



# case study

Mobile Temperature Screening with ZKTeco ProFace X [TD] & Vanderbilt ACTpro to Protect Patients at Dublin Hospital.



Industry  
Health Care

Location  
Dublin, Europe

Solution  
Access Control

In this case study, we analyze the requirements for contactless biometrics access control solutions used for mobile temperature screening by **ZKTeco** and how they Integrate with **Vanderbilt ACT pro** to Protect Patients at **St. James' Hospital** in Dublin, Ireland.

## the challenge

St. James Hospital in Dublin, Ireland, which has **more than 1,000 beds**, is a teaching hospital that specializes in not only treatment, but health promotion and preventative services at its central location. Its current facility incorporates the clinical departments of the Trinity College medical school, the unit for dietetics and nutrition, the nursing school, the postgraduate center and the library of the Faculty of Health Sciences. It is also a central location for the treatment of COVID-19 patients.

*"Using the ZKTeco terminal with the power of access control from Vanderbilt, St. James Hospital is better able to add additional screening procedures in an effort to protect patients and other staff members from potential infection exposure. This is crucial in a healthcare environment, where we're already dealing with a vulnerable population and protecting them is of the utmost importance — especially during the current pandemic and the added stress this brings to our staff and our patient's families."*

**Alan Buckley**

Operations Manager

Facilities Management, St James's Hospital.



### Our partner

**Vanderbilt** is a global provider of security systems recognized for future-proof, high-performance, easy-to-use intrusion detection and access control products. Vanderbilt are an advocate of open platforms and integrations. Their sister-company **ComNet** is a manufacturer of audio, video, data, and Ethernet communication products focusing on innovative communication networking solutions. **Vanderbilt** and **ComNet** are **ACRE** companies. For more information visit: [www.vanderbiltindustries.com](http://www.vanderbiltindustries.com).

### About the installer

Forward **Vision Security** is a Dublin-based professional CCTV, alarm and access installation company.

## the project

Tasked with keeping patients and staff safe from the threat posed by the coronavirus pandemic, St. James Hospital needed a way to add additional screening capabilities to its facility alongside its existing access control terminals. The technology needed to bring a multi-layered approach to screening individuals entering the hospital facility who could potentially introduce a significant amount of risk to those within the facility. While access to patient floors was restricted in line with mandates set forth by the government, it was critical for St. James to have an added screening measure for incoming staff at the facility.

## the system elements

St. James Hospital chose the **Vanderbilt ACTpro** Access Control Solution integrated with the **ZKTeco ProFace X [TD]** Visible Light Facial Recognition Terminal to address its challenges. The **ACTpro** solution specifically used the **ACT1500 Single Door IP Controller** and **ACT1030 Card Reader** alongside the **ZKTeco** system.

The **ProFace X [TD]** solution uses intelligent engineering facial recognition algorithms and the latest computer vision technology and supports both facial and palm verification for a fully touchless experience.

Coupled with the **ProFace X [TD]** solution, **ACTpro** can not only grant and restrict access based on biometric functionality but can detect mask wearing and high temperatures as a means to grant or restrict access to the facility. As a result, better hygiene is achieved with touchless biometric authentication, skin temperature detection and masked individual identification.

If a member of the staff presents to the door with a high skin temperature, that individual is routed to another location and the door will not open in an effort to identify potential infection .

The **ProFace X [TD]** solution is also equipped with an anti-spoofing algorithm for facial recognition against almost all types of fake photos and video.



### ProFace X [TD]

Face & Palm Verification terminal with Mask and Body Temperature Detection.



### ACTpro Access Control Solution

Vanderbilt's Access Control system hardware, web-enabled door controller interfaces and a suite of card readers.

**VANDERBILT**

### ACT1500 Single Door IP Controller and ACT1030 Card Reader

Controller & Card reader.

# installation details

The **ZKTeco ProFace X [TD]** terminals have a straightforward, intuitive interface to set temperature thresholds and collaborate with the environment around them. Protocols can be set to prevent access if a mask isn't being worn, or if the temperature of the visitor is above the threshold.

The solution is ideally suited to hospitals like St. James because of their ability to be layered as part of a comprehensive approach to screening individuals considered at-risk for infection as a means to protect patients and other staff members.

The solution was selected because of its ability to accommodate a maximum of **30,000 facial templates** and up to **5,000 palm templates**, as well as its speed of recognition of **less than 0.3 seconds per face**. When implemented in a healthcare setting, these factors are crucial to successful implementation.

The touchless nature of the terminals brings safety and hygiene issues to the forefront, cutting down on possible exposure to infectious disease. The device detects people with elevated temperatures who can then be further scrutinized in an effort to add extra screening processes and identify potential disease exposure.

This ability, along with the visitor check-in and tracking processes integrated with the **ACTpro** access control system, is a critical component in today's modern healthcare facilities to provide real-time data for security officials.

