



# ESI Access™ 5D Thermal Reader

## Datasheet

Traditional access control technologies using RFID cards and other sources of identification have been around for over 40 years. Access control systems are installed to only allow authorized individuals access to buildings, offices, and restricted areas. These technologies protect the facility, employees, and customers from unauthorized access, creating a secure and safe environment.

During a global pandemic like we have now with the COVID-19 virus, securing facilities, and protecting employees, vendors, and customers have taken on new meaning. The CDC has laid out guidelines for what is now considered to be a "safe" return to work environment. The guidelines require the wearing of masks in public areas and recommended temperature checks for those who enter the facility. Most states are either mandating or recommending that all people entering the building must have their temperature checked or verified.

The **ESI Access™ 5D Thermal Reader** is designed to check for a flexible set of variables that can be set by each organization according to their access needs. The reader can allow access using traditional RFID scans, QR codes, and even facial recognition. This unique reader can also automate the process of taking body temperature readings and checking for the presence of PPE masks.

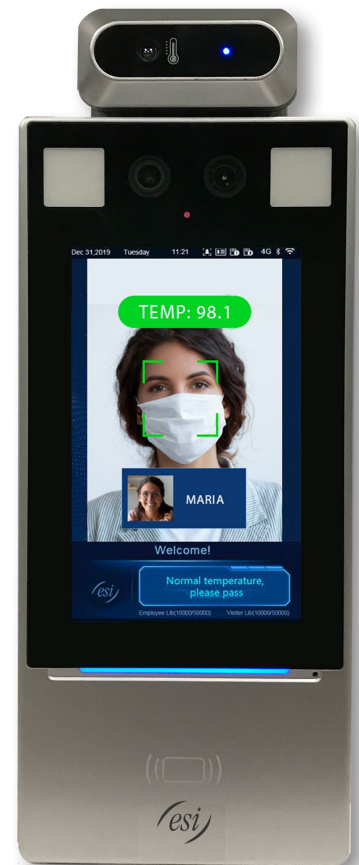
The system can be set up in a stand-alone kiosk mode or integrated into most standards-based access control systems. Individuals requesting access are notified if their body temperature is within acceptable limits, or if they're required to wear a mask. The findings are reported to an administrator, as well as the screened person.

A password-protected, configurable log of visitors that includes pictures, actual temperature data, pass-fail results and other information is also available to administrators. Maintaining proper access records can help organizations prove they took the necessary steps to safeguard their offices and their constituents.

With the ESI Access™ 5D Thermal Reader companies can limit entry, ensuring safe office environments for employees, vendors, and customers. The system is flexible and can easily be updated based on the latest set of CDC, state, and organizational guidelines.

### Key Features:

- Fully-customizable entry detection criteria
- No contact temperature measurements
  - Temperature detection range between 86°F to 113°F
  - Configurable temperature thresholds
- PPE face mask detection
- Two-way audio with **EZ Access Station** terminal  
(see back for more details)
- Supports multiple custom prompts
- Various mounting options
- Tamper protection, door open time out and time exceeded alarms
- Facial Recognition
  - Accuracy > 99%; False Rate < 1%
  - 10,000 face storage capacity
  - Recognition time 0.2 seconds
  - Anti-spoofing detection effective against pictures and videos
  - Face recognition distance between 6" and 9.5'
- 1080P low-illumination, wide-angle lens to capture high quality images
  - Supports video capture recordings
  - Built-in storage for archiving





## Manage the 5D Thermal Reader via the EZ Access Station

The Windows®-based application configures and communicates with all ESI Access™ 5D Thermal Readers installed at the site. This application makes it easy to customize and monitor the solution from one location. The password-protected application will allow administrators to manage all 5D readers on the network, set entrance and reporting (alerting) criteria, view applicable entry logs, communicate via two way audio, monitor the live video feeds and much more!

## Specifications

<b>Operation System</b>	Linux
<b>Face Recognition Accuracy Rate</b>	> 99% (~90% with Mask)
<b>Face Recognition Time</b>	200ms
<b>Face Capacity</b>	10,000
<b>Card Capacity</b>	100,000
<b>Storage Capacity</b>	4GB
<b>Event Capacity</b>	8,000 (with images)
<b>Measurement Range</b>	86°F - 113°F
<b>Measurement Accuracy</b>	0.18°F
<b>Measurement Deviation</b>	≤±0.54°F
<b>Measurement Distance</b>	3.2' feet
<b>Authentication Mode</b>	Face Whitelist: (1:N) Card:(1:N) Face +Body temperature
<b>Card Type</b>	Mifare 1 Card
<b>User Management</b>	Supports user library addition, deletion, update
<b>Record Management</b>	Supports local recording and real-time upload
<b>Interface</b>	LAN×1, Wiegand Input×1, Wiegand Output×1, RS485×1, Alarm Input×2, Alarm Output×1, USB2.0×1, Lock×1, Door Contact ×1, Exit Button×1
<b>Power Supply</b>	Input 12V±25% DC
<b>Screen</b>	Touch Screen, Size:7 inch, Resolution: 600×1024
<b>Camera</b>	Dual Lens, 1080P
<b>Supplement Light</b>	LED soft light and infrared light
<b>Dimensions (L×W×H)</b>	5.2" in. × 1.29" in. × 12.0" in.
<b>Working Environment</b>	For access control terminal: -4°F~+149°F, Relative Humidity < 95% (non-condensing)
<b>Protection Level Both terminal and module</b>	IP 54
<b>Application Situation</b>	Indoor-only

*The above specifications may be updated in the future without prior notice.  
All hardware/software/physical features should be based on the final shipped products.*