VISIONA-64™
SERIES

HARDWARE MANUAL

MAD64-70050 Revision 8

VISIONA-64™ Series Models

- VISIONA-64 (70050)
  Catalogue number: V64-B-1K
  No integrated card reader

- VISIONA-64 SMC (700555)
  Catalogue number: V64-B-SMC-1K
  Integrated DESFire/MiFare reader

- VISIONA-64 EXTENDED
  Catalogue number: V64-OD-NR-1K
  IP65 with extended temperature range

- VISIONA-64 SMC (700556)
  Catalogue number: V64-OD-NR-1L
  Integrated IClass/SEOS reader

CONTENTS

1. INTRODUCTION

VisionA-64™ - Face recognition based physical access control terminal

The VisionA-64™ and the accommodating VA64WS™ software solutions offers a complete identity management solution.

1.1. Overview

VisionA-64™ incorporates precision face-recognition technology into an ergonomic computer peripheral, which delivers unparalleled performance, reliability and convenience. The VisionA-64™ can be modular, and it utilises the most accurate biometric technology available.

The VisionA-64™ operates as a standalone PAC, or as part of a networked access control solution, allowing for complete modularity and interoperability between all MAD EYE and third party software/hardware using our proprietary VA64WS integration SOAP API (web-service).

1.2. General features

- Full stand-alone capabilities
- Internal SQLite database
- Easy installation kit
- Easy integration into third party hardware and software.
- Integrated, contactless card reader supporting: DESfire, MiFare(or IClass/SEOS) or Proximity cards
- Encryption: SHA 256 bit SSL
- Anti-vandal casing (available IP65 enclosure on the EXTENDED version)
- Communication: TCP/IP, WiFi, BLE, OSDP
- Inputs:
  - Exit push button/door status
- Power sources
  - No power supply provided
- USB host
- RS-485
- On-board relay unit
- Real-time clock
- Tamper protection
- Wiegand
  - IN (Up to 90 bit customized)
  - OUT (Up to 90 bit customized)
- Operating temperature: -10 Celsius to +70 Celsius
- Indoor / Outdoor use

1.3. Operational modes

- Identification(1:N) – standalone DB, up to 2000 templates (extendible upon request)
- Verification (1:1) - standalone DB, up to 100,000 templates
- Template on Card – template is stored on Desfire/MiFare (IClass/SEOS) card
- Template on Mobile - user data stored on a mobile app
- Template on Secure Device - user DB on onespecific device

1.4. Access modes

- Face only
- Smart card only
- Face or smart card
- Face and smart card

1.5. Door states & statuses

- **Strike Time** - the time duration that the strike relay will be enabled when successful access has been granted.

Please note:
All communication channels are rated UL294 Level 4, except for external relay signals, which are Level 2.

2. INSTALLATION PREPARATION

2.1. What's in the box?

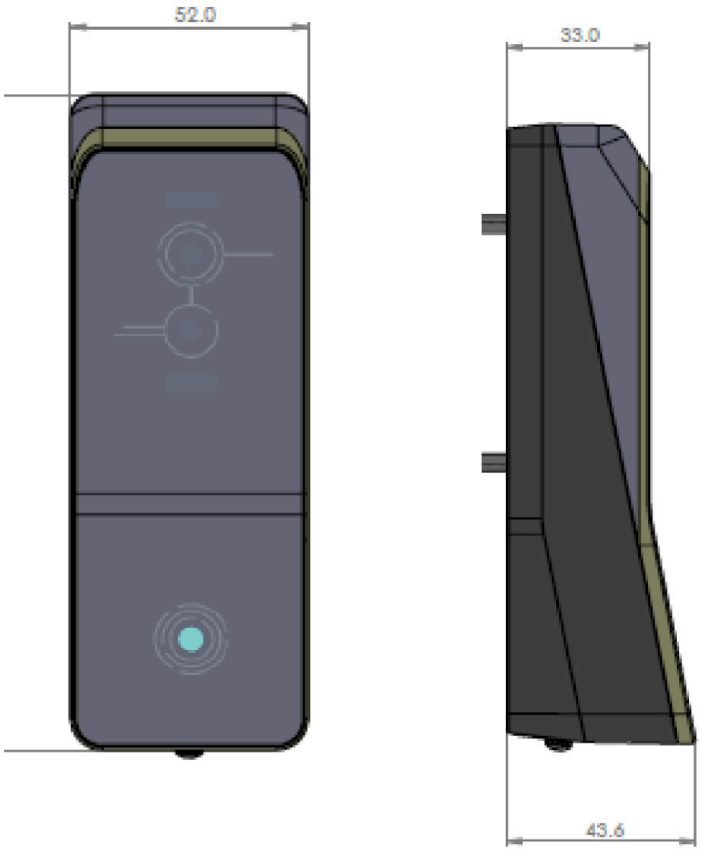
Open the box, and make sure that the contents match the order form and the packing slip.

While unpacking, please check for any visible damage to the terminal or the accessories. The protective materials used for the packaging should be able to protect the unit from most forms of damage during transportation.

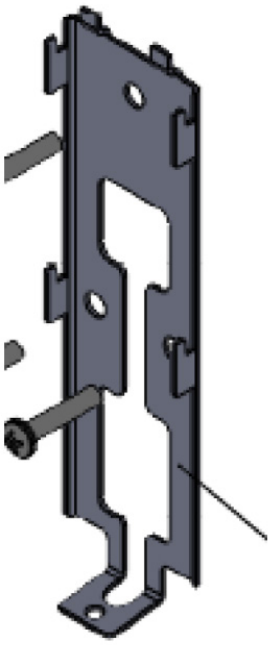
Contents:

- Biometric terminal
- Wall mounting bracket
- Cables
  - Power Cable
  - Ethernet Cable
  - Interface Connectors

BIOMETRIC TERMINAL

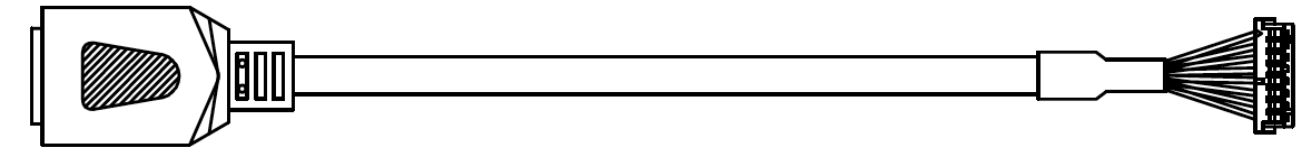


WALL MOUNTING BRACKET



CABLES

Ethernet (P45)



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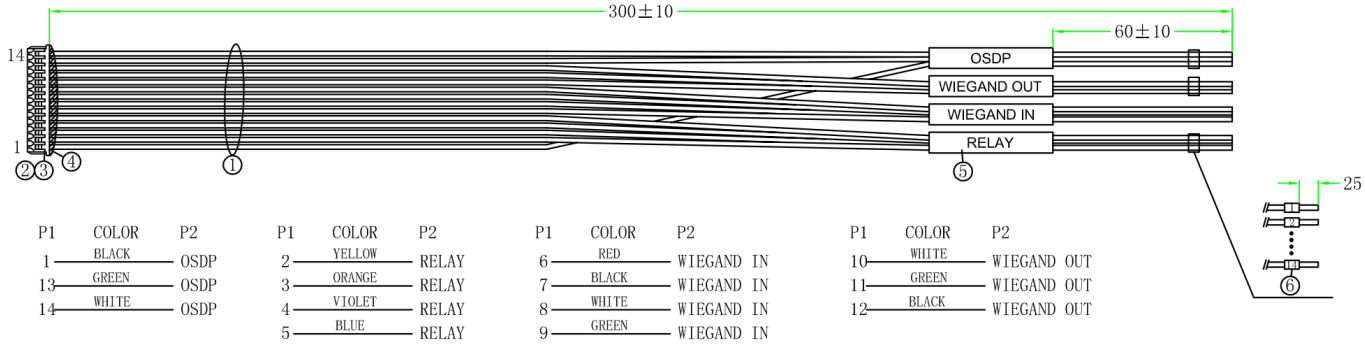
Interface (P42)



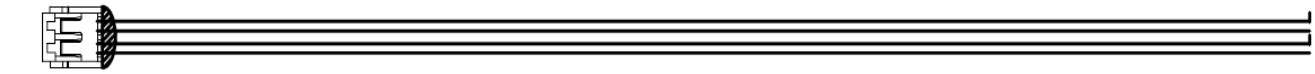
P1	COLOR	P2
1	BLACK	OSDP
13	GREEN	OSDP
14	WHITE	OSDP

P1	COLOR	P2
2	YELLOW	RELAY
3	ORANGE	RELAY
4	VIOLET	RELAY
5	BLUE	RELAY

P1	COLOR	P2
6	RED	WIEGAND IN
7	BLACK	WIEGAND IN
8	WHITE	WIEGAND IN
9	GREEN	WIEGAND IN

P1	COLOR	P2
10	WHITE	WIEGAND OUT
11	GREEN	WIEGAND OUT
12	BLACK	WIEGAND OUT

12 V DC 1AMP Power Cable (P1)



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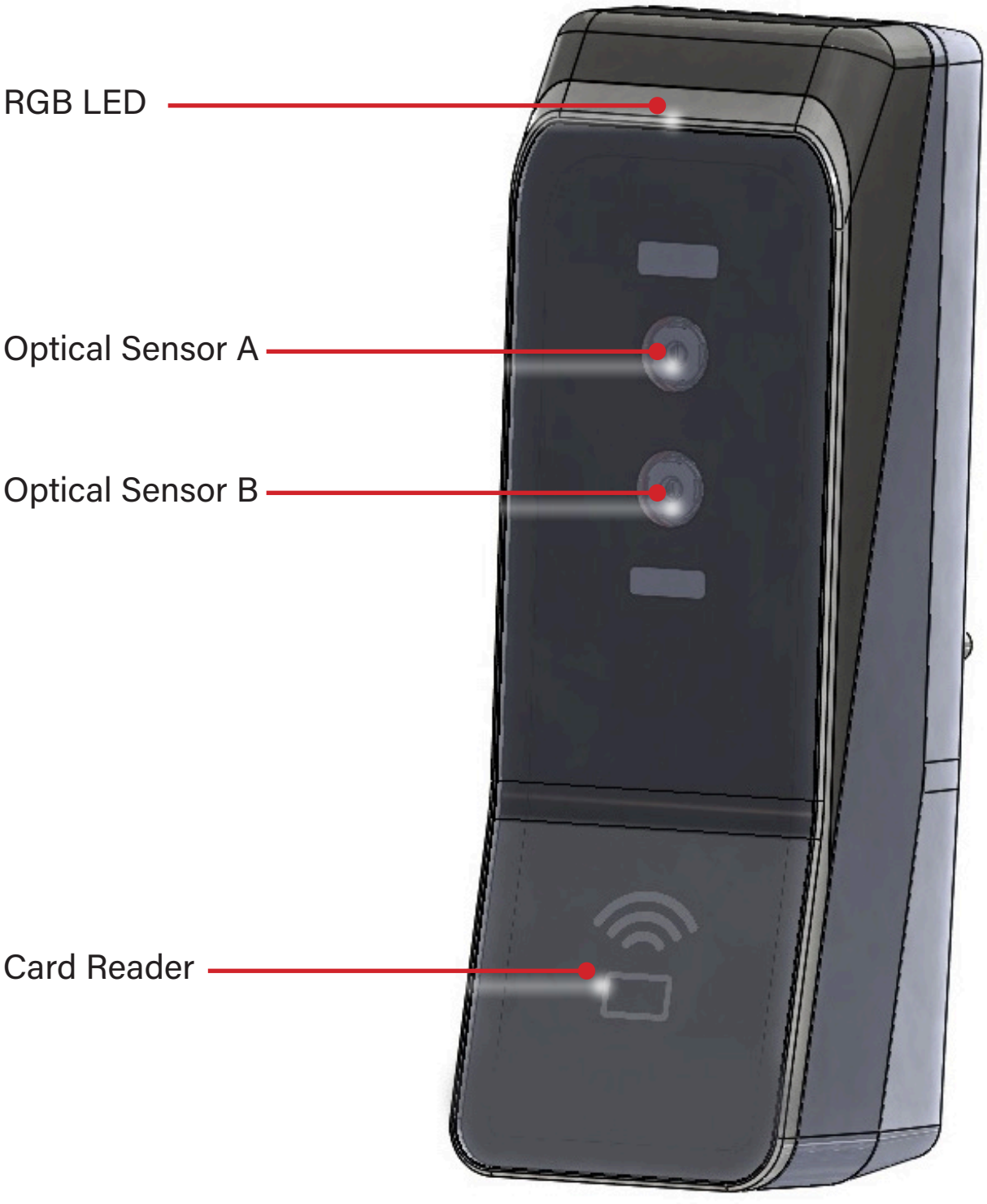
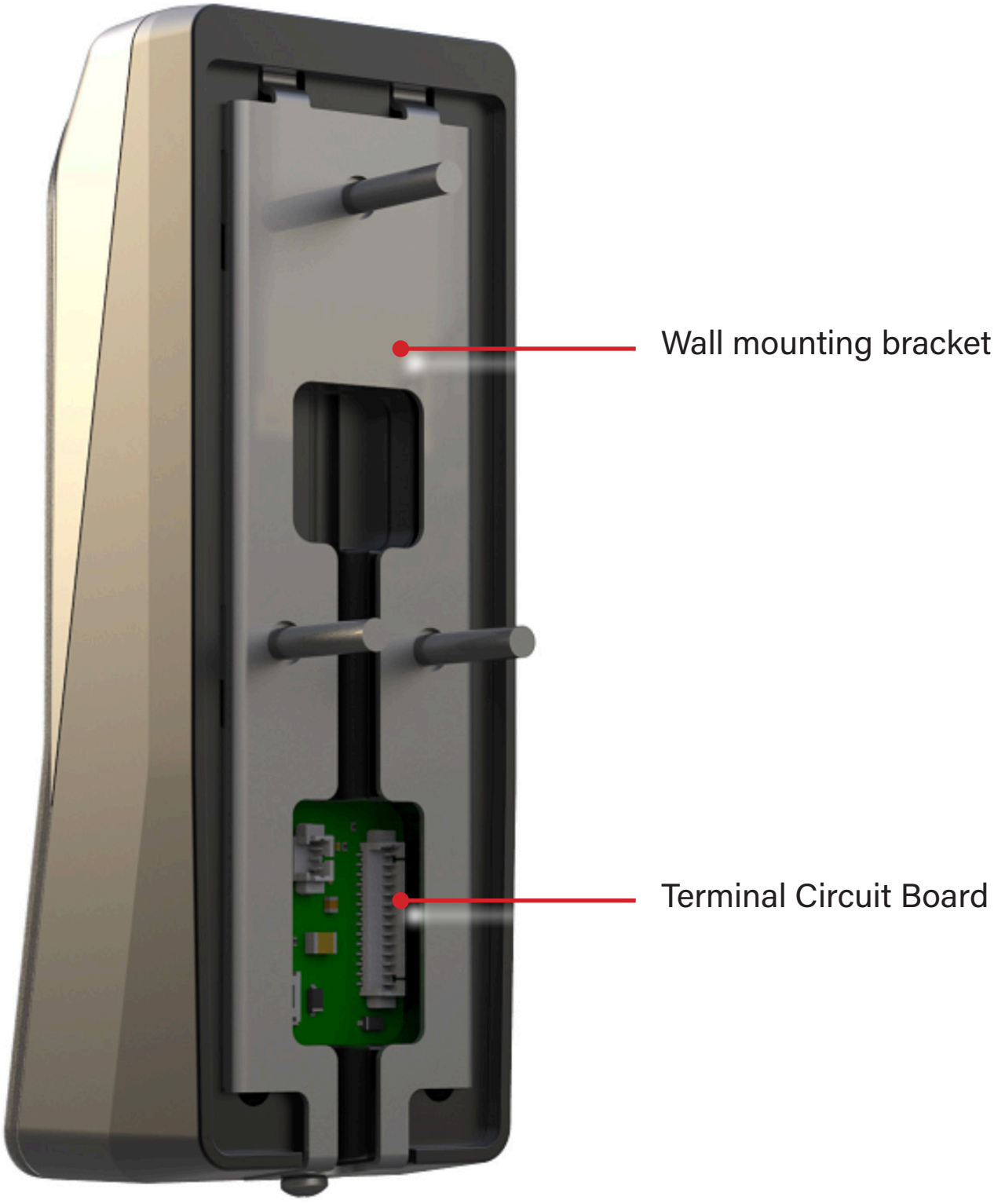
3. HARDWARE LAYOUT

3.1 Terminal front view



3.2 Terminal rear view



3.3 Terminal dimensions

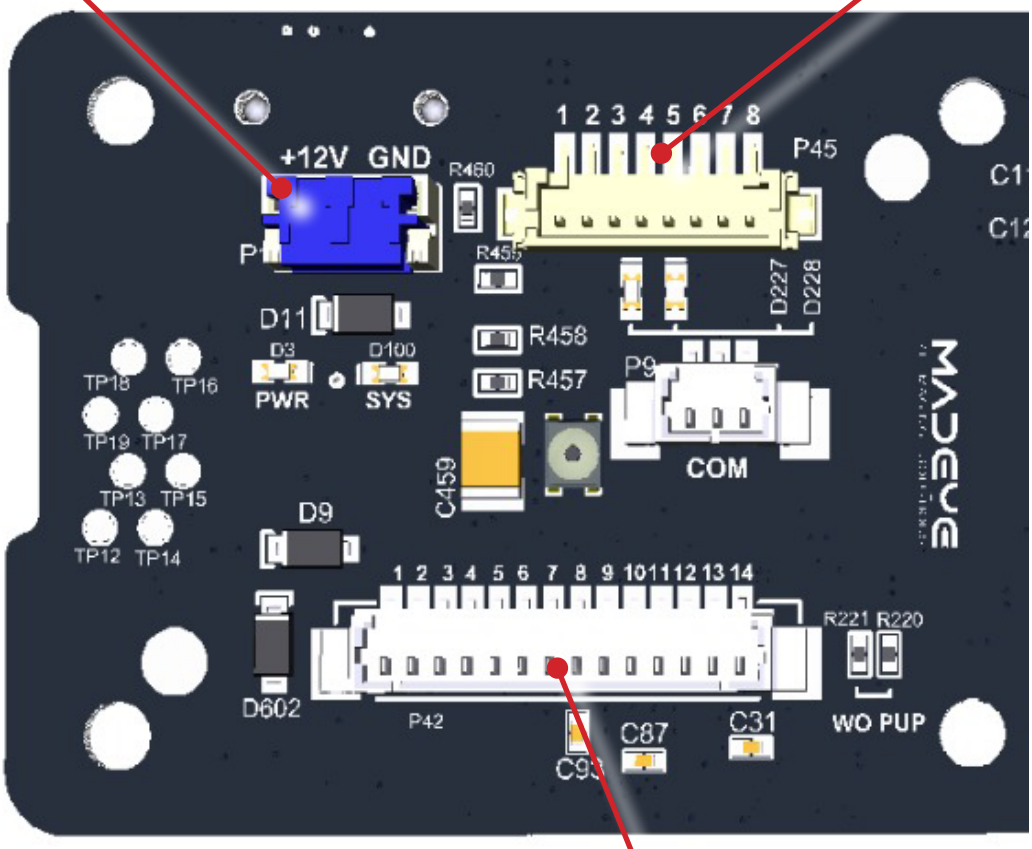
Size in millimetres (mm)

3.4 Terminal circuit board I/O connections

Terminal Circuit Board

P1 - Terminal Main Power - 12V DC 1AMP

P45 - Ethernet



P42 - 14 pin interface

3.5 Terminal circuit board connection definitions

	Function	Label	Type	Pin Position
P1	POWER INPUT	12V	VDC (Reader power)	1
		GD	GROUND (Reader power)	2
P45	ETHERNET			
P42	14 PIN INTERFACE		GND	1
			EXIT PUSH BUTTON	2
			N/C	3
			COMMON	4
			N/O	5
			5V DC OUT	6
			GND	7
			WIEGAND IN DATA 1	8
			WIEGAND IN DATA 0	9
			WIEGAND OUT DATA 1	10
			WIEGAND OUT DATA 2	11
			GND	12
			RS485B	13
			RS485A	14

4. TYPICAL INSTALLATIONS

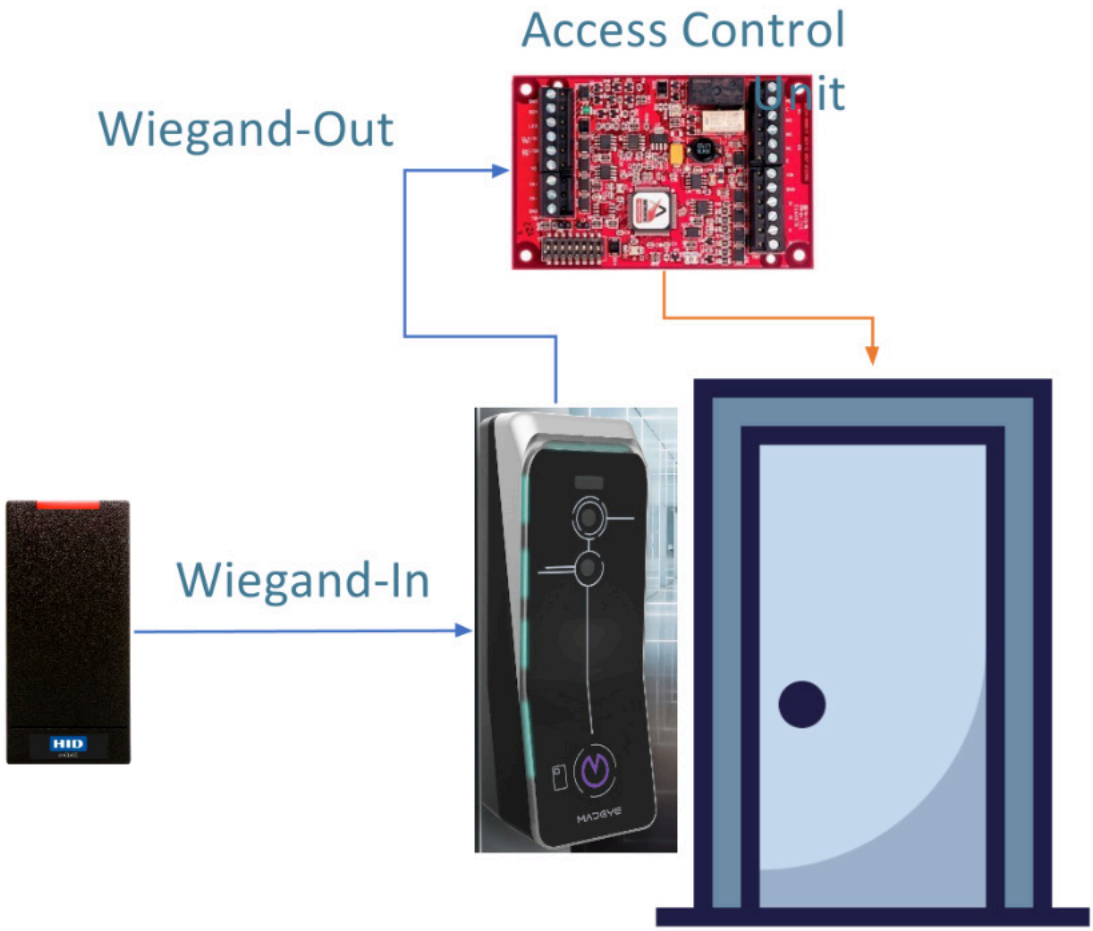
The terminal installation should comply with your local safety rules. The installation has to be done by certified installers only. Recommended locations and wiring methods shall be in accordance with the National Electrical Code, ANSI/NFPA 70.

The following tools/materials are required:

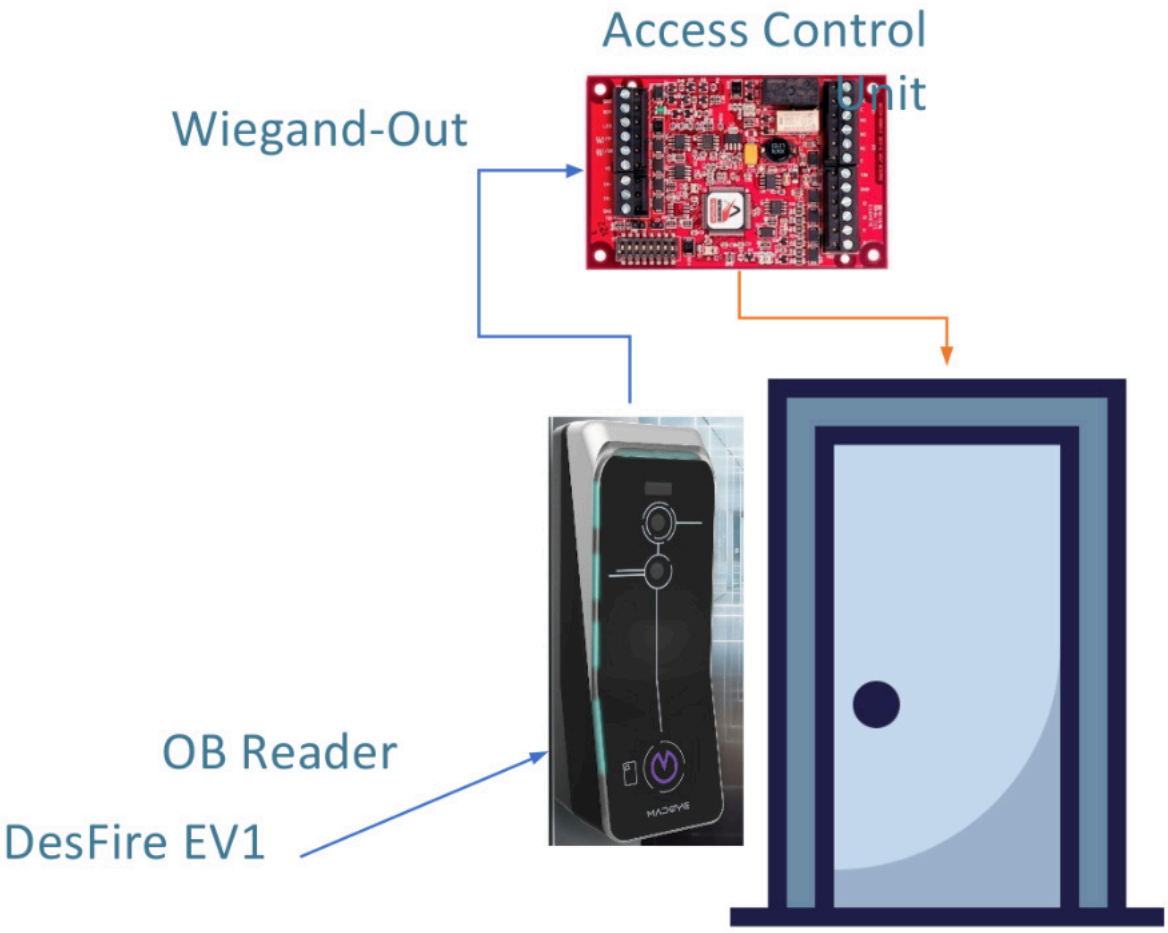
- Hammer drill & drill bits
- Screwdrivers
- Wire cutters
- CAT 5 cable / Network cable

4.1 Integrate with access control system operation modes

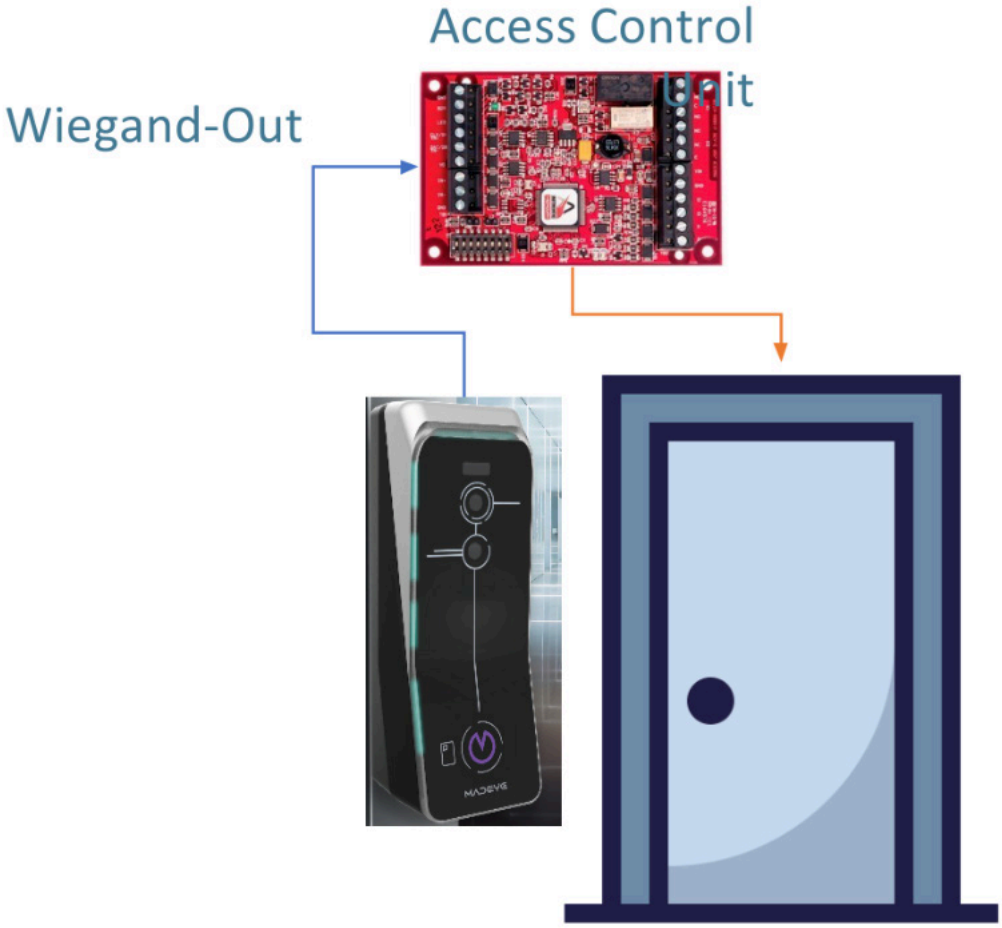
- 1:1 identification – External reader
- Template on main server – Suricata Server



- 1:1 identification – OB Reader
- Template stored on employee personal badge

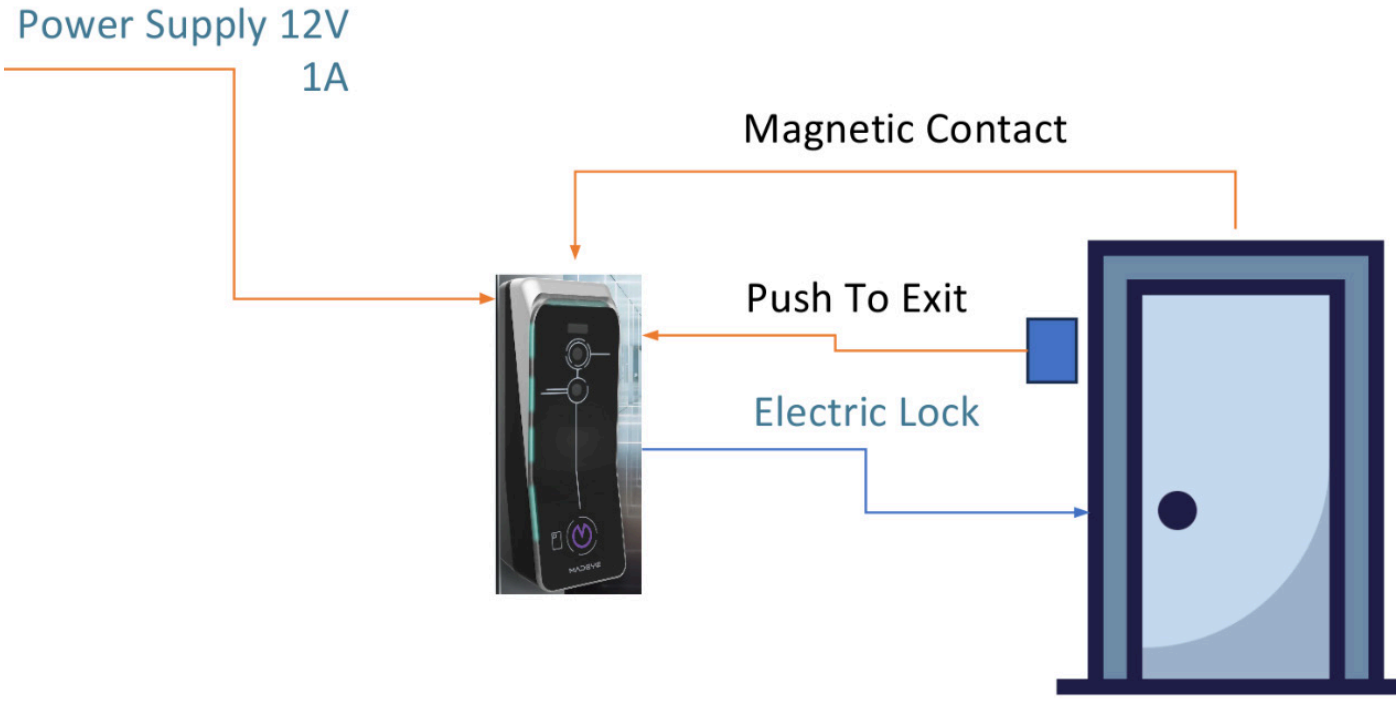


- 1:N Verification - Face only
- Template stored in Edge device

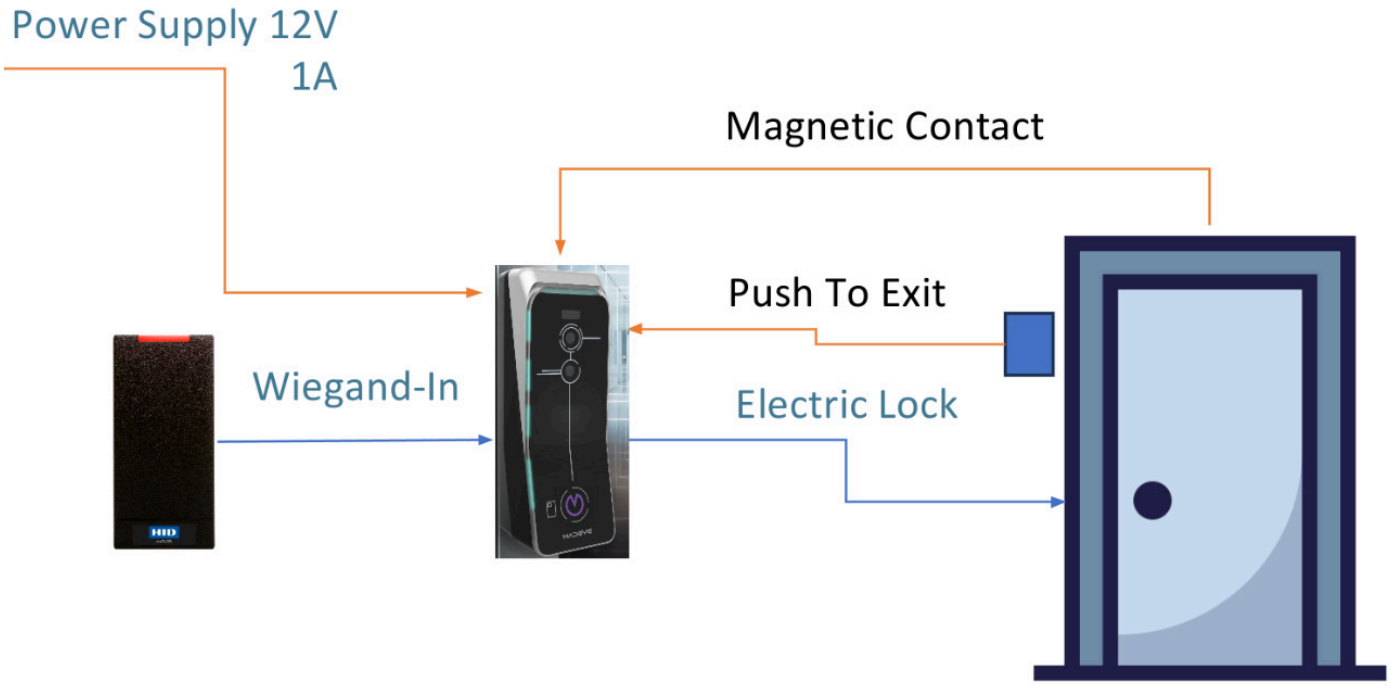


4.2 Stand alone installation operations mode

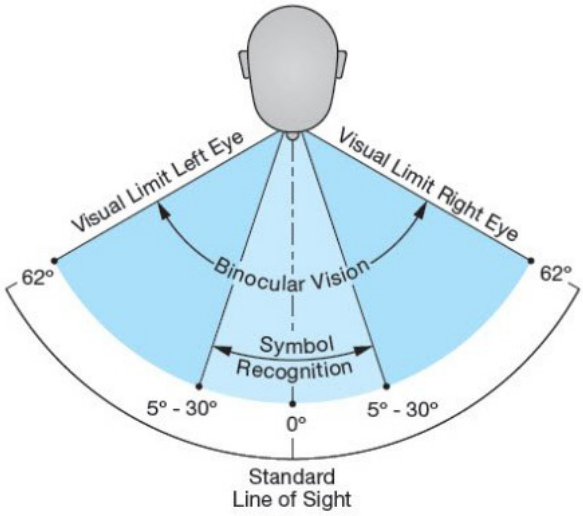
- 1:N Verification - Face only
- Template stored on edge device

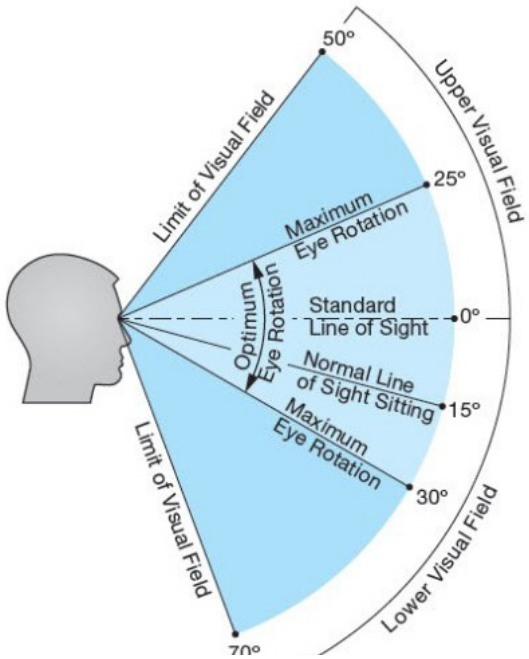


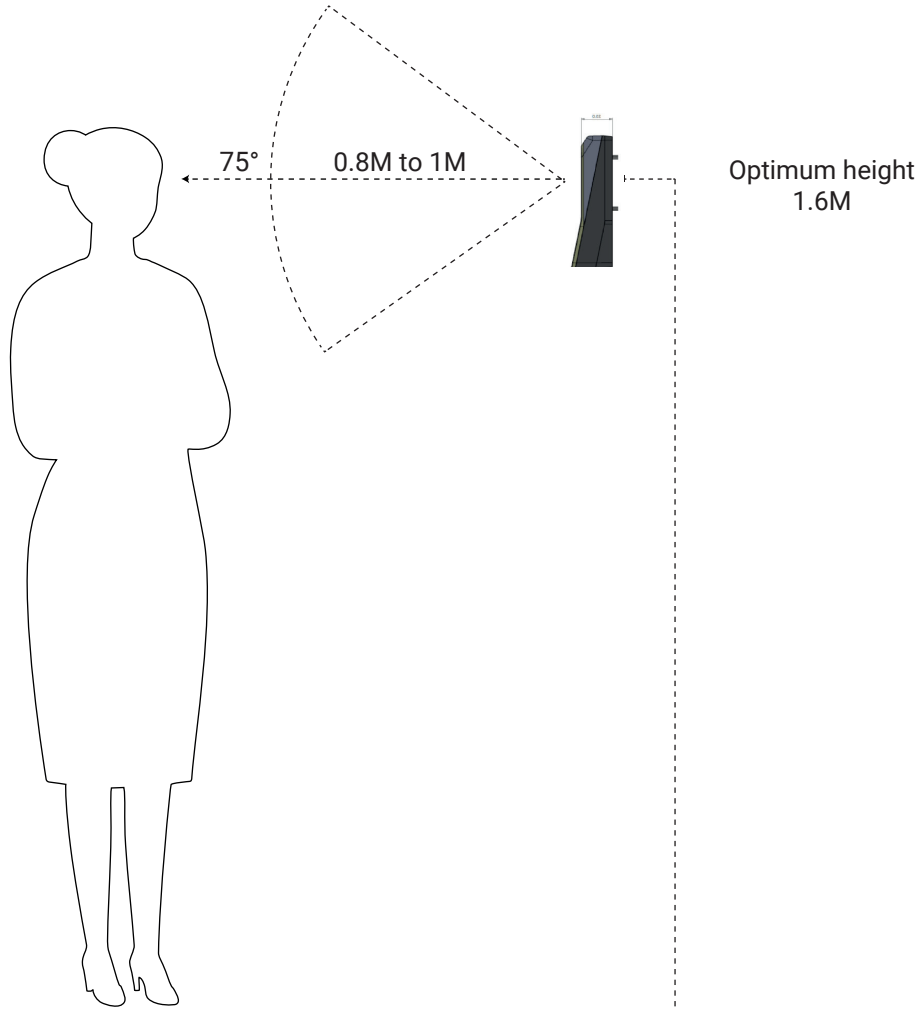
- 1:1 identification – External reader
- Template on main server – Suricata Server



4.3 Terminal face reader field of view







5. TERMINAL IP CONFIGURATION

All of the VISIONA-64™ terminals are shipped with DHCP IP settings. If there is no DHCP server accessible, the terminal will use the following default settings:

5.1 Default IP configuration

- IP address: 192.168.1.111
- Subnet mask: 255.255.255.0
- Default gateway: 192.168.1.1

5.2 Reset default IP configuration

To reset terminal to default IP settings, short pins 7, 8, 9 on P42 (MOLEX 14 pin connector), power the terminal, and after you hear the beeps, the terminal is back to default IP configuration.