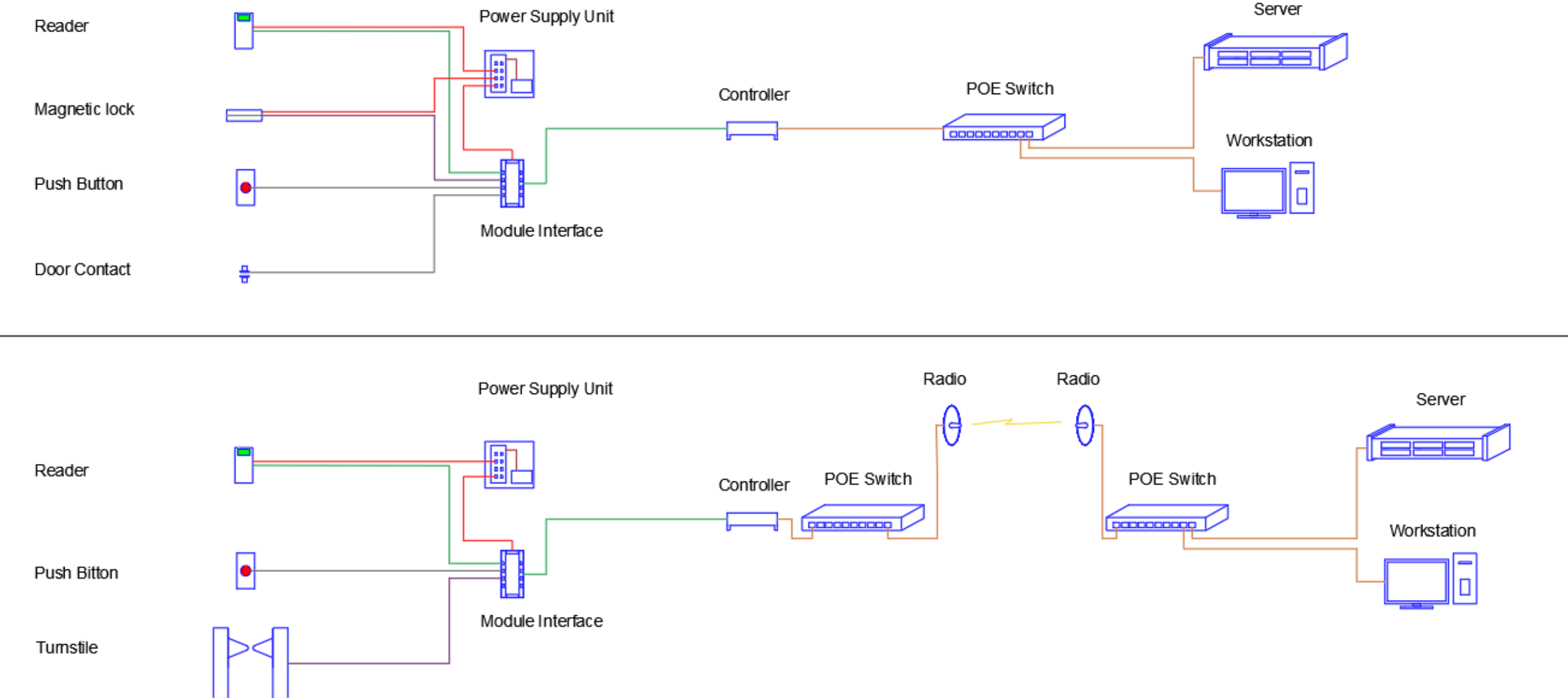# Access Control System
Simplified Diagram

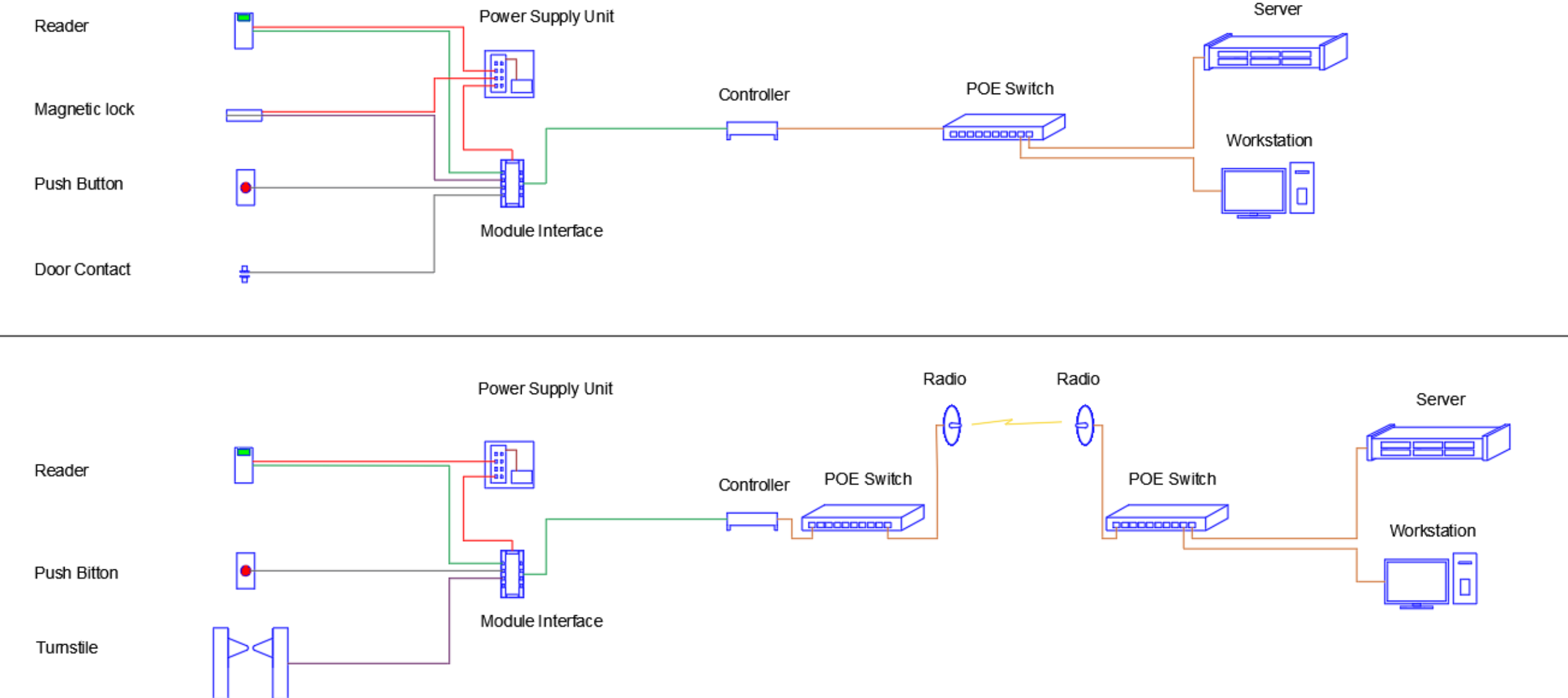Created By: Rowell Aceron – DES Manager

Access Control Connection

TF Wire for Power
STP Cable for Readers – Modules - Controller
THHN Wire for Input Devices
UTP / LAN Cable for Network / Wireless network
THHN Wire for Output Devices

Reader

Power Supply Unit

Server

Magnetic lock

Controller

POE Switch

Push Button

Workstation

Module Interface

Door Contact

Reader

Power Supply Unit

Radio   Radio

Server

Controller   POE Switch

POE Switch

Push Bitton

Workstation

Module Interface

Turnstile

Access Control Connection

TF Wire for Power
STP Cable for Readers – Modules - Controller
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Power Supply Unit

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Radio

Server

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POE Switch

POE Switch

Push Bitton

Module Interface
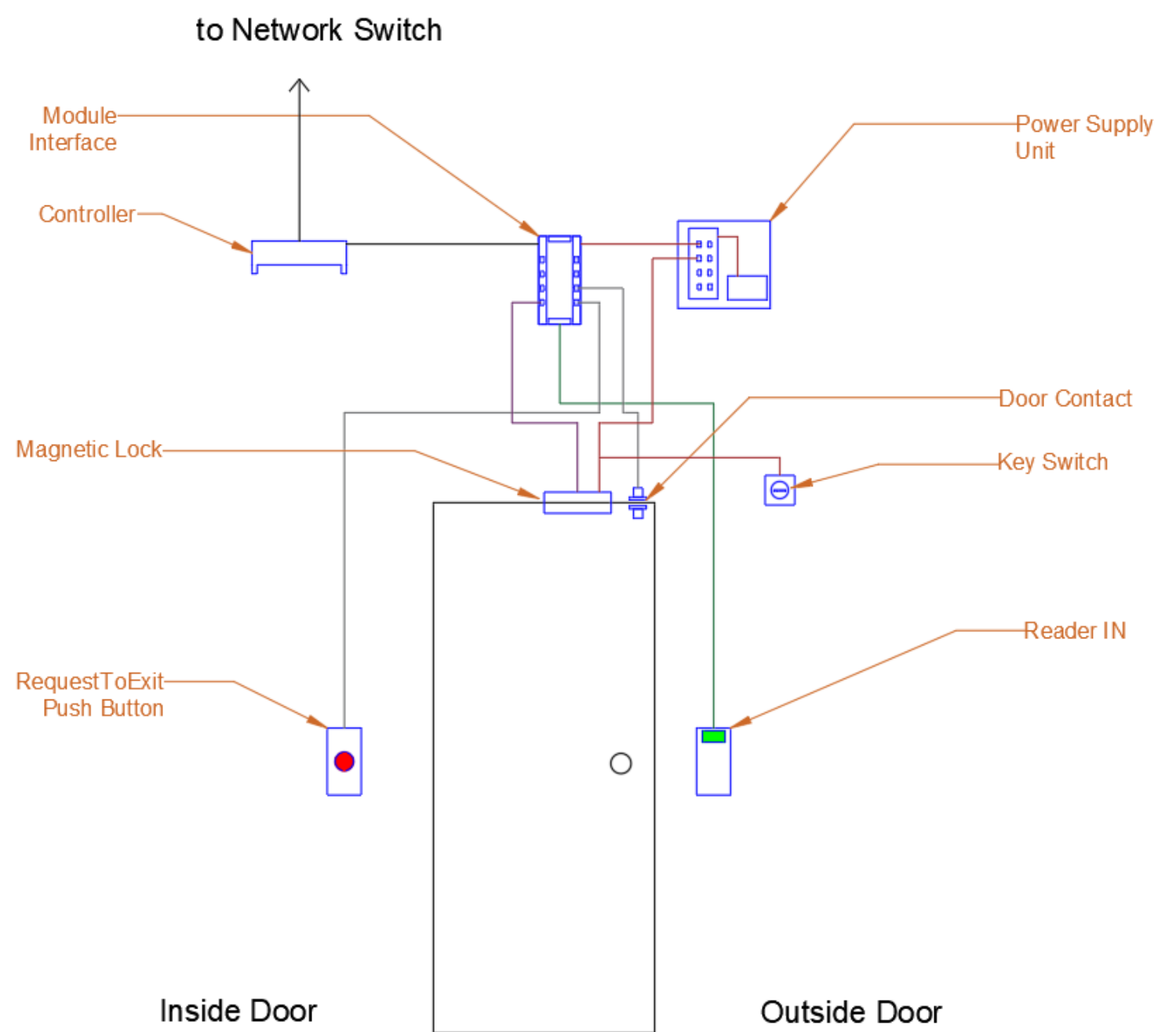
Workstation

Turnstile

Access Control Hardware

Single Door Configuration

Door Configuration
- 1 x Magnetic Lock
- 1 x Door Contact (Recessed Mount Type)
- 1 x Reader-IN
- 1 x Push Button to Exit – OUT
- 1 x Kill Switch
- 1 x Module Interface (Reader Module)
- 1 x Controller
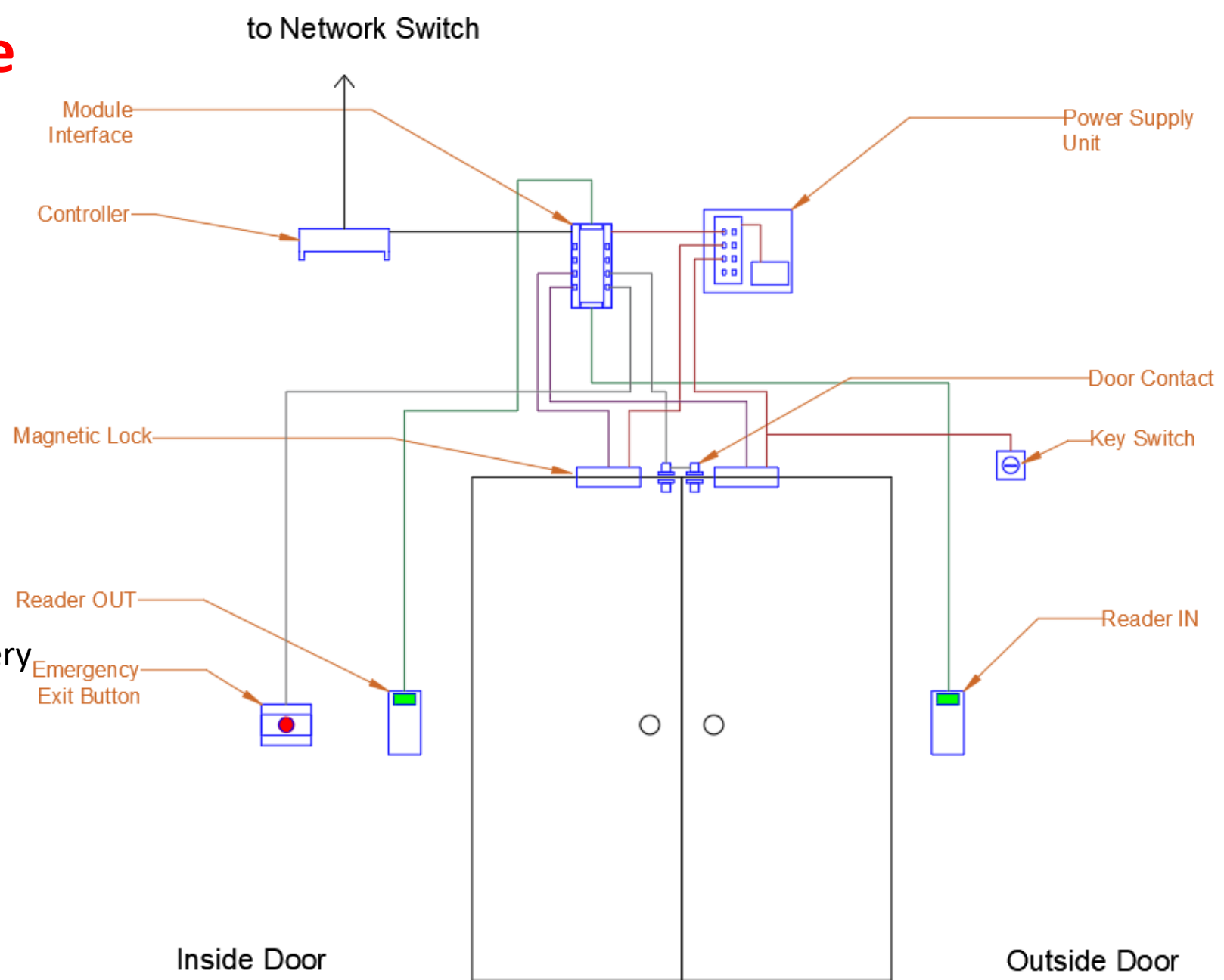- 1 x Power Supply Unit with Back-up Battery

to Network Switch

Module Interface

Controller

Power Supply Unit

Door Contact

Magnetic Lock

Key Switch

Reader IN

RequestToExit Push Button

Inside Door

Outside Door

Access Control Hardware
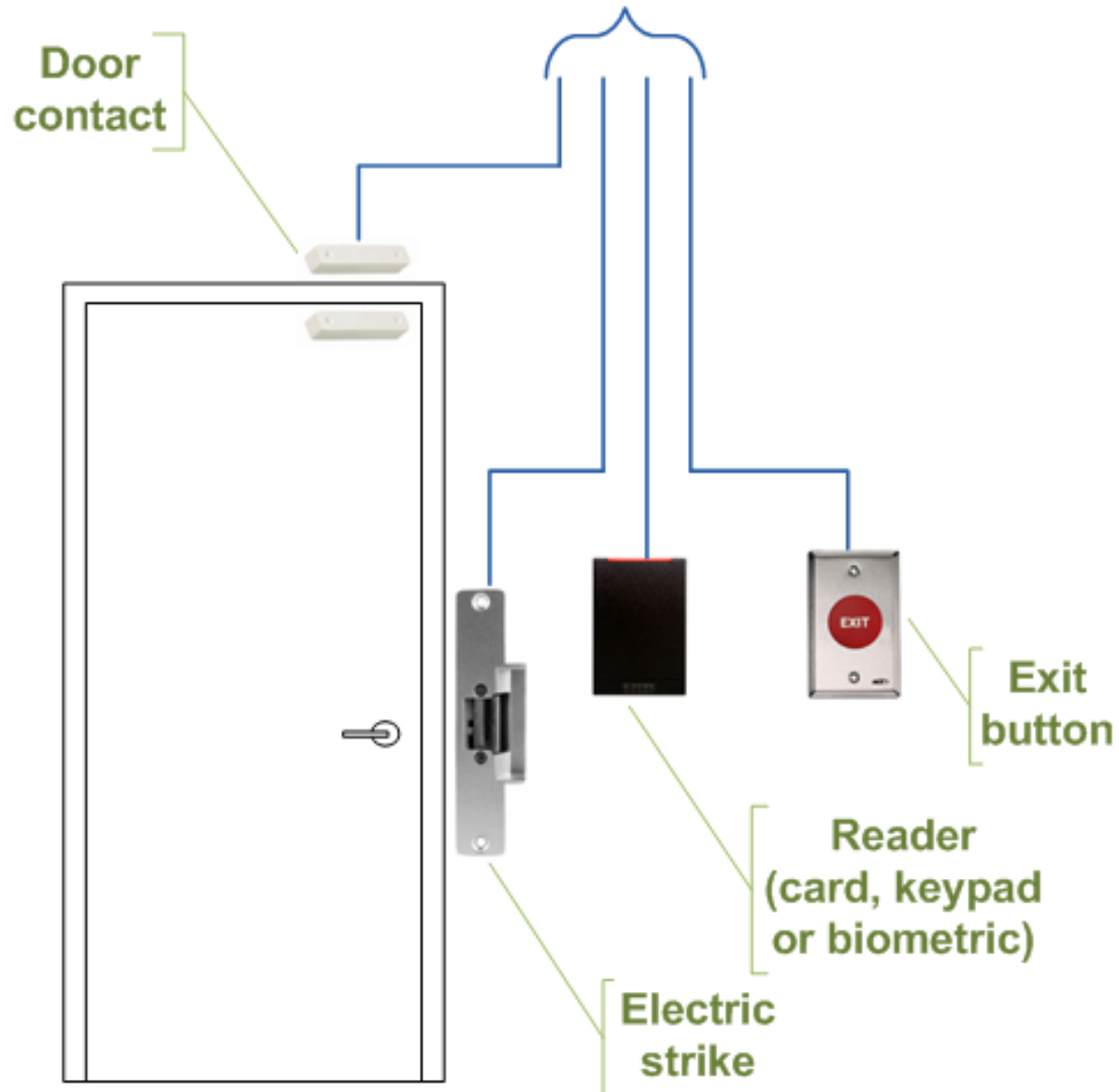
Double Door Configuration

Door Configuration
- 2 x Magnetic Lock
- 2 x Door Contact (Recessed Mount Type)
- 2 x Reader-IN and OUT
- 1 x Kill Switch
- 1 x Emergency Exit Button (Break-Glass)
- 1 x Module Interface (Reader Module)
- 1 x Controller
- 1 x Power Supply Unit with Back-up Battery

to Network Switch

Module Interface

Power Supply Unit

Controller

Door Contact

Magnetic Lock

Key Switch

Reader OUT

Reader IN

Emergency Exit Button

Inside Door

Outside Door

To Module and Controller

Door contact

**Other Common
Access Control Hardware**

Single Door Configuration

- Electric Strike Lock
- Door Contact (Surface Mount Type)
- Reader-IN
- Push Button Out

Exit
button

Reader
(card, keypad
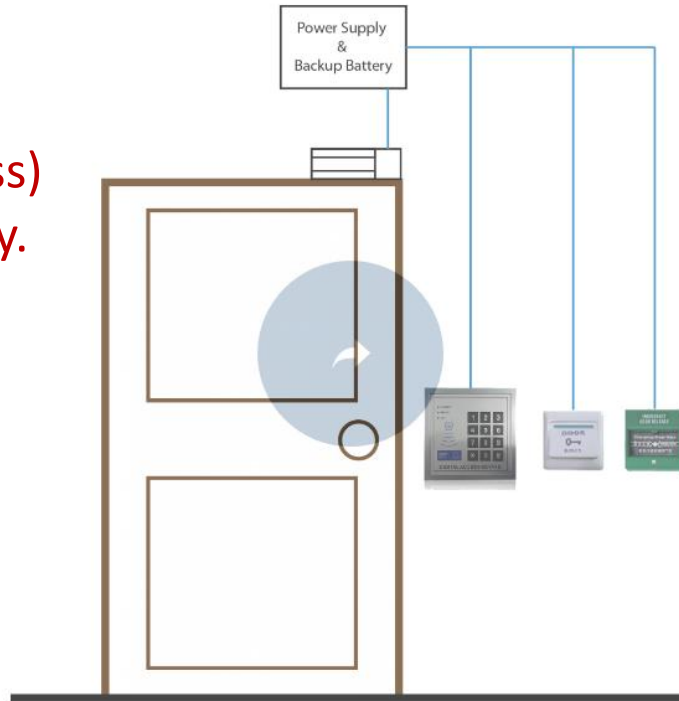or biometric)

Electric
strike

Standalone Access Control

Door Configuration:

- Single Door
- Reader/Biometrics Reader Controller
- Electromagnetic lock
- Door button
- Emergency exit button (break-glass)
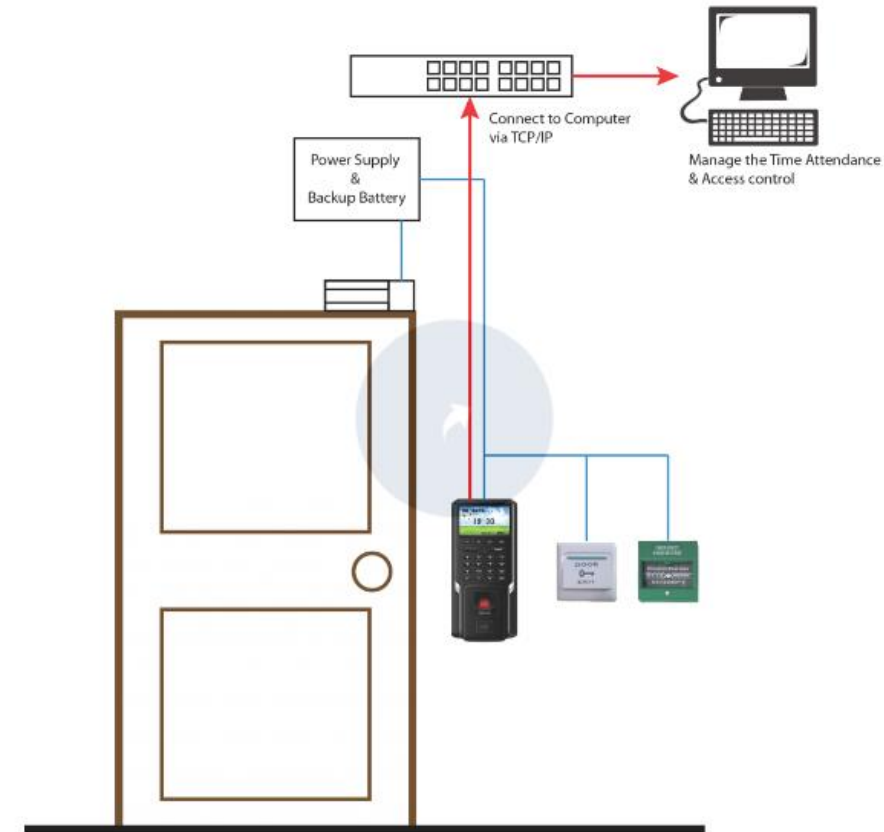- Power supply with back-up battery.

1

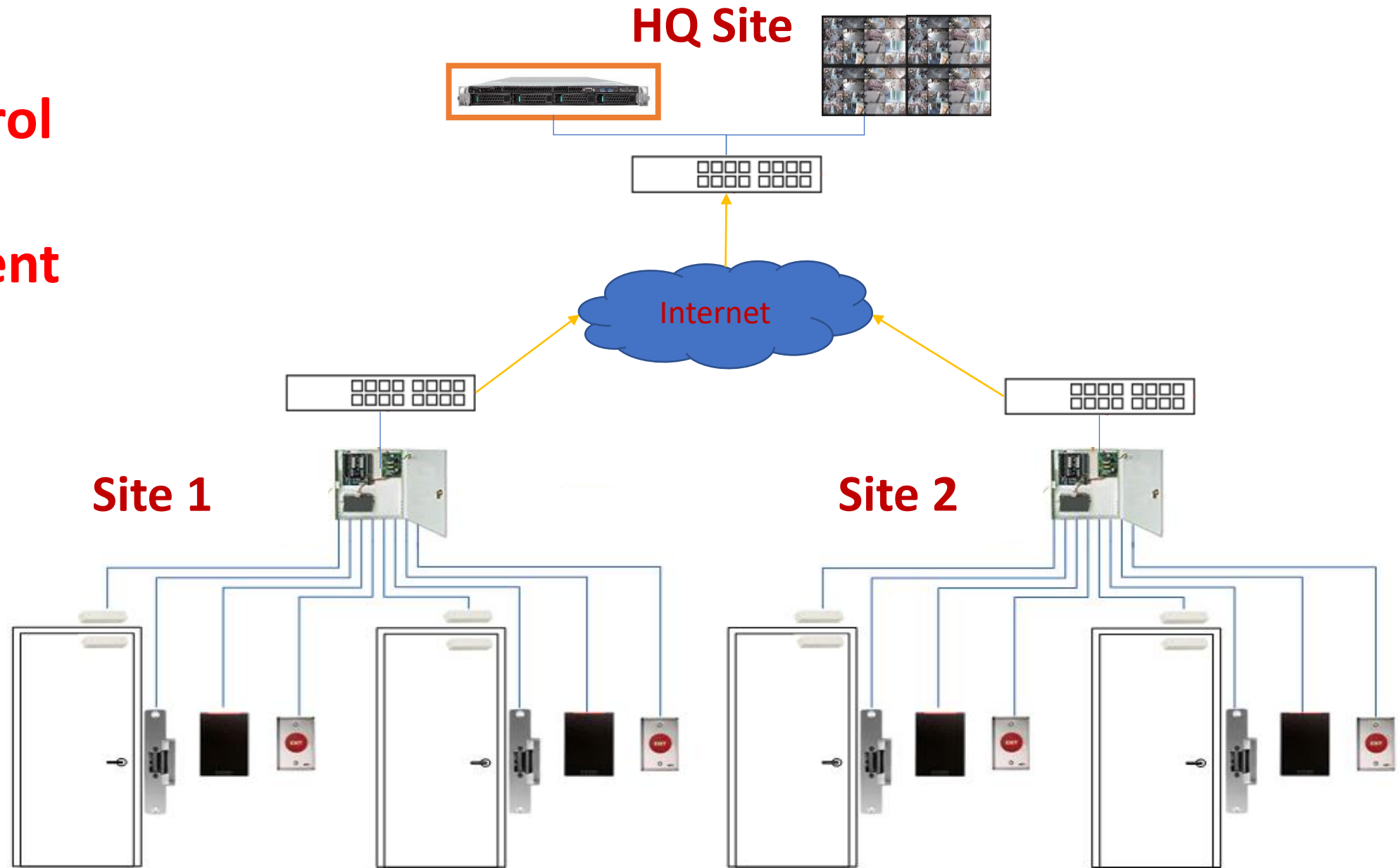Standalone Door Access Control System via Reader Controller Device

2

Standalone Door Access Control System via Biometrics Controller Device

Centralized Access Control

HQ Dependent

HQ Site

Internet

Site 1

Site 2

Federated Access Control

Site Independent

HQ Site

Internet

Site 1

Site 2