# TC160M1 – out of the box and ready to go with this simple, low cost, plug and play fever camera with face mask detection.

- Keep your business open and staff/ customers safe
- Audible alert, picture taken and time/date stamped if elevated body temperature detected
- Low cost to ensure accessibility to all
- Scan multiple people at a range of 4m
- Verbal prompt if no mask detected







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## TC160M1

ThermaCheck M1 is an autonomous and easy-to-use dual vision camera for automated elevated body temperature screening, mask detection and people counting. Simple HDMI connectivity allows the camera head to be paired with your choice of display. An alarm status relay allows integration with other forms of access control. Accurate and reliable screening results, integrated into your other entry protocols, will help keep your employees, customers, and guests safe

| Temperature<br>Measurement &<br>Alarm | Temperature Range     | 82 - 113 °F (28 - 45 °C)                                    |
|---------------------------------------|-----------------------|---|
|                                       | Temperature Accuracy  | ±0.5 °F (±0.3 °C)   |
|                                       | Measurement Distance  | 3.5 - 13.1ft (1 - 4 m)                                      |
|                                       | Calibration           | Human subject or blackbody                                  |
|                                       | Target Mode           | Single or Multiple Person (~10 people max)                  |
|                                       | Temperature Alert     | User defined threshold value                                |
|                                       | Mask Alert            | Toggle on/off   |
| Thermal Camera                        | Sensor Technology     | Microbolometer  |
|                                       | Resolution            | 160 x 120   |
|                                       | NETD                  | <50 mK (0.05 °C)  |
|                                       | FOV                   | 57°x 44.3°  |
|                                       | Color Palette         | Iron Red  |
| Visual Camera                         | Sensor Technology     | 1/2.8 inch CMOS   |
|                                       | Pixel Size            | 2MP   |
|                                       | Resolution            | 1920 x 1080   |
|                                       | Low Light Level       | Color: 0.01Lux@(F1.5)                                       |
| General                               | Connections           | 1 x USB; 1 x HDMI; 2 x relay                                |
|                                       | Operating Temperature | 50 - 113 °F (0 - 45 °C)/Preferred: 60 - 90 °F (16 - 32 °C); |
|                                       | Humidity              | EC 60068-2-30/24h 85% RH                                    |
|                                       | Power Adaptor*        | Input: 100-240V AC, Output: 12V 2A DC                       |
|                                       | Dimension             | 5.2in x 3.5in x 1.8in (130mm x 90mm x 45mm)                 |
|                                       | Weight                | 16.5 oz (465 g)   |
|                                       | SDK                   | HTTP API for easy integration with VMS                      |

### Out of the Box Solution

The Thermacheck TC160M1 is ready to go out of the box. No software or PC is required to run it, its all included in the one simple box.

Simply plug it in to a display with an HDMI cable and power it from a mains power point... That's it, now your business/organisation is doing that much more to keep visitors and staff safe and the doors to remain open.

#### How it works

With camera setup, it will continuously scan up to 4m away. As people filter past the camera the built in Al will:

- 1. Identify human faces... you don't want it alarming every time someone carrying a hot cup of coffee passes by.
- 2. Scan faces for Elevated Body Temperatures (EBT) (typically 38C and over is considered a fever). If EBT is detected an audible alarm is sounded and thermal and visual image is recorded and date/time stamped – the alarm can be muted if this may cause embarrassment to individuals etc.
- 3. The camera can also scan for individuals not wearing face masks and if no mask detected and helpful automated voice will remind the user to please wear face masks. This can be recorded also if required.
- 4. The unit has a built in relay output which means it can easily be configured and integrated with doors or gates to lock if alarms are triggered, preventing entry of febrile individuals

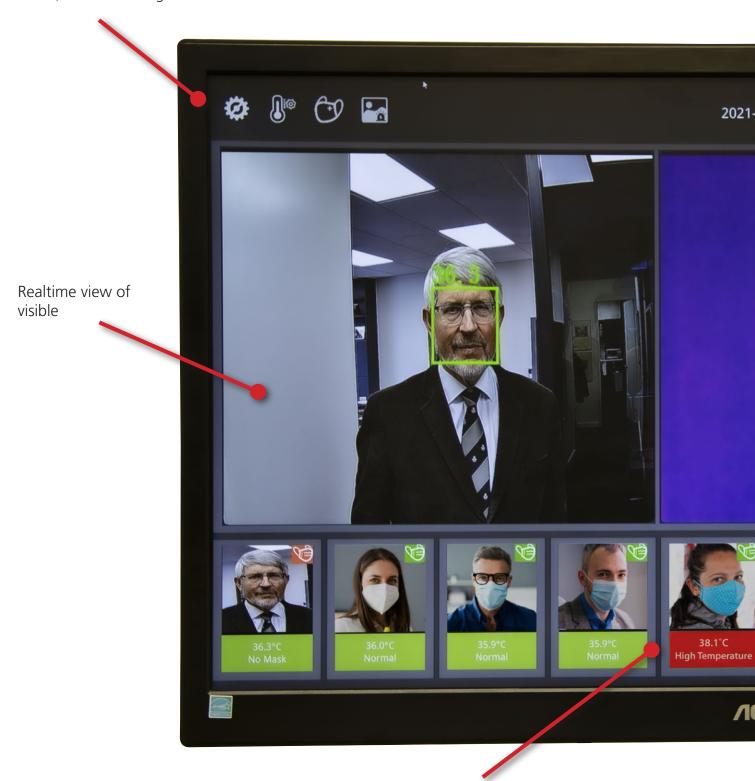


- 5. Users can choose to record all visitors or only those setting off alarms. With either option there is no facial recognition technology being employed so visitors can be comfortable of their privacy not being infringed upon.
- 6. All recordings are stored on a 32GB Micro SD card for easy download and storage if required.

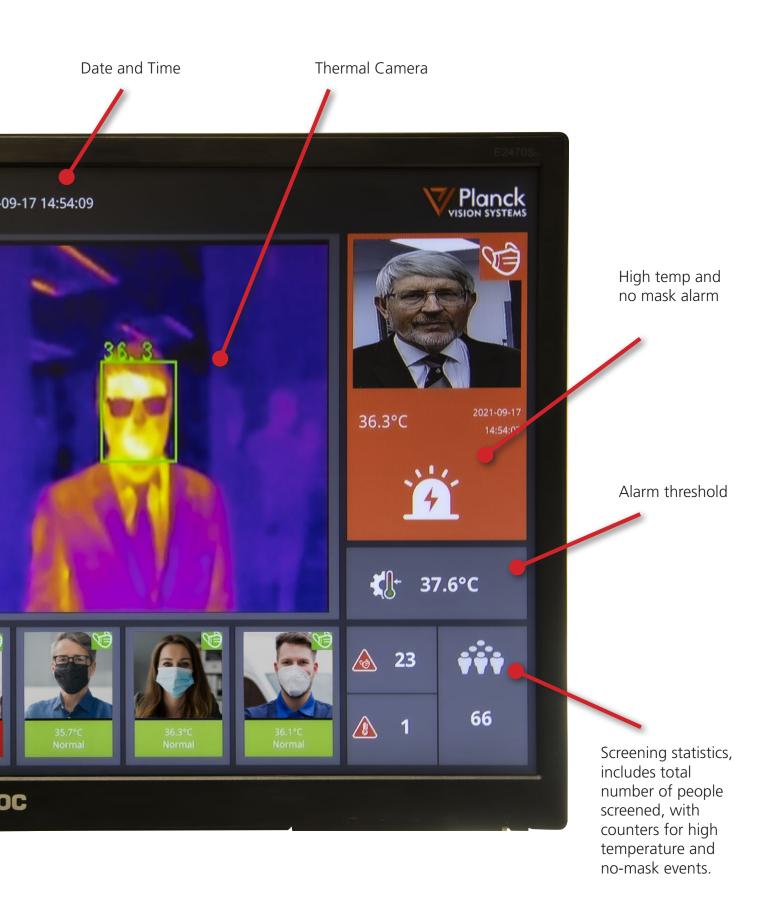


## TC160M1 Display

Main menu for settings, includes calibration, toggle mask detection on or off, view recordings and alerts



Dynamically refreshed recent screening results.



## An Affordable Solution Ensuring Accessibility for All

With its low cost and easy setup the TC160M1 is perfect for a range of applications and organisations, with the goal of reducing febrile individuals accessing your site and keeping your business open!

**Supermarkets** – were closed down in the August/September 2021 community outbreak of the DELTA variant of COVID-19 in Auckland due to COVID-19 positive individuals having visited stores. Costing some stores \$100,000 per day. The TC160M1 has been deployed successfully in supermarkets around the world to mitigate against such risks.

**Medical practices** – Some of the most at risk but essential services that must remain open, TC160M1 can be deployed as a front line screening tool before people enter premises

**MPI and Large manufacturing sites** – Some larger manufactures, exporters and factories have specific regulations that must be met the TC160M1 and wider ThermaCheck range can assist with this. Turn key solutions with professional integrators available on request.

**Fast-food Restaurants** – often areas with high foot traffic and large visitor numbers, can even be deployed in drive throughs.

**Petrol Stations** – Another business which sees high foot traffic and large visitor numbers. The units can be integrated with the sliding doors which many sites exhibit locking if no mask or elevated temperatures detected.

#### Other:

- School or Childcare facilities
- Universities, Polytechs
- Government buildings
- Courts
- Gyms and recreational facilities
- Restaurants
- Small businesses where visitors are expected





## Camera Alarms

Choose to automatically record all visitors and their temperature readings or only alerts



#### High temperature alarm

- An individual has presented with an elevated body temperature, the camera has picked this up and alarmed
- The system has stored a time stamped thermal and visual image of the alarm

#### No mask detected alarm

- An individual has attempted to enter with no face covering, the camera has picked this up and a voiceover reminds the individual to "please wear a mask"
- The System has stored a time stamped an image of the individual





With the built in relay control allowing integration with access controls, the TC160M1 can be setup to lock door, gates and turnstiles if high temperatures or no masks are detected.

## USA Design and Supported in New Zealand

Planck Vision Systems leverage multiple wavelengths of light to see information beyond what visible cameras can see. The two founding partners of this company have more than 45 years of combined experience with thermal imaging systems in academia and industry.

Our company is headquartered in Santa Barbara CA, the capital of infrared sensing technologies in the United States. Although the company was founded in 2020, our design team has worked together for more than 15 years on thermal/ visible camera systems and on products that are currently distributed worldwide



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