# Installation Guide

## Access Server/PC Minimum Requirements:

Processor: Intel i5, equivalent or higher
RAM: 8GB or higher
Hard Disk Space: 500GB free space or more
Operating System: Windows Server 2008 or higher, Windows 7, 10 or 11 (MAC OS NOT SUPPORTED)

## Access Control Kit Parts Included:

- Access Control PCB
- Backup Battery Cable (Battery not included)
- Pair of 485 Cable for Controller
- Wiegand Readers (WAR-EHO-MPX)
- Proximity Card (WAC-SIT-ISO)
- Cabinet lock keys (2 set)

## Cable Requirements: (Not Included)

Wiegand Reader – 22 AWG 7; 3 individual twisted pairs or equivalent
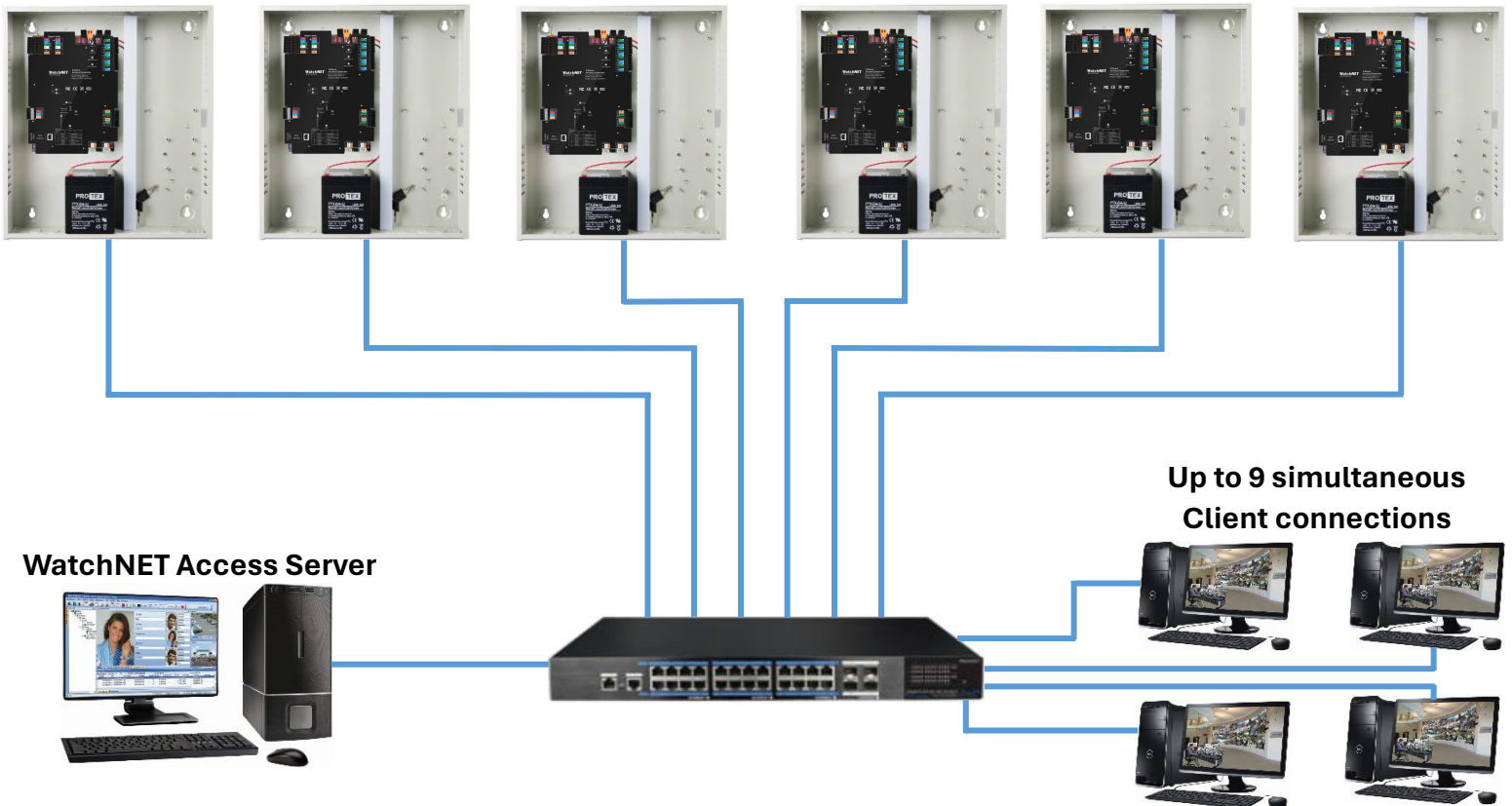OSD Reader – 4 Conductor twisted pair over-all shield or equivalent
Lock Power – 18 AWG 2 Conductor shielded
Door Contact/Sensor – 22 AWG 2 Conductor
REX (Request to Exit) – 22 AW 4 Conductor
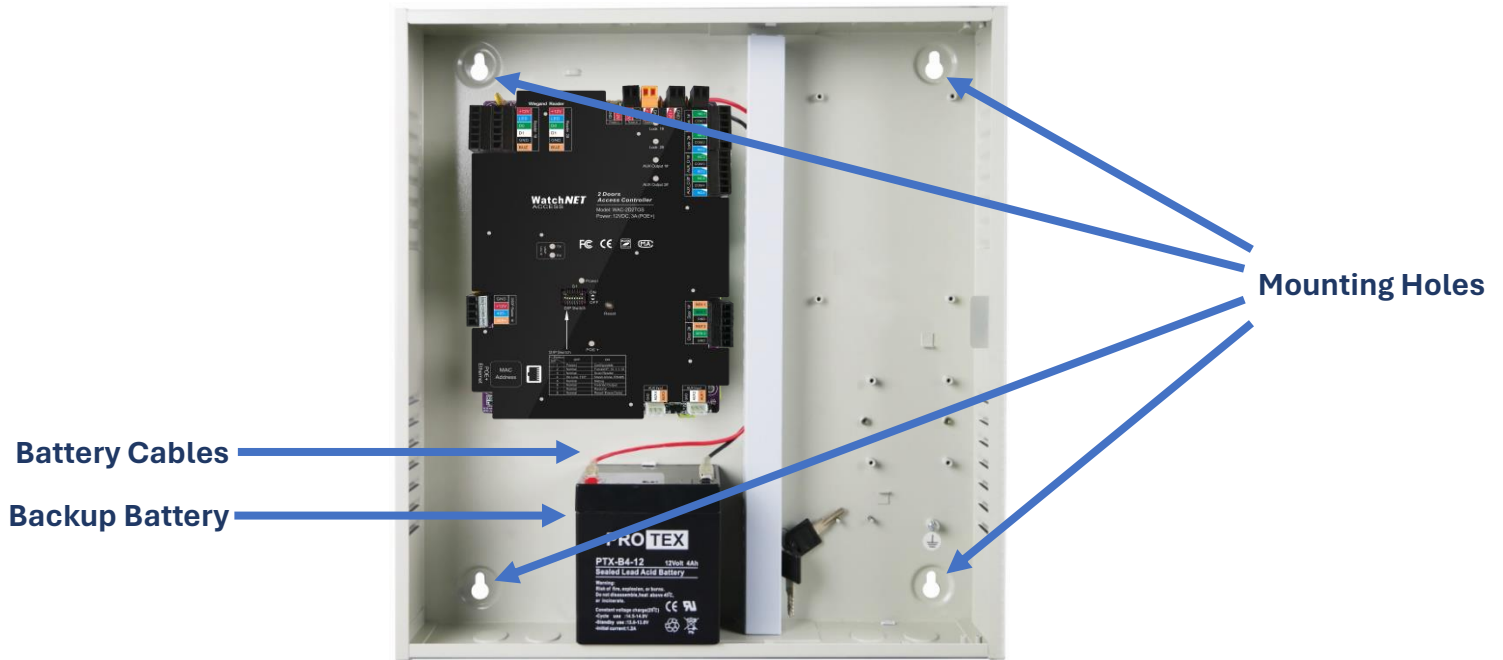
## Overview

**Up to 200 Controller connections**



**WatchNET Access Server**

**Up to 9 simultaneous Client connections**
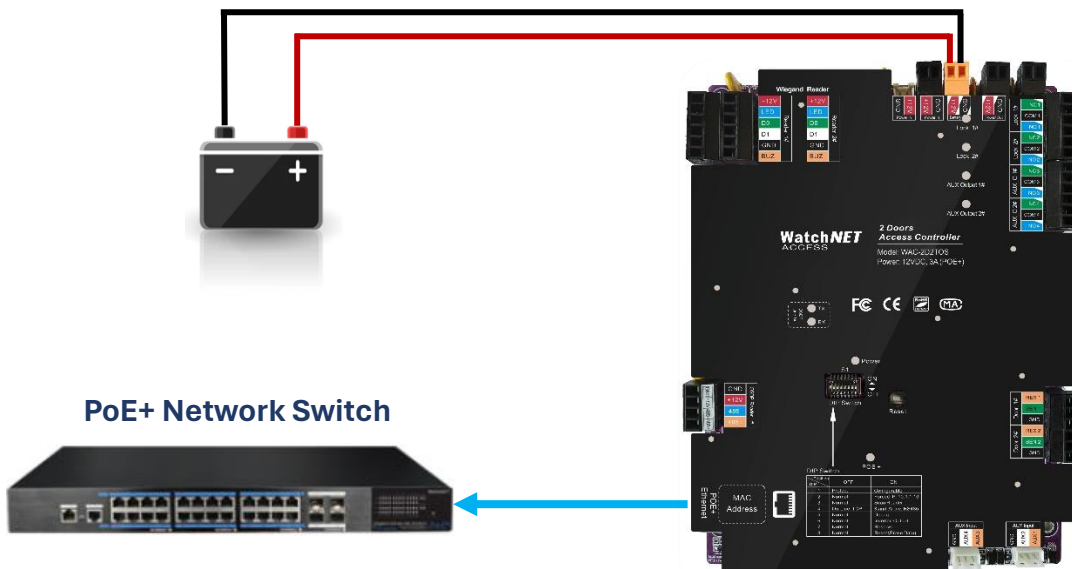
# 1. Mounting the Cabinet:
- o Make sure to mount the cabinet on a secure area.
- o Mount the cabinet with the proper screws.

*Note: Installer must provide their own screws depending on the site's requirements.*
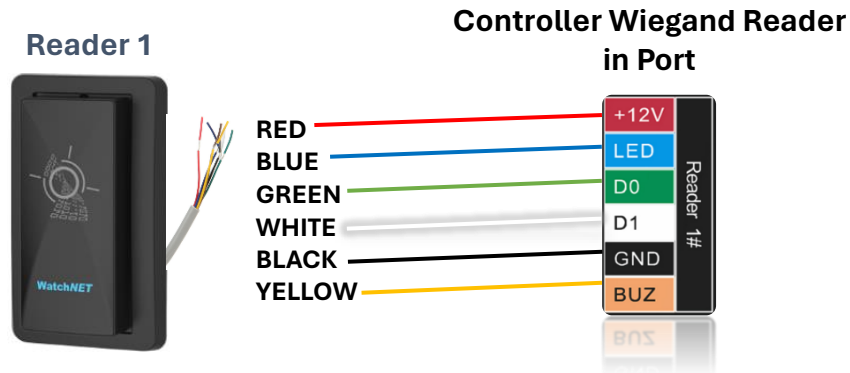
**Mounting Holes**

**Battery Cables**

**Backup Battery**

# 2. Connecting the Controller:
- o Connect the Controller to a POE+ network switch for power and network connection.
- o Connect the Backup Battery to the battery cables.
- o Once it's powered and connected you can use the WatchNET Access software to search and add the controller, refer to the software manual for more information.
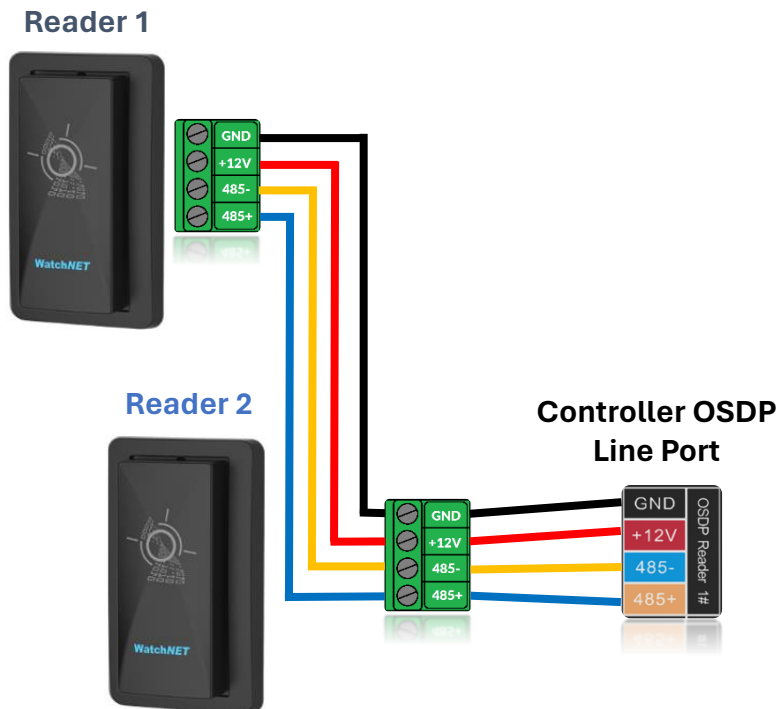
**PoE+ Network Switch**

## 3. Reader Connection:

- **Wiegand Reader Connection**

**Reader 1**

**Controller Wiegand Reader in Port**

RED — +12V
BLUE — LED
GREEN — D0
WHITE — D1
BLACK — GND
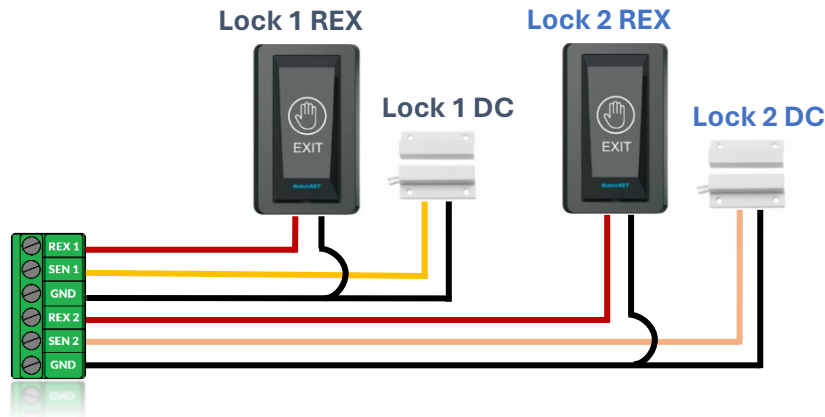YELLOW — BUZ

*Reader 1#*

- **OSDP Reader Connection**
  - You can daisy chain up to 2 readers and connect it to the controller for longer distance up to 1200m
  - Each reader must be connected to corresponding OSDP Line port, see table on the access cabinet door.
  - For longer distance, separate power must be used, see readers specs for more information.

**Reader 1**

GND
+12V
485-
485+

**Reader 2**

**Controller OSDP Line Port**

GND
+12V
485-
485+

GND
+12V
485-
485+

*OSDP Reader 1#*

## 4. Input Connections:

- Inputs are used to connect Door Sensor/Contacts, Request to Exit (REX) and Aux inputs.
- Door sensor can be configured as normally open or normally closed in the access control software.
- REX and Door Sensor share the GND wires.

**Lock 1 REX**      **Lock 2 REX**

**Lock 1 DC**      **Lock 2 DC**
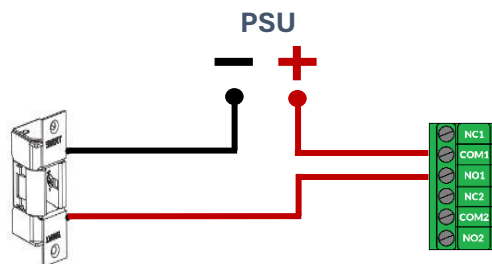
REX 1
SEN 1
GND
REX 2
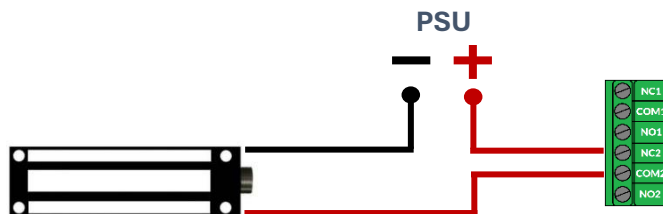SEN 2
GND

## 5. Lock/Relay Connections:

- WatchNET Controller supports Normally Open or Normally Closed relay to connect a Door strike or Magnetic lock.
- Most common installation uses Door strike with Normally Open relay connection
- If using Magnetic lock, make sure to check with local building codes for requirements and proper installations.

**Note:** *For* **4** *and* **8 Door Controllers***, it's always recommended to use a separate PSU (Power Supply unit) to power the locks.*

- **Door Strike with Normally Open Connection**

**PSU**
**–** **+**

NC1
COM1
NO1
NC2
COM2
NO2

- **Magnetic lock with Normally Closed Connection**

**PSU**
**–** **+**

NC1
COM1
NO1
NC2
COM2
NO2

## LED Status

| LED | STATUS | DESCRIPTION |
| --- | --- | --- |
| Power | Orange light blinking | Controller is ON and normally operating |
| PoE+ | Stable red light | Controller is powered using PoE+ |
| OSDP 1-4 TX/RX | Rapidly blinking | OSDP reader is communicating to the controller |
| OSDP 1-4 TX/RX | Rapidly blinking with flashing yellow & green | OSDP reader is sending data to the controller |
| Lock 1-8 | ON | Lock relay is open or triggered |
| AUX 1-4 | ON | Aux Output is open or triggered |
| TCP/IP Port | Yellow light flashing & green light stable | Communicating normally to the network |