

High Precision Detection of Elevated Body Temperature



Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Detection of Elevated Body Temperature

Why is it important?

- One of the symptoms caused by virus diseases such as the COVID-19 is the elevated body temperature
- Detection of elevated body temperature can be used to screen people with the aim to prevent the fast spreading of the disease amongst a group of people e.g. travellers at the airport or employees in a government building or private company



Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Detection of Elevated Body Temperature

Common Approaches and their Disadvantages

- Common systems available in the market today measure the skin temperature of the human face
- The facial skin temperature is affected by a wide range of environmental and physiological factors
- An elevated facial temperature does not precisely correlate to the core temperature of the human body
- Measurement of facial temperature is performed without the use of a reference temperature target and for this reason it is inaccurate

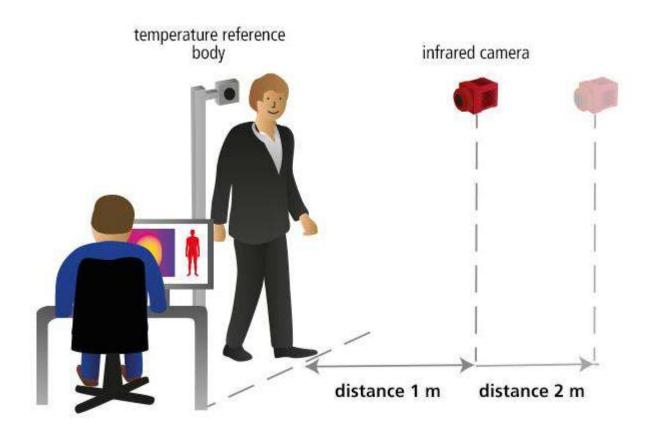


Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

The solution of AT: FebriScan

High Precision Detection of Elevated Body Temperature





Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Advantages / Unique Selling Points

- High precision detection of elevated body temperature according to the standard IEC / DIN EN 80601-2-59:2017
- Recording of the body temperature on the inner corner of the upper and lower eye lids (canthi)
- High precision temperature reference (blackbody) with accuracy +/-0.1°C
- Fast measuring process and evaluation (< 1 second)
- 2 different camera subject distances (1m and 2m)
- Applicable independent of location: e.g. companies, authorities, railway stations, airports, etc.
- Easy installation



Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Key Features

- Smart IR camera cutting edge technology with resolution 336x256 or 640x512 pixels
- Automatic measurement adjustment by means of high precision temperature reference (blackbody).
- Integrated fully automatic self-test functions for highest reliability of temperature measurement
- 3 versions allowing easy adaptation to local installation conditions
- Intuitive graphical interface
- 24/7 continuous operation



Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Available Packages

Portal	Mobile	Integration
 All-In-One solution for fixed installations at one location Smart camera IRSX-I with high precision blackbody and FebriScan App Portal with holders, brackets and user display Operator monitor with embedded PC Sticker/Signs 	 Flexible setup with tripods for temporary screenings Smart camera IRSX-I with high precision blackbody and FebriScan App Tripods for camera and blackbody Operator monitor with embedded PC Transportation cases Sticker/Signs Optional User display Carry bags 	Bundle for customer specific integration • Smart camera IRSX-I with high precision blackbody and FebriScan App • Camera IO-Kit Optional • Sticker/Signs



Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Portal Package



Operator Monitor with FebriScan App Visualisation

Smart Camera IRSX-I

High Precision Blackbody

Portal

User Display

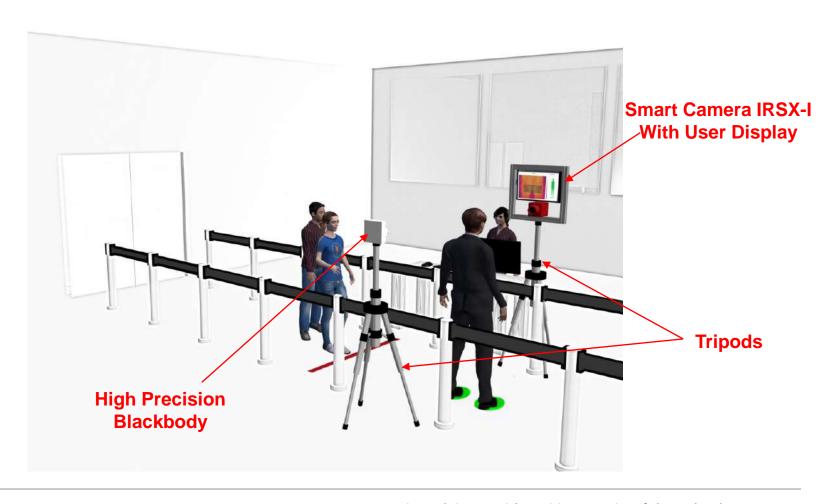


Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020



Mobile Package





Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Integration Package

High Precision Blackbody



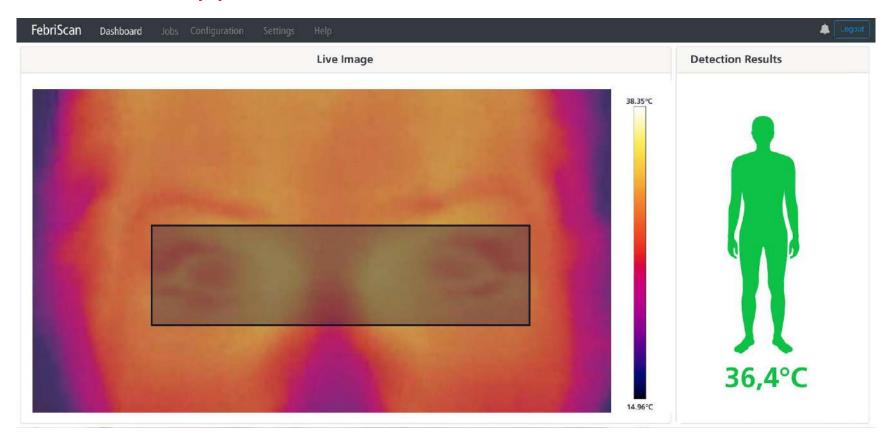
Smart Camera IRSX-I

Automation Technology
Vision Sensors and Systems

Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

FebriScan App

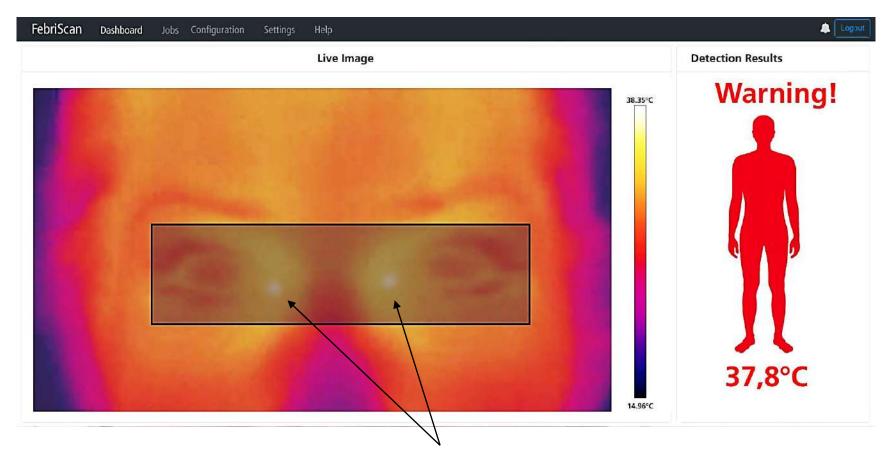




Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

FebriScan App



Hot spots detected at the canthi



Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Customer Specific Visualization and I/O

 Embedding data in application-specific website via camera's REST-API



Embedding data using camera's Modbus TCP client



- Controlling I/Os with camera's Modbus TCP master
- Embedding data using MQTT or OPC-UA (available soon...)





Automation Technology
Vision Sensors and Systems

Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

Summary

- State of the art high precision system for detection of elevated body temperature according to standard IEC / DIN EN 80601-2-59:2017
- Accurate temperature measurement by means of high precision blackbody (+/-0.1°C)
- 3 different packages cover all possible installation requirements
- Intuitive app for easy operation
- High screening efficiency



Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020





Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020

High Precision Elevated Body Temperature Detection

Copyright:

AT – Automation Technology GmbH

Phone: +49 (0)4531 88011-0 Fax: +49 (0)4531 88011-20 Hermann-Bössow-Str. 6–8 23843 Bad Oldesloe

Germany

Email: info@automationtechnology.de
Web: www.automationtechnology.de



Topic: FebriScan – High Precision Detection of Elevated Body Temperature

Date: March 31, 2020