

TRASSIR Face Mask Detector Neural network personal protective equipment detector

Face detection in the video stream to monitor compliance with epidemiological measures





TRASSIR Face Mask Detector

Neuroanalytical smart module that extends the capabilities of an existing video surveillance system by enabling automatic face detection and determining whether a person is using a medical mask.

With the help of the smart module, faces are automatically detected and then the presence of a face mask is determined. The system functionality allows you to set the logic of the door and/or turnstile depending on the results of detection, as well as the formation of notification in a given form, including with a real-time sound alert.

> The use of personal protective equipment in public places is a necessary preventive measure in a pandemic or an epidemic, and increasing the effectiveness of monitoring its compliance is the most important task for business owners.



TRASSIR Face Mask Detector usage scenarios

In view of the increased epidemiological danger around the world, regulations on the mandatory use of personal protective equipment, primarily medical protective masks, have been introduced. These requirements apply not only to citizens, but also to legal entities, including retail chains. Violation of these regulations entails appropriate penalties and sanctions, and business owners are interested in monitoring visitors' compliance with the necessary measures as effectively as possible.

Scenario 1: Control of wearing masks in a retail store

- A camera pointed at the entrance to the store
- The video channel starts up the face detector with classification by mask presence
- An additional script configures the closing of dry contacts when a face without a mask is detected in the frame
- When the dry contacts are closed, a loudspeaker will announce the need to wear a mask when entering the store
- The administrator of the sales floor is notified of the violation. In case a customer without a mask has ignored the announcement, an administrator can come up and ask them to leave the store





TRASSIR Face Mask Detector usage scenarios

Scenario 2: Control of wearing masks in retail stores using ACS

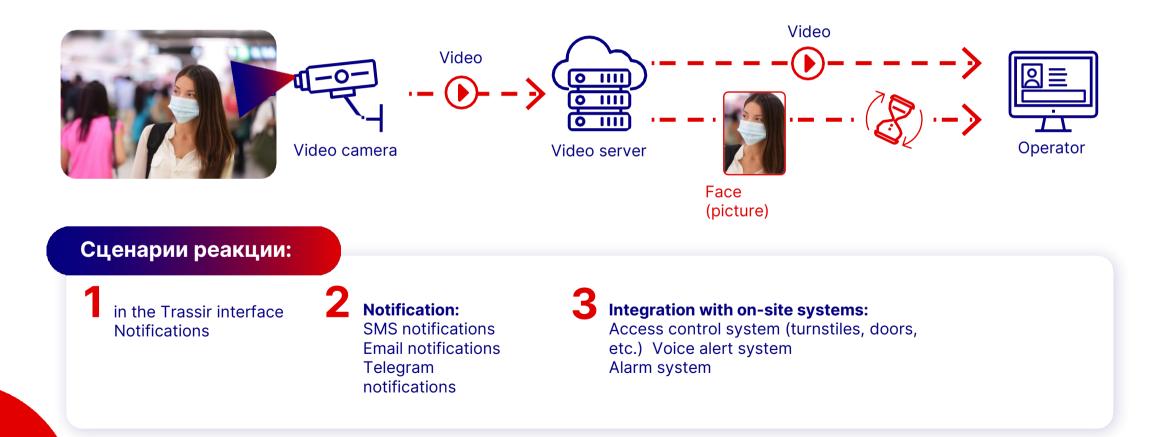
- A camera pointed at the entrance to the store
- The video channel starts up the face detector with classification by mask presence
- An additional script configures the closing of dry contacts when a face without a mask is detected in the frame
- When the dry contacts are closed, the turnstile will remain closed and the intruder will not be able to enter the sales area
- Upon violation, a light indicator on the turnstile lights up and there is an audible notification of the need to wear a mask when entering the store





Solution architecture. How does it

Implemented: locally on the NeuroStation series servers offload analytics





Areas of application



Airports



Business centers and offices



Buildings and facilities



Industrial enterprises



Retail



Cultural and sports facilities



Public transport



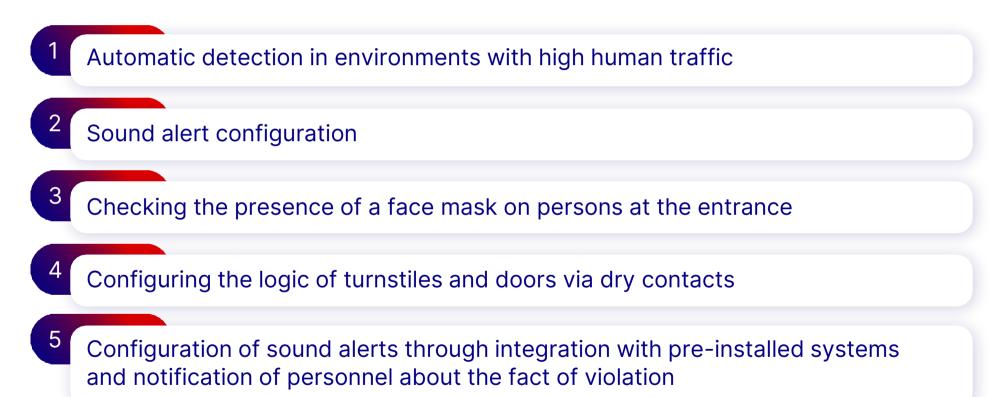
Customs and border control



Safe city



Functionality and features of the solution





Solution benefits

Quick implementation

expanding the functionality of existing video surveillance systems

Responsiveness

operation in real time without delays.
Significant reduction in response time to violations

Reliability

exclusion of false positives
with persons whose face is not
visible in the frame

Simplicity

 neural network analytics running on the hardware, easy implementation into existing CCTV system

Integration

 the necessary set of mechanisms for integration with hardware

Cost

a one-time payment
for 1 video channel

