



# Elite Series[TI]

Robust Facial Recognition and Thermal Imaging Temperature Detection Terminal with Ultra-large Capacity

ZK BioSecurity

- 0.1s Rapid Temperature Detection
- Up to 120cm Detection Distance
- Touchless for Better Hygiene
- Temperature Detection
- Masked Face

Elite Series[TI] is a fully upgraded version of the Elite Series Visible Light facial recognition terminals using Thermal Imaging intelligent engineering facial recognition algorithms and the latest computer vision technology. It is a new high-level facial recognition and Thermal Imaging Temperature Detection terminal supported with ZKTeco's customized powerful CPU and ultra-large capacity of facial templates, a maximum of 50,000 facial templates for 1:N recognition.

Elite Series[TI] adopts touchless recognition technology and exclusive features, namely temperature detection and masked individual identification, which detects and limits access if a user has out-of-range body temperature or does not wear a mask and eliminates hygiene concerns effectively. It is also equipped with an ultimate anti spoofing algorithm for facial recognition against almost all types of fake photos and videos attack.

The terminal with temperature and mask detection will be a perfect choice to help reduce the risk of infection and germs spreading during the recent global public health issue as well. Elite Series[TI] enables fast and accurate body temperature measurement and masked individual identification during facial and palm verification at all access points, especially in hospitals, factories, schools, commercial buildings, airports, stations, and other public areas.

## Features

- Ultra-large capacity: 30,000 facial templates (standard) or 50,000 facial templates (optional) for 1:N facial authentication
- Unrivalled facial recognition speed (less than 0.3 seconds per face)
- 2MP starlight CMOS sensor camera with WDR function, which enables the terminal to recognize faces under a challenging lighting environment (0.5 lux to 50,000 lux)
- Anti-spoofing algorithm against print attack (laser, color and B/W photos), videos attack, and 3D mask attack
- Smart energy-saving design; a microwave detector will wake up the terminal when it precisely detects the distance between the user and the device is 300cm (9.84ft) or less
- 8" touchscreen with 400lux, which offers high visibility under strong and direct light
- Supplement lighting with adjustable brightness
- Multiple communication methods: TCP/IP
- Temperature Measurement Accuracy:  $\pm 0.3^{\circ}\text{C}$  ( $\pm 0.54^{\circ}\text{F}$ ), tested in 80cm (2.63ft) under  $25^{\circ}\text{C}$  ( $77^{\circ}\text{F}$ ) environment
- Mask detection; facial verification available with masks
- 0.1s Rapid Temperature Detection with measurement distance of 30cm to 120cm

\* Facial verification for masked individuals will increase FAR.

\* The temperature measurement data is for reference only, and not for any medical purpose.

\* Elite Access[TI] & Elite Pass[TI] are not suitable for intense light and high-temperature environments. It is advised to use the product indoor without wind.

# Specifications

## Capacity

- Faces:** 30,000 (standard)  
50,000 (optional)
- Users:** 50,000
- Transactions:** 1,000,000
- User Photos:** 20,000
- Event Photos:** 10,000

## Compatibility

- Security Relay Box
- Wiegand / RS485 / RS232 Slave Reader
- With FP / RFID / Barcode (optional)
- ZKBioSecurity Software

## Standard Functions

- Access Levels, Groups, Holidays, DST, Duress Mode, Anti-Passback, Record Query, Custom Wallpaper & Screen Saver, Tamper Switch Alarm

## Access Control Interfaces

- Lock Relay Output
- Alarm Output / Auxiliary Input
- Exit Button / Door Sensor

## Preventative Measures

- Mask Detection
- Body Temperature Detection
- Temperature Measurement Accuracy:  $\pm 0.3^{\circ}\text{C}$  ( $\pm 0.54^{\circ}\text{F}$ )
- Temperature Measurement Range:  $20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$  ( $68^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ )

## Special Functions

- 0.3s High Speed Facial Recognition
- Alive Body Detection
- HTTPS Encryption (optional)
- Event Snapshot

## Hardware

- 900MHz Dual Core Customized CPU
- 512MB RAM / 8G Flash
- 125kHz EM Reader / 13.56MHz MF (optional)
- 2MP WDR Low Light Camera
- Hi-Fi Audio
- Microwave Distance Detection Sensor
- 8" High Brightness IPS Touch LCD
- Reset Button & Tamper Switch

## Communication

TCP / IP

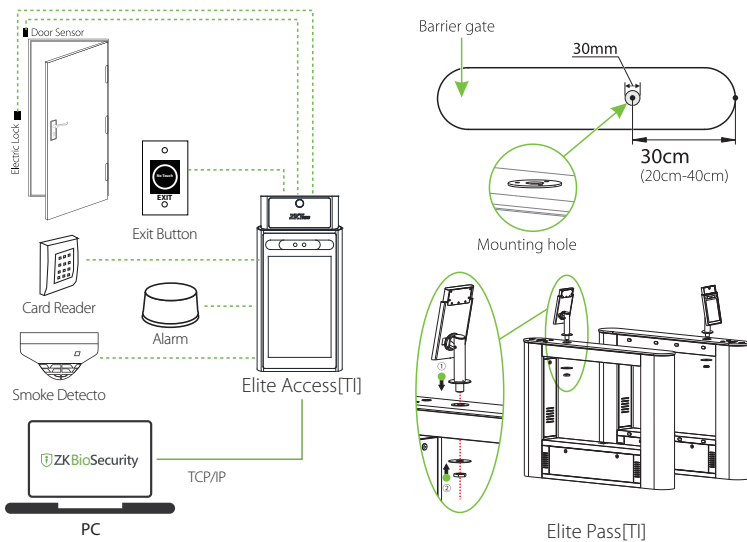
## Power

- Operating Voltage 12V DC
- Current Draw <2,000mA

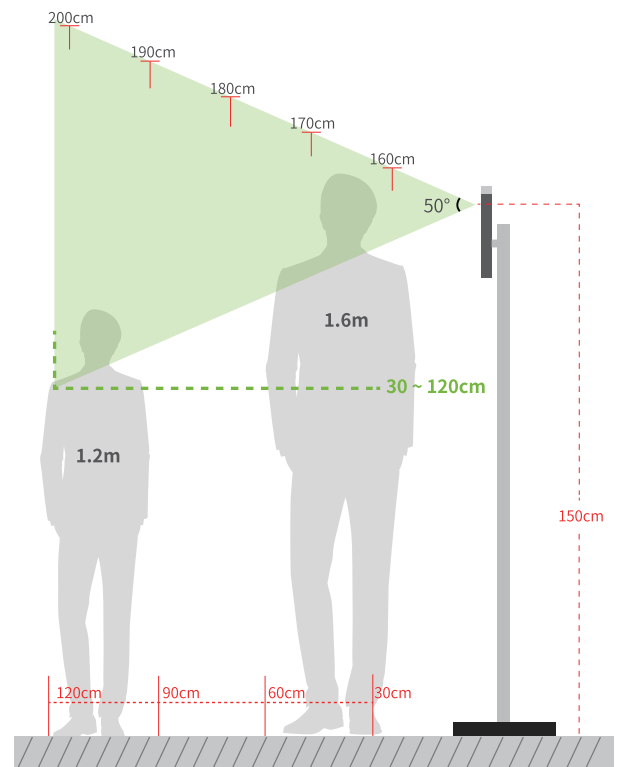
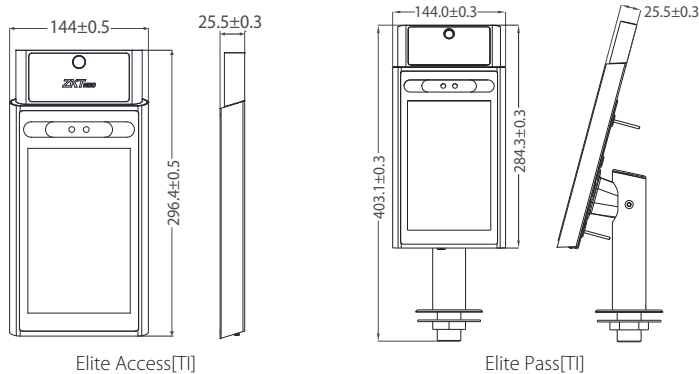
## Additional Information

- Face Algorithm:** ZKLiveFace 5.8
- Working Temperature:**  $20^{\circ}\text{C}$  to  $35^{\circ}\text{C}$  ( $60^{\circ}\text{F}$  to  $95^{\circ}\text{F}$ )
- Working Humidity:**  $\leq 93\%$
- Storage Temperature:**  $-40^{\circ}\text{C}$  to  $65^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$  to  $149^{\circ}\text{F}$ )
- Storage Humidity:**  $\leq 93\%$
- Elite Access[TI]'s Net Weight:** 1.42kg
- Elite Access[TI]'s Gross Weight:** 2.5kg to 15kg
- Elite Pass[TI]'s Net Weight:** 1.83kg
- Elite Pass[TI]'s Gross Weight:** 2.96kg to 18.21kg
- Elite Access[TI]:** 144mm\*296.4mm\*28.7mm
- Elite Pass[TI]:** 144mm\*296.4mm\*25.5mm

# Wiring Diagram



# Dimensions (mm)



**Recommended Installation Height : 150cm**  
**Temperature Measurement Distance : 30cm to 120cm**

