
- Neigungswinkel mind 15° / Tilt angle minimum 15°
- Kamera Auflösung / Camera resolution

**Algorithmenparameter / Algorithm parameters**

- Stream (Gerätename, Sensorauswahl, Rotation) / Stream (Device name, Sensor selection, Rotation)
- Kamerakalibrierung (Höhe, horizontaler Winkel, vertikaler Winkel) / Calibration (height, horizontal angle, vertical angle)

**Administrator Parameter**

	Resolution	Recommended value
<input type="checkbox"/> Leistung / Performance	320x240	3x3
<input type="checkbox"/> Gauß-Filter / Gaussian Filtering	640x480	5x5
<input type="checkbox"/> Helligkeitsregelung / Brightness change control	1920x1080	7x7

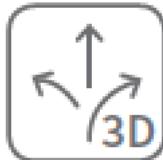
- Hintergrund / Background  
Prüfen mit "Objekte im Vordergrund markieren" Achtung!, vorher Sensor anlegen!  
Double Check with "Highlight Objects in the foreground" Attention! add sensor first
- Schattenkorrektur / Shadow Removal
- Morphologischer Filter / Morphological filtering
- Blob-Erkennung / Blob detection
- Verfolgung / Tracking

MxCampus - Checklist Intrusion Pro Page 1/2

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## AI-Traffic App Bundle

AI-Traffic = AI-Road3D + AI-Incident



### AI-Road3D

Traffic monitoring: Detection, tracking and counting of vehicles (behavior, traffic density, type [trucks, cars, cycles]).  
Identifies vehicles that are too fast.



### AI-Incident

Traffic monitoring: Presence of pedestrians, vehicles stopping, queues or vehicles in the wrong direction.

# APP-Selection in the Setup Menue

6



▪ Allincident	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ Allintrusionpro	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AILoitering	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AILost	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AIOccupancy	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AIOvercrowd	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AIOveroccupancy	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AIParking	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AIPeople	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AIRetail	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AIRoad3d	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AISecurity3	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AISmoke	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ AISpill	<input type="button" value="Trial"/>	Trial available.	Please update the license.
▪ <a href="#">AITraffic Settings</a>	<input checked="" type="checkbox"/>	2020-06-23 (30 days trial).	AITraffic



Camera model: M73

Sensor Module: B100D

FoV:  $45^\circ \times 25^\circ$

Focal length: 10 mm

Image Sensor width: 7,18 mm

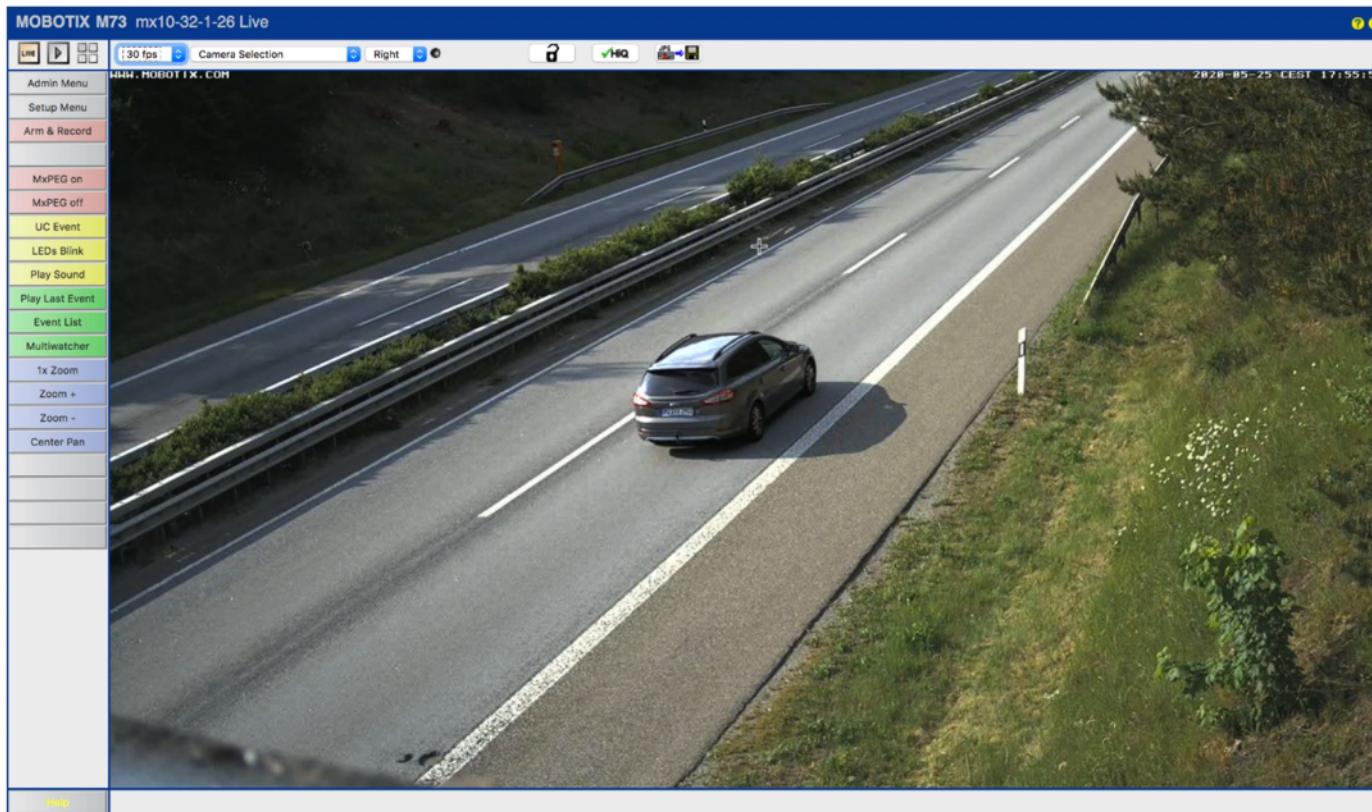
Setup: Autobahn Bridge

Camera height: 7,3 m



**Resolution used for analytics: 640 x 480**

**Average Object Size: 100 x 70 px**



# Activating the App and Embedded Dashboard

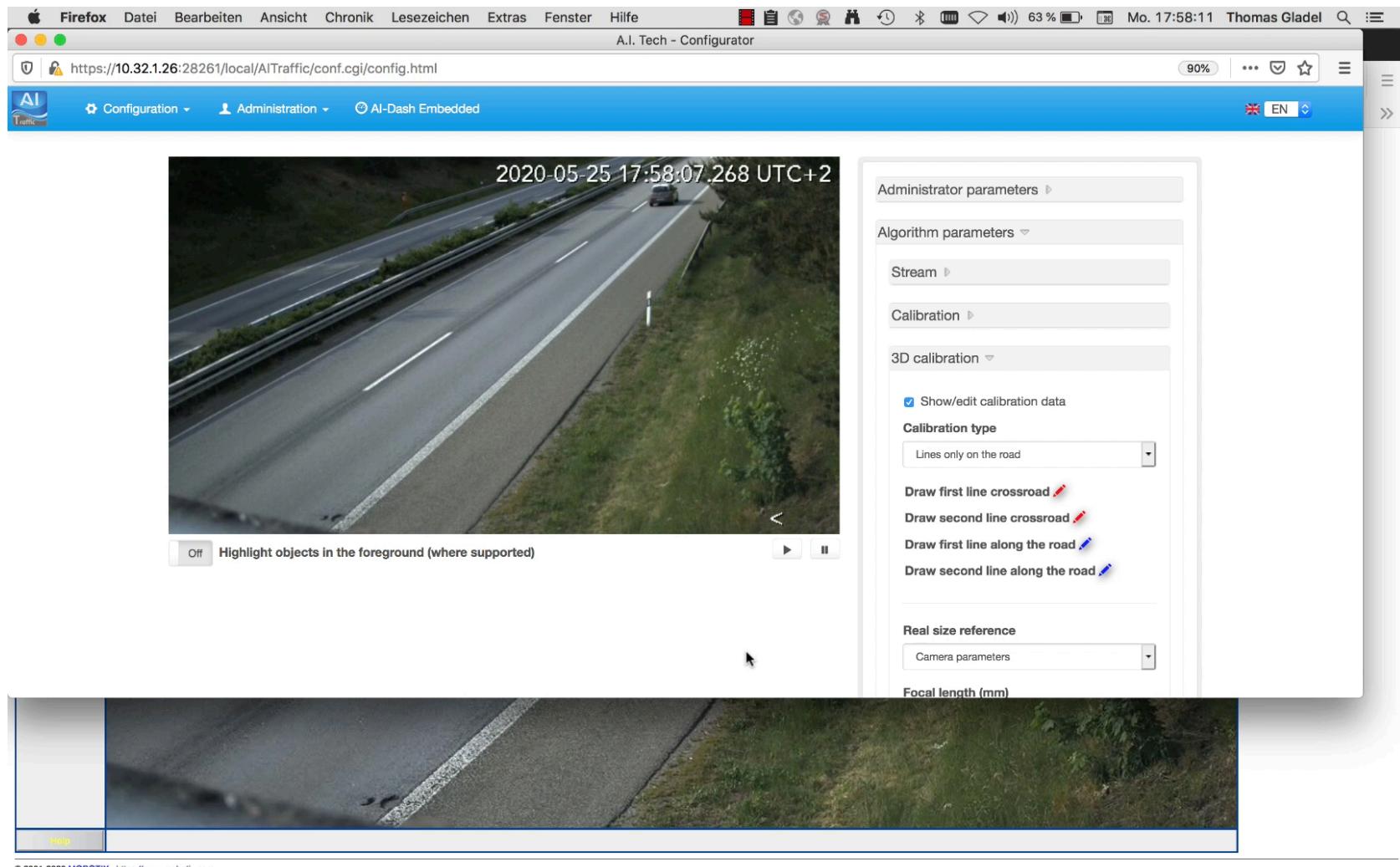
9

The image displays two side-by-side browser windows. The left window is titled 'mx10-32-1-26 Setup Overview' and shows a navigation bar with links like Datei, Bearbeiten, Ansicht, Chronik, Lesezeichen, Extras, Fenster, and Hilfe. Below this is a URL bar with 'https://10.32.1.26/control/'. The main content area is divided into sections: 'Image Control' (with links to General Image Settings, Exposure Settings, Color Settings, JPEG Settings, Text & Display Settings, and vPTZ Settings); 'Event Control' (with links to General Event Settings, Event Overview, Action Group Overview, and Recording); and 'Certified App Control' (with a single link to Certified App Settings). The right window shows a live video feed from a camera mounted on a road. The video shows a multi-lane highway with a white van on the left and a black car ahead. The timestamp in the top right corner of the video feed reads '2020-05-25 CEST 17:55:54'. The browser interface includes standard toolbar icons and a search bar at the top.

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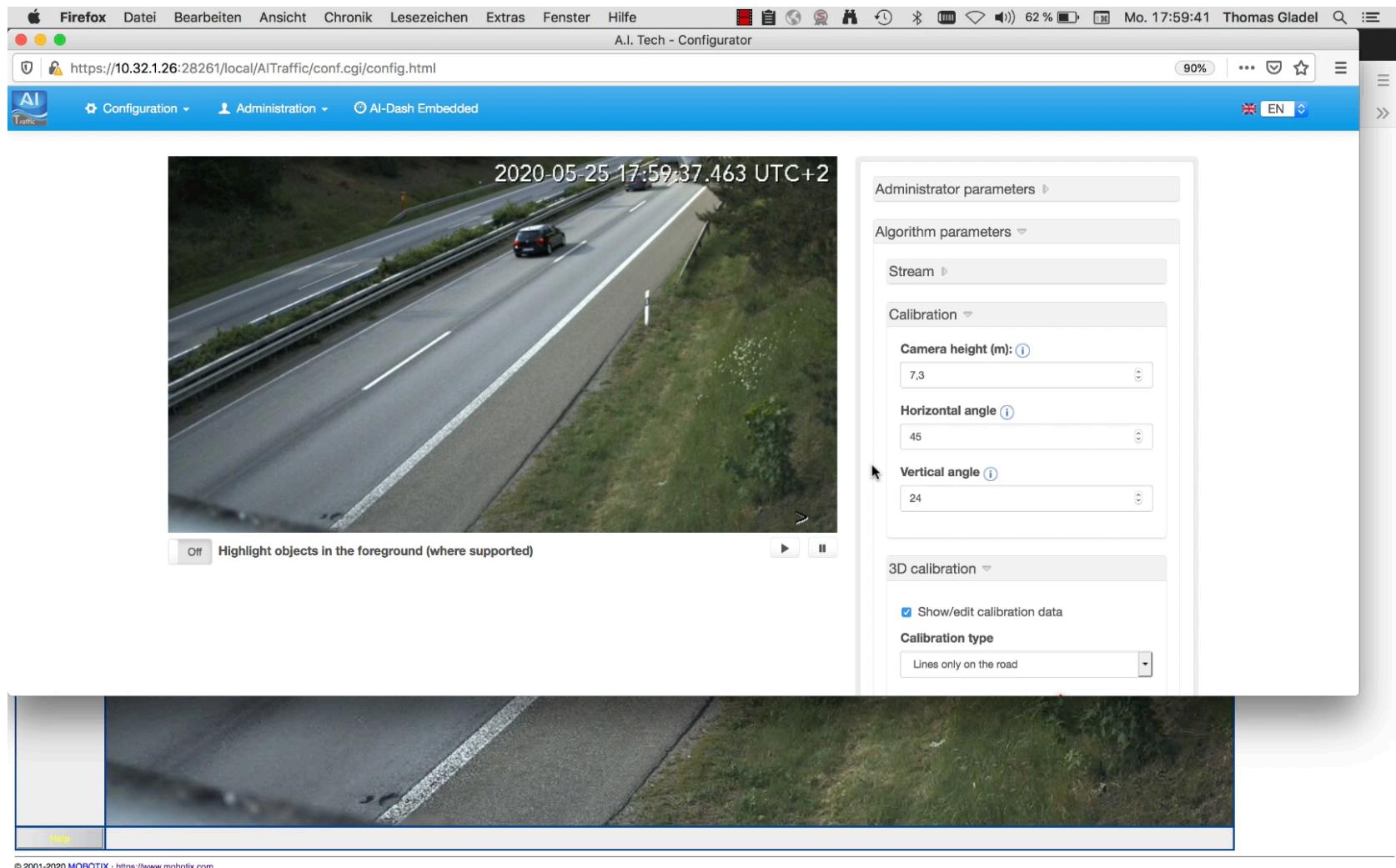
# Stream and Calibration

10



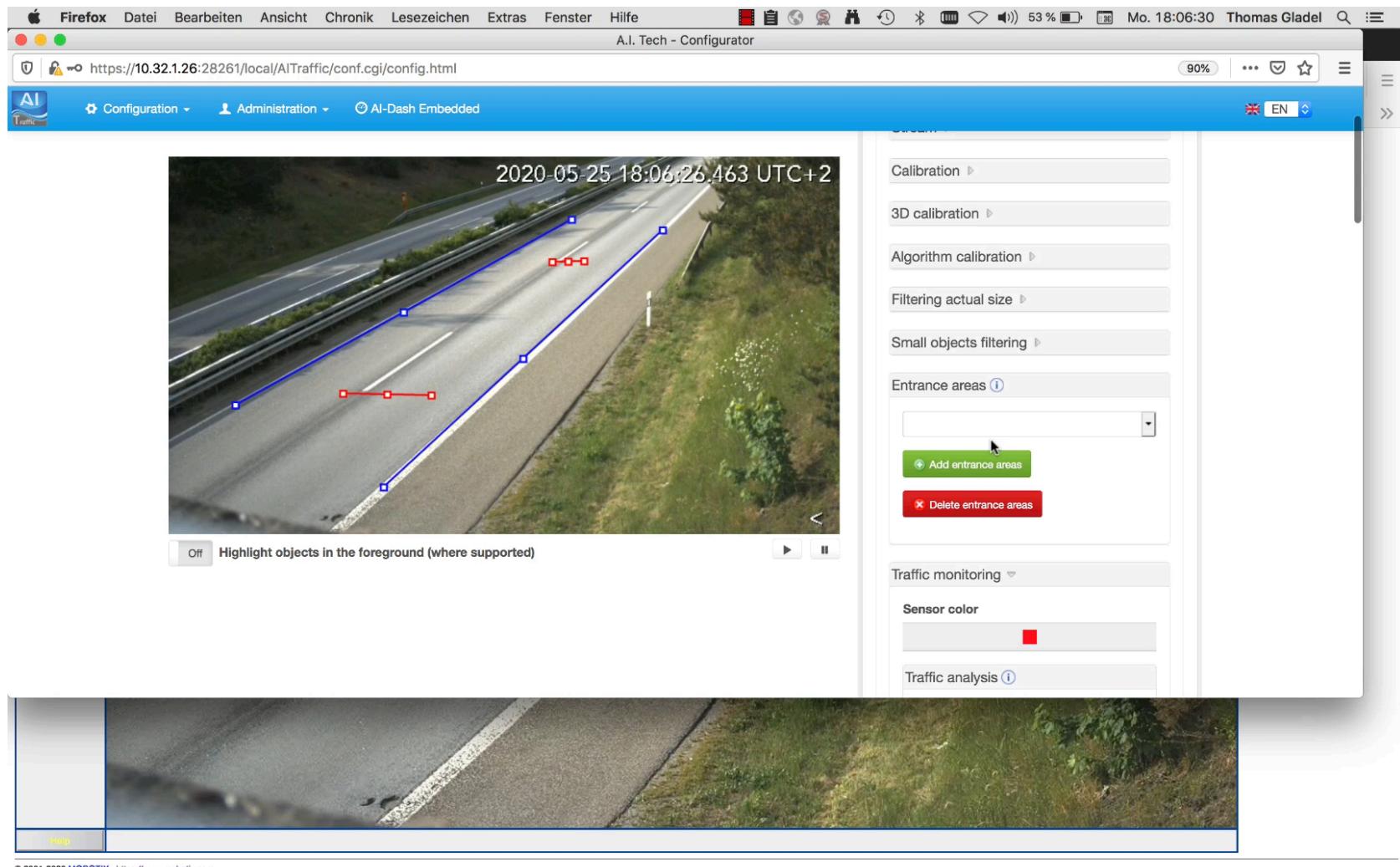
# 3D Calibration and Camera lens parameters

11

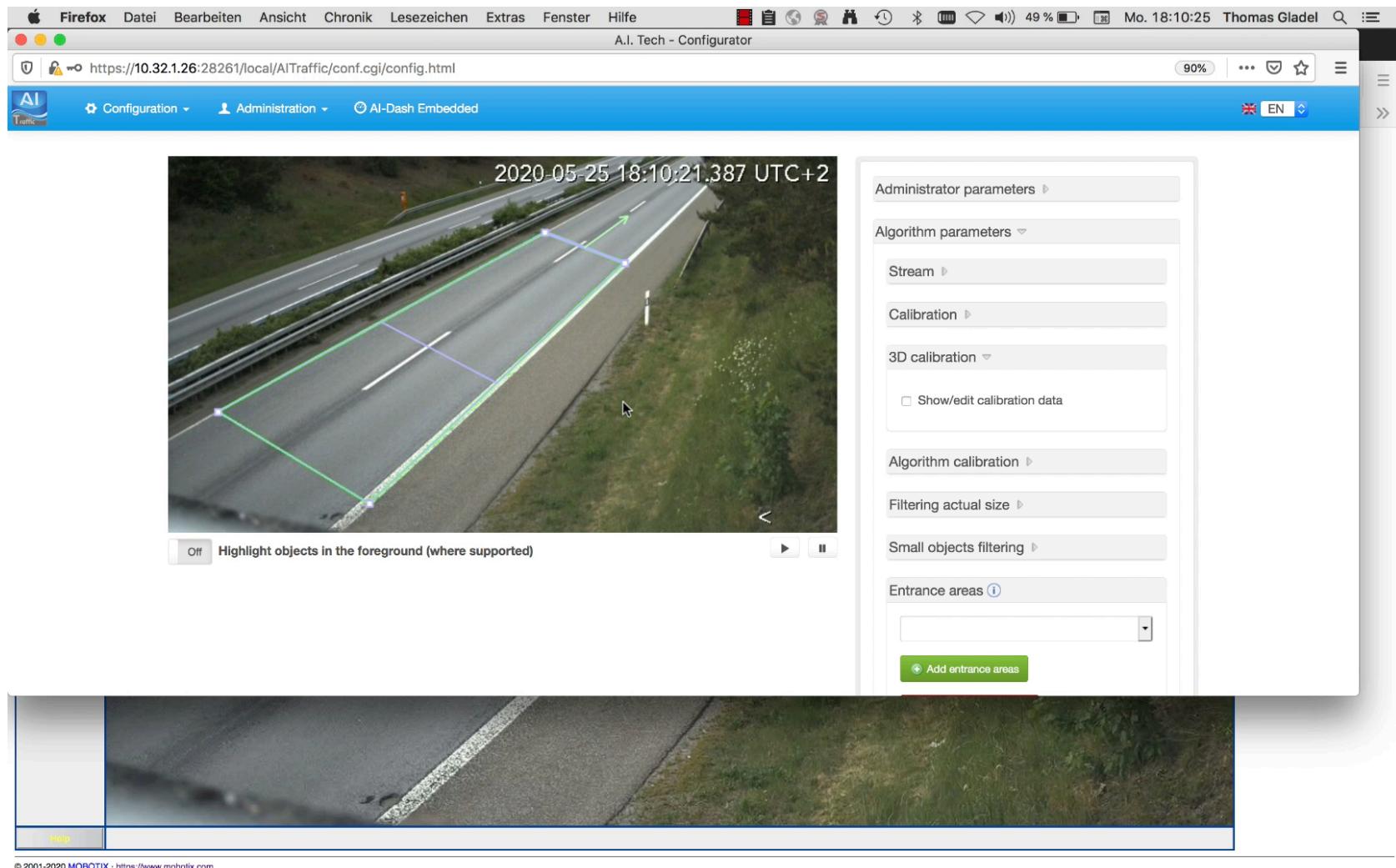


# Define Sensor

12

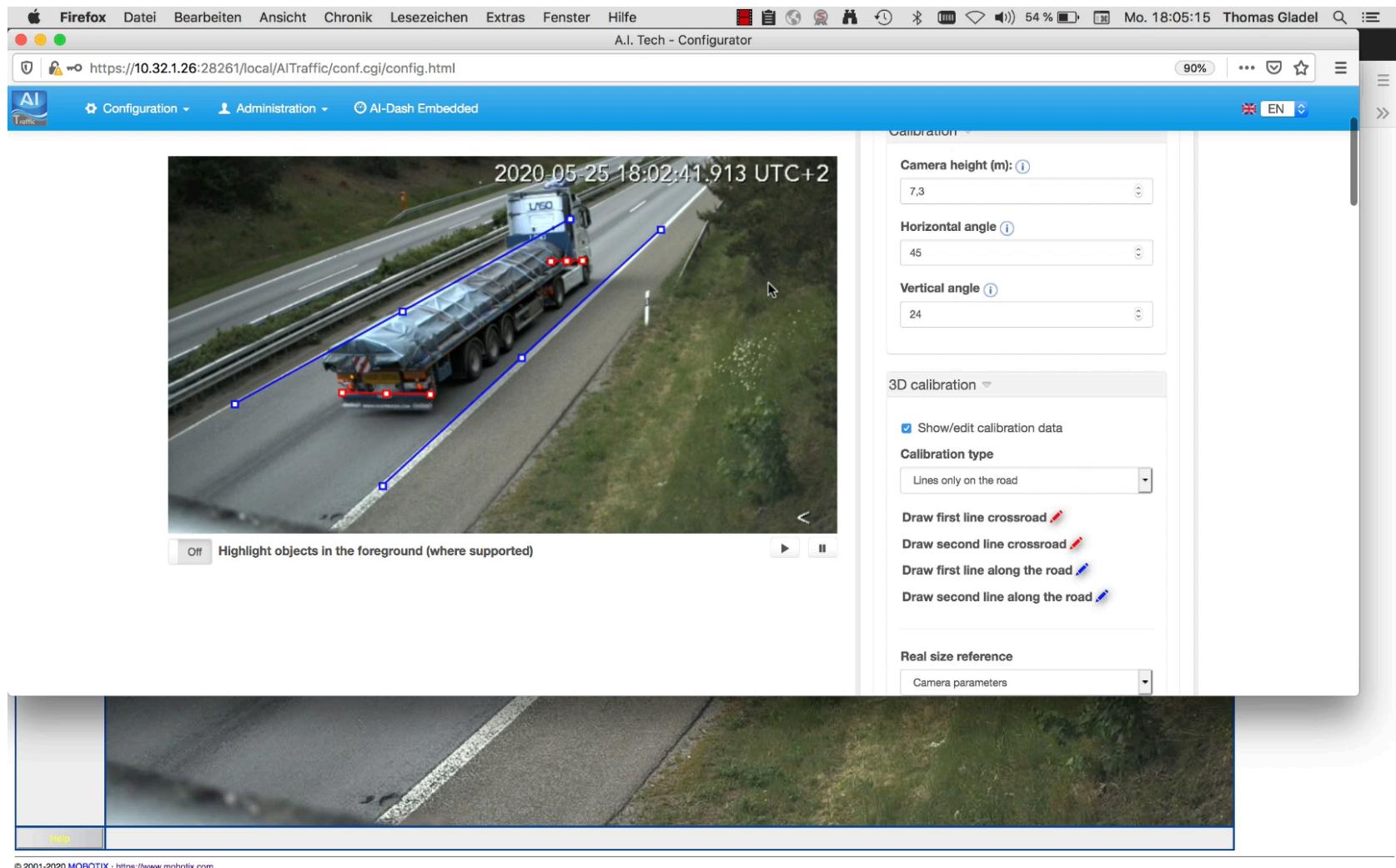


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# Administrator Parameters

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# Using the results

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The screenshot shows a Firefox browser window displaying the AIDash - Embedded dashboard at <https://192.168.115.81:28261/dashboard/#dash>. The dashboard interface includes a top navigation bar with links for AI Dash - Embedded, Live, Dashboard (which is currently selected), and Configurator. Below this is a sub-navigation bar with Report, Live, and Dashboard. The main content area is titled "Dashboard" and "A.I. Tech". On the right side of the dashboard, there is a configuration panel with the following fields:

- Interval:** 28/04/2020 - 27/05/2020
- Aggregation level:** Daily
- Sensor type:** Road traffic analysis
- Event type:** Road traffic analysis
- Sensor:** S1
- Aggregation:** By vehicle type

At the bottom of this panel are two buttons: "Show chart" and "Show events".

At the very bottom of the page, there is a footer with the text "Copyright © 2019 A.I. Tech. All rights reserved." and "Version 1.2.0".

Traffic analysis ⓘ

# 1

+ Add sensor

✖ Remove sensor

[Redraw the sensor](#) 

---

Sensor selection ⓘ

1

Sensor Name ⓘ

S1

Enable vehicle counting and classification ⓘ

Enable high speed limit control ⓘ

Speed limit (km/h) ⓘ

130

Enable traffic density monitoring ⓘ

Traffic density event period (s) ⓘ

60

Enable congestion control ⓘ

Enable wrong way control ⓘ

Stopped vehicle or pedestrian [i](#)

# 1 [▼](#)

[Add sensor](#)

[Remove sensor](#)

[Redraw the sensor \[i\]\(#\)](#)

ID sensor [i](#)

3 [▼](#)

Sensor Name [i](#)

S3

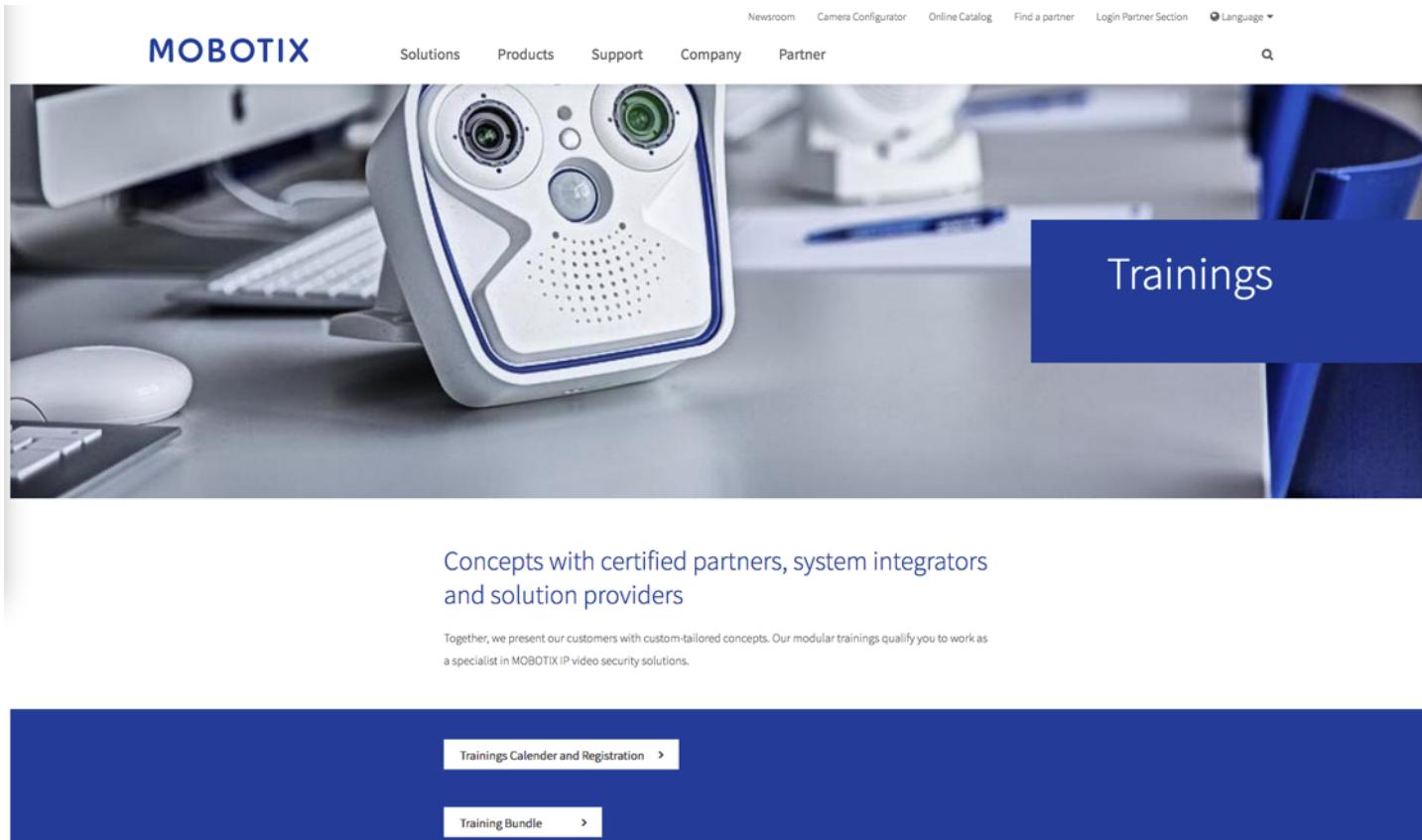
Enable pedestrians detection [i](#)

Enable stopped vehicles detection [i](#)

Latency (s) [i](#)

10 [▼](#)

Check for more MOBOTIX trainings on our website  
<https://www.mobotix.com/en/support/trainings>



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BeyondHumanVision

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