FEVER SCREENING KIT

Description

In today's world, highly infectious diseases are transferred by sick people and contaminated objects. Virus epidemics like the Swine influenza in 2009/2010, Ebola virus disease in 2014 and the Coronavirus epidemic in 2020 have created a worldwide demand for suitable screening techniques that provide a fast non-contact detection of individuals with a potential fever.

Fike's Fever Screening kit is a standalone unit that can be used by employers to measure the employee's temperature and assess symptoms prior to allowing them start work or even enter the facility. The compact and simplistic nature of the system allows it to be easily relocated and set up in a minimum time. The software works discreetly to single out the people whose skin temperature exceeds the predefined value. If necessary, the software offers the possibility to take automatic IR image snapshots when a person trips the alarm.

The kit consists of a compact high resolution IR camera connected to a laptop computer equipped with custom software, which is password protected to prevent unauthorised access. With a temperature resolution of 40 mK, the software is capable of detecting the smallest of temperature variances. A table tri-pod and interface cable are provided for IR camera installation and connection to the laptop.

Ordering

Part Number	Description
28-0062	Fever screening kit with Dell Inspirion Laptop PC *(includes the 28-0024 PI 400i IR camera)*
28-0024	IR camera, 1 m (3.3 ft) USB cable, table tripod, process interface cable incl. terminal block, software package
28-0060	Ambient temperature reference source, 20 x 20 cm, incl. 16-bit temperature sensor with 0.1°C accuracy, 20m connection cable with PIF plug for accuracy, 20m connection cable with PIF plug for connecting to camera, mounting bracket for wall and ceiling mount *(recommended accessory, purchased separately)*

Features

- Quick non-contact temperature scan or screening process
- Reduce the risk of access by infected persons
- Standalone – no need for additional equipment
- Visual and/or audio alarm
- Non-touch screening thereby maintaining social distancing and hygiene
- Can be easily relocated with minimum set-up time

This document is only intended to be a guideline and is not applicable to all situations. Information is subject to Fike's full disclaimer at http://www.fike.com/disclaimer.

Computer Specifications

Model	Dell Inspirion 3593 Laptop
Operating system	Windows® 10 Pro
Display	15.6 inch touch screen, 1366 x 768 HD resolution
Processor	10th Gen Intel® Core™ i3-1005G1, smart dual-core
Memory	8GB system memory
Hard drive	1TB and 128GB solid state drive (SSD)
Graphics	Intel® UHD
Weight	4.45 lbs.
Dimension	0.78 inch thick
Additional features	HDMI output; wireless-AC connectivity; built-in HD webcam with microphone; headphone/microphone jack

PI 400i Camera Specifications

Optical resolution	382 x 288 pixels
Detector	FPA, uncooled (17 µm x 17 µm)
Spectral range	8 – 14 µm
Temperature ranges	-20°C - 100°C (-4°F - 212°F)
Frame rate	80 Hz / switchable to 27 Hz
Optics (FOV)	18° x 14° / f = 20 mm [0.7 in] or 29° x 22° / f = 12.7 mm [0.5 in] or 53° x 38° / f = 7.7 mm [0.3 in] or 80° x 54° / f = 5.7 mm [0.2 in])
Thermal sensitivity (NETD)	40 mK mit 29° x 22° FOV / f = 0.9 40 mK mit 53° x 38° FOV / f = 0.9 40 mK mit 80° x 54° FOV / f = 0.9 0.6 K mit 18° x 14° FOV / f = 1.1
Accuracy	±2°C (±3.6°F), whichever is greater
Accuracy with BR 20AR	±0.5°C [0.9°F] (T_{amb} 18°C [64°F] to 33°C [91°F]) (T_{obj} 30°C [86°F] to 40°C [104°F])
PC interface	USB 2.0 / optional USB to GigE (PoE) interface
Process interface (PIF), standard	0 – 10 V input, digital input (max. 24 V), 0 – 10 V output
Process interface (PIF), industrial (optional)	2x 0-10 V input, digital input (max. 24 V), 3x 0/4-20 mA outputs, 3x relays (0-30 V/400 mA), fail-safe relay
Cable length (USB)	1 (standard) / 5 m / 10 m / 20 m (3.3 / 16.4 / 32.8 / 65.6 ft)
Ambient temperature	0°C to 50°C (32°F to 122°F)
Storage temperature	-40 to 70°C (-40 to 158°F)
Relative humidity	20 to 80%, non-condensing
Enclosure (size/rating)	46 x 56 x 68 - 77 mm (1.81 x 2.2 x 2.68 - 3.03 in) (depending on lens + focus position) / IP 67 (NEMA 4), aluminum case
Weight (without mounting bracket)	237 – 251 g, (8.36 – 8.85 oz) depending on lens
Shock/Vibration [1]	IEC 60068-2-27 (25G and 50G) IEC 60068-2-6 (sinus shaped) IEC 60068-2-64 (broadband noise)
Power Supply	Via USB
Tripod mount	¼-20 UNC
Scope of supply	• USB camera, incl. lens • USB cable (1 m [3.3 ft]) • Table tripod • PIF cable, incl. terminal block (1 m [3.3 ft]) • Software package • Rugged outdoor transport case (IP67) for camera only • Certificate of calibration (reference temp: 95°F)

1) For more details see operator's manual

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