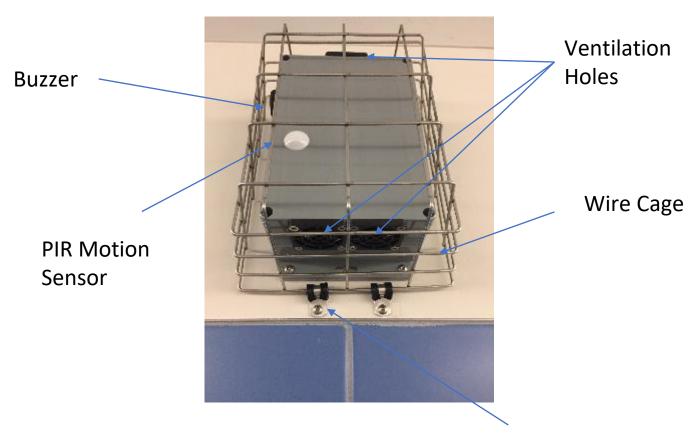
Zeptosense™

Helping the world sense to safety[™]

External Case Overview

Wall installation with wire cage

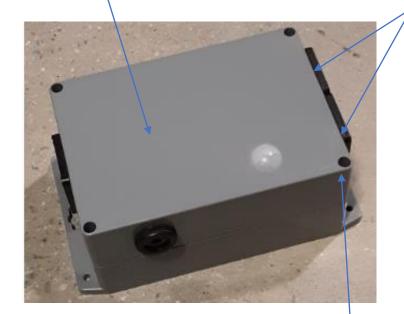


Tamper proof screws for install Clips act as a hinge so the cage can be released to access the unit

External Case Features

- We do not need a gasket
- to access the sensor components but do need access to the battery
- Provide a door and screws for the battery (cable to keep door attached to unit)
- We'd like a backplate design where the mounting holes can be hidden
- We'd like to reduce the touch time for the guards (12 min per case right now)
- We don't want the case any larger

We like the thickness of the plastic \



Ventilation holes need to remain open for air flow to sensors

The metal fan guard provides ~75% open area but prevents a student from poking the unit with a pen/pencil

We like the four screws to keep the lid securely closed

Internal Case Overview

LiPo system battery

Chemical Sensor

Particle Counter

Charging Battery

PIR Motion Sensor

Buzzer

Electronics
Stack (Lower board IoT Node/Upper board Sensor

adapter board)

Charging USB Cable

Communication

neter Board and antenna

Accelerometer

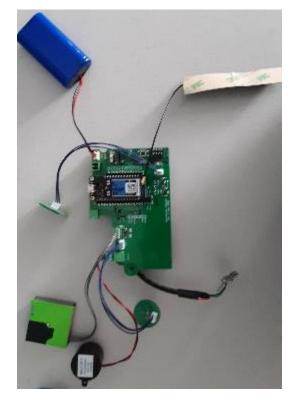
Zeptosense

Internal Case Feature

- Case mounting points for installing IoT Node board and the Sensor adapter board
- Case mounting points to install chemical sensor
- Plastic clip/metal bracket to mount particle counter
- Mounting points for accelerometer
- Move buzzer inside and provide case mounting points
- Sleeve/retaining ring for PIR to prevent the sensor from being pushed inside the case or pulled out
- Mounting points for the LiPo system battery
- We'd be interested at in looking at different case styles, shapes and sizes
 – especially if it will improve air flow.



IoT Node Board



IoT Node Board plus accelerometer, Sensor adapter board, Sensors, and Communication board

Damaged Cage



- A student pulled the wire cage out of the ceiling
- The student thought the PIR was a reset button and pushed it up inside the unit