# **Church Office**

ILLUMRA Case Study











Church buildings throughout the South American region are experiencing high electric bills due to inefficient controls of both HVAC and general lighting functions. It was found that the HVAC equipment continuously ran regardless of the space being occupied or not. However, Illumra was asked to do a test run on a church building in America before implementing controller solutions throughout South America.

## THE CHALLENGE:

- Mini-Split HVAC Unit & Lighting being left on days at a time.
- Same issue in Multiple Church offices
- Electricity Expensive Mandate to economically find a solution
- Older cinder block buildings difficult to run wires especially conduit.
- Manual On / Auto Off required for Mini-Split & Ceiling Light Fixture.

# THE SOLUTION:

- ILLUMRA 902MHz Wireless Controls: (2) 20A Relay / Receivers, (1) Ceiling mount Motion Sensor, (1) Single Rocker Switch
- Manual On / Auto Off Solution Achieved install Successful
- Mini split HVAC Unit and lighting only function when occupied. Systems automatically turns off as the room becomes vacant.

#### **PARTS USED**

Single Rocker Switch E9T-S1AWH

20A 4-Wire 100-277VAC Relay E9X-RUV-41BTP

Ceiling Occ Sensor E9T-OSC

#### THE RESULTS:

Air Conditioning units no longer runs when office is unoccupied which resulting in substantial energy. Longer life of installed equipment and automates the process of keeping the churches functioning efficiently.

## **BENEFITS TO CUSTOMER:**

- Installation was not intrusive to walls and ceiling No touch up necessary.
- Lower installed cost running conduit and copper wire not necessary
- Substantial Energy Savings Lights and Mini-Split run times reduced from 6 days a week to hours a week.