

# Face Recognition Access Controller

Face Mask Detection with wrist Temperature Module

Embedded Controller • Face Detection • Mifare 1 Card reader  
• Temperature Probe Option • Alarm if not wearing a face mask.

## Introduction

The RE-ACFDT face recognition access controller.  
Supports Face + Temperature + Mask.  
Face, Password, QR Code, Card Authentication.  
Mifare1 access cards. 100,000 capacity.  
Speaker output for prompts and alerts.

## Features

- » Deep Learning 0.2s Face Recognition with accuracy  $\geq 98\%$
- » 0.2 - 2.9M recognition distance & Anti Spoofing
- » A.I. recognition for a person wearing a "face mask."
- » 10,000 face recognition Database, max 6images / face

## Thermo wrist Module

- » Non-contact temperature reader accuracy of  $\pm 0.3^{\circ}\text{C}$
- » Wrist Temperature reading distance of 1—4cm
- » Elevated Temperature alarm, access restricted



## Hardware

Solution	Linux Embedded OS (Non-Android) 16GB MMC
Display	Touch Screen 7" 600x1024pixels
Camera	2MP @ Full HD 1920x1080 F1.6

## Face Recognition

Ideal Height	0.8—2.2Meters [2.6—7.2Feet]
Detection Distance	0.2—2.9 Meters [0.65—9.5Feet]
Recognition Time	200ms [0.2Seconds] accuracy $\geq 98\%$
Face Capacity	10,00 Face database capacity. 8,000 log entries with image.

## Temperature Module

Thermo Range	30°C — 45°C [86°F — 113°F]
Accuracy / Deviation	$\pm 0.1^{\circ}\text{C}$ / $\pm 0.3^{\circ}\text{C}$
Reading Time / Distance	$\leq 500\text{ms}$ / 1—4cm [0.39" — 1.58"]

## Connection

Network	RJ45 10M/100M Ethernet
Weigand Port	Input & Output support 26 and 34 bit.
Alarm	Input x 2, Output x 1
Additional x 1 each	USB2, Lock, Door Contact, Exit Button

## General

Power (Terminal/ Module)	DC 12V 1.5A (10Watt) / 0.75W $\pm 25\%$
Dimension (WxHxD)	Terminal 134x305x33mm [5.28" x 12" x 1.3"] Module 87 x 45 x 27mm [3.43" x 1.77" x 1.0"]
Weight (Terminal + Module)	0.641kg [1.41lb] + 131kg [0.29lb]

## Functions

User Management	User library adding, deletion, update
Record Mangement	Local recording & realtime Network upload
Card Types	Mifare 1k Cards supports 100,000 numbers
Door opening method	Verified Face, Password, QR Code, Card
Operation	Touch screen admin / remote software
Installation Location	Internal use devices IP 54 rated
Light Operation	LED soft light, IR Night Light
Sleep Mode	Auto display saver sleep until detected person/object

## CAD Dimensions

