



**Smart Education Solutions By
G4**



Smart Education Public area Solutions

School Energy Saving

School Lab Air Quality

BGM/ PA and Time Clock

Auditorium AV Systems

Signage Control, Lighting Dynamic Control and Scheduling

Climate Control

Active Lighting

Student School Entry / Exit Logging Tracking Solution

Student Bus Ride Logging Safety and Tracking Solution



We make it Easy to cut wastage and add safety



Smart Classroom Simple G4 Solutions

- Proactive Lighting
- Comfort and Temperature control
- Multimedia Control
- In class student logging
- Active shooting Lockdown safety



Student Campus Room

- Real Occupancy Sensors
- Energy Saving
- Comfort and Scheduling
- Water Wastage Saving



Central Monitoring Dashboarding

- Monitor all Locations
- Control based on schedules, events or manual
- Report and decision making adjustment





School / College Attendance and Tracking



► Smart G4 provides Bio-S Smart School Secure and Easy classroom attendance logging system . The device can be installed at every Lecture room door/ Auditorium entry to log in the students attendance for different lectures.



► For children schools, a tapered entry at main school entrance with Entry and Exit Bio-S device shall ensure the logging and tracking of each child which can also be tracked on internet dashboard securely by parents.

► The Bio-S will warn if any child is leaving unattended accordingly, and will also alert if any unauthorized person is trying to enter school grounds. This Device together with other smart G4 solutions can help secure and safeguard the beloved ones at minimal costs.



School Bus Safety and Tracking

It is very important for parents to track their child mobility and safety at any time and at all times with automated alerts.

The smart School BUS Bio-S can identify and log school children entering the bus and exiting the bus with exact time/date stamp.

Additional SMS can be sent to parents informing them that child is back home already.



School Bus Child Safety (Never leave anyone behind)

Many fatal accidents has been reported especially during very hot seasons where some children fall asleep and remain inside bus. while driver assumes that all the bus has emptied, he locks it leaving the child to die in agony of heat and thirst.

smart G4 has designed 2 solutions for this:

- The Bio-S that counts the In/Out and has display for Student safety.
- The S-BUS Child safety System as explained herewith in the illustrate video above



Active School Shooting Lockdown Safety

Smart G4 Cyber-night (SERAI) has developed a new simple yet most effective classroom lock down response unit to make sure that all children are safe inside classrooms during active shooting. deterring the attacker from wasting his time to invade and break school locked classroom.

While locking the door idea sounds simple, it is not the case in real life scenario. Most the panicking students as well as teachers would not have the courage to approach the door to lock it.

With our classroom responder, it is as simple as pulling a string that runs around all the classroom and can be pulled from any corner people are hiding at. (It is similar to the Pull string available in US buses like greyhound and other.

Kindly contact our Sales team for your needs





SMART SCHOOL CONCEPT IS A NEW SMART-G4 SOLUTION

Waste-less Classroom | Healthy Classroom
Simply Plug And Play Solution That Allow The
Following Logical Energy Saving And Functional
Control On Demand:



1- If Sun is Shining, then Save Lighting Energy.



2- If No One in Classroom after Class Hours then Save Energy (lights and AC off).



3- If temperature is below (Cold) = Warm up Classroom.



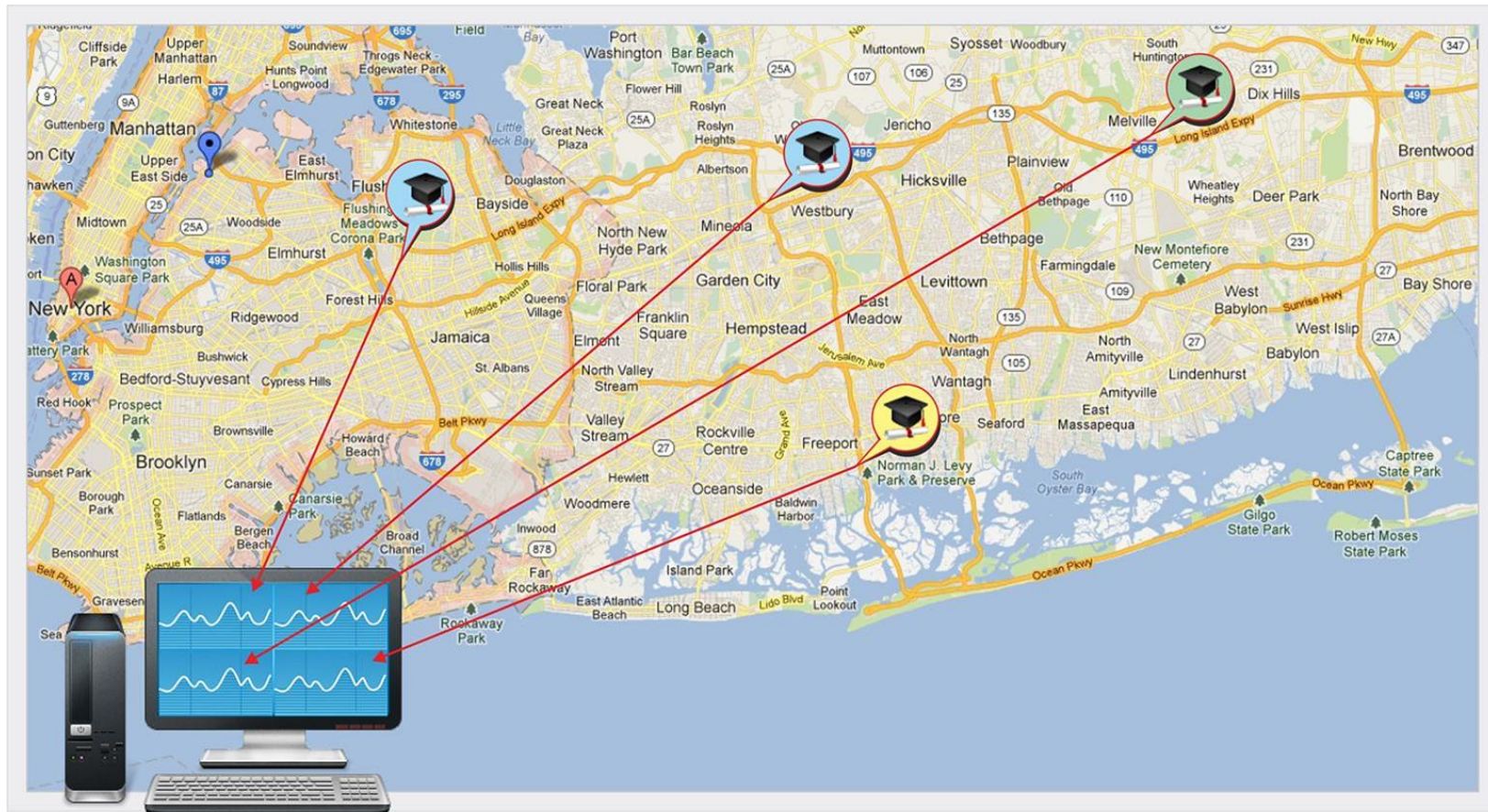
4- If Temperature is above (hot) = Cool Down Classroom.



5- If Occupied & Teacher command by Remote or iPhone, then Turn Lights & AC temperature as Needed.

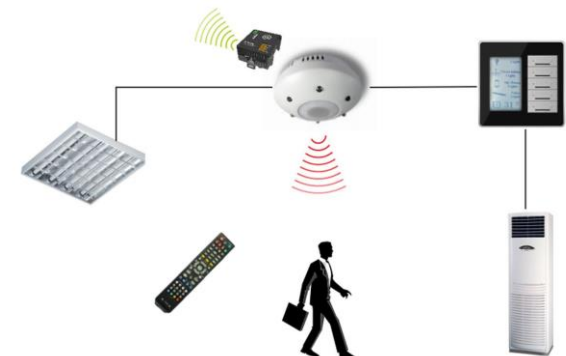
6- If Motion By Janitors or after School hours then Light up, then when no more activity = Save energy.

7- Optional Central Management and Remote Ministry Notional Consumption analysis and logging.



Smart-G4 Automation, Technology For Everyone.

The 8in1 Sensor with the Swave are the Best Friend and almost complete solution for Universities, Colleges and School classrooms



MY BOX Creative



SMART-KIDZ Creative Box

My Creative Box (MCB) is a Learning System designed to impart the vital elements of STEAM to our children. STEAM is an acronym for Science, Technology, Engineering, Arts & Mathematics. MCB accomplishes this goal by using a “Hand’s-On” system where the “User” (the at-home child or in-school student) actually builds the MCB computer system and programs the system to do various tasks related to the playing of the world famous “Minecraft” game (which comes as part of the computer system). These tasks include [a] building the physical computer from the MCB that arrives as a kit; [b] assembling electrical circuits to create controls to play the game; [c] exploring levels of the game to meet various challenges that use, logic, math, and physical & mental skills to build both parts and game components within Minecraft; and [d] learning programming skills to advance within the game and create physical electronic components to enhance the game



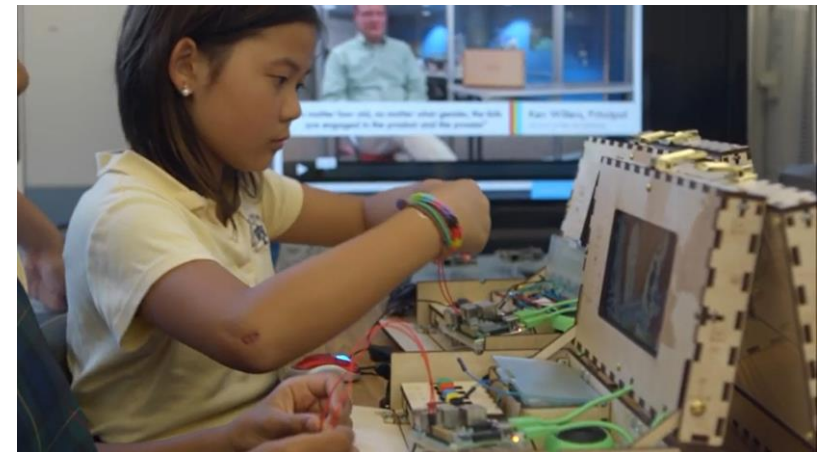
SMART-KIDZ Creative Box - At Home

Children who have a My Creative Box in their home will greatly benefit from the major exposure they will have to the innovative learning system. Parents can help guide their children's development, but children instinctively seem to absorb the knowledge flow of the MCB. They jump into the building of the MCB and then into the MineCraft Game that takes them into a world of electronic circuits and programming that makes the game move forward.



SMART-KIDZ Creative Box - At School

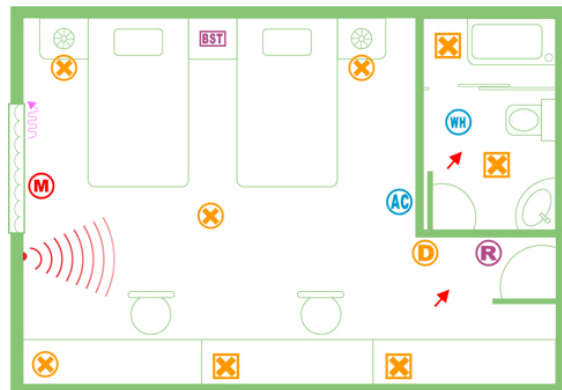
Every school can benefit from multiple My Creative Boxes in classroom. MCB's are a teaching innovation that imparts self-reliance, new skills and creativity. The MCB make learning new skills fun. The integral MineCraft game system not only grabs the attention of every age student, but makes the knowledge easy to absorb. Hearing allows for 25% retention, Seeing allows for 50% retention, but Doing allows for up to 90% retention of knowledge. MCB builds "Hands-On" skills and a knowledge base in Logic, Engineering, Electronics, Coding and Programming that will benefit the students throughout their lifetimes.



SMART UNIVERSITY VIP HOSTEL LUX-ROOM



Dynamic Display Panel (DDP)
Card Holder with Service
Bedside Controller
Magnetic Contact Door/Window
Access reader
Water Heater



HVAC
PIR Sensor
Cobra 180 Sensor
Motorized Curtain
ON/OFF Channel
Dimmer Channel

SMART UNIVERSITY VIP HOSTEL LUX-ROOM



How does it Work?

For Comfort / Service / Health

- A. If Bed Time + (Schedule) then AC start not same as End Temperature for Health (e.g.: 18C – Wake at 25C)
- B. Bedside / Remote
- C. Service Request (Class /Wait Laundry/DND) If DND = Flash Entrance Light No Bell
- D. Security for Room in case door left open
- E. If Motion = Light on in Corridor the Bathroom

For Energy Saving

- A. When door opens then Close system check any motion happen inside the room(Bathroom + Bedroom)
 - a. If motion = continue energy supply.
 - b. If no motion for 20 minutes then energy save.
 - c. If during energy save detect motion or door open = Power up
- B. If class time frame (schedule) then abide.
- C. Water heater (schedule)
- D. AC low/high set point
- E. Fan Maintenance Air Circulation (Summer/Vacation)
- F. If Door/Window forgotten

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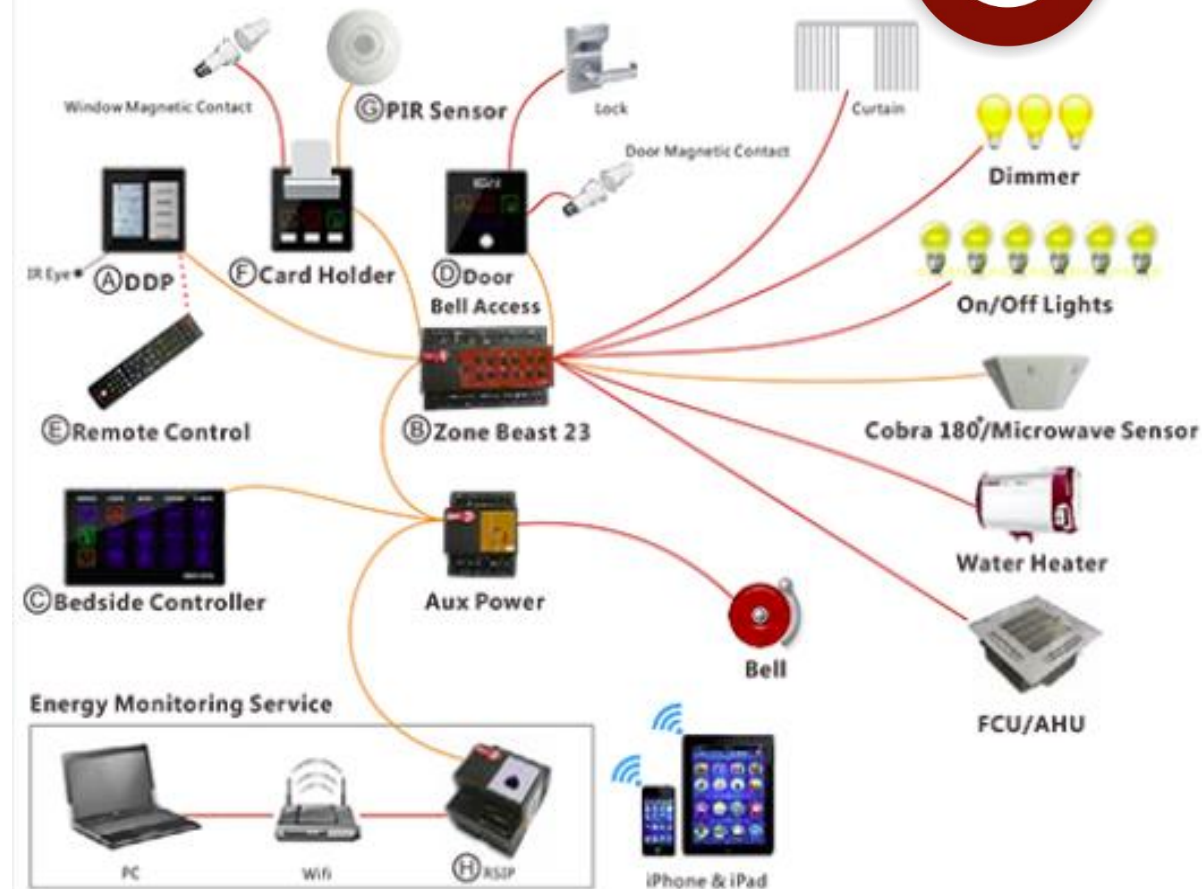
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SMART UNIVERSITY VIP HOSTEL LUX-ROOM



Product Name	Qty
Zone Beast (Buzzer, Bell Connection 3 Dimming, 8 on/off, HVAC,Water Heater	1
Door Bell with Card Access Read	1
Energy Card Holder with Service	1
Motion Sensor for Toilet	1
Cobra 180 + 3 PIR	1
Aux Power	1
DDP	1
Remote Control with 4 moods	1
Bedside Controller	1



CABLES

- LAN
- S-Bus
- Wireless



? DDP

- ✓ Security Code
- ✓ Lighting
- ✓ Scenes
- ✓ Dimming
- ✓ AC
- ✓ Music
- ✓ Curtain
- ✓ Temperature
Thermostat
- ✓ Media
- ✓ Other
- ✓ Boiler

? Bedside Controller

- ✓ DND (Do not Disturb)
- ✓ Clean Room
- ✓ Laundry
- ✓ Lighting
- ✓ Moods
- ✓ Curtain
- ✓ Climate

? Zone Beast

- ✓ 3ch Dimming
- ✓ Curtain Switch Over Relays
- ✓ 9ch Lighting & Relays
- ✓ 1 16 amp Heavy Boiler(Water
Heater)
- ✓ HVAC Controller(With 3 Fan
Speed)
- ✓ Temperature Sensor
- ✓ 0-10V Ballast
Controller(Dimmer)
- ✓ 3 Fan Speed Controller

? PIR Sensor

- ✓ Motion Sensor Detection
- ✓ Security

? RSIP

- ✓ Central Monitor
- ✓ Central WiFi
- ✓ iPhone / iPad Contr

? Remote Control

- ✓ Moods
- ✓ Lighting
- ✓ Dimming
- ✓ Music
- ✓ AC
- ✓ Other

? Card Holder

- ✓ DND (Do not Disturb)
- ✓ Clean Room
- ✓ Laundry
- ✓ Lighting

? Doorbell Access

- ✓ Door Bell
- ✓ DND (Do not Disturb)
- ✓ Clean Room
- ✓ Laundry
- ✓ Lighting

Smart Energy Saving Components for Student on-Campus Dormitory Rooms



Products



X1



X2



X2

Options

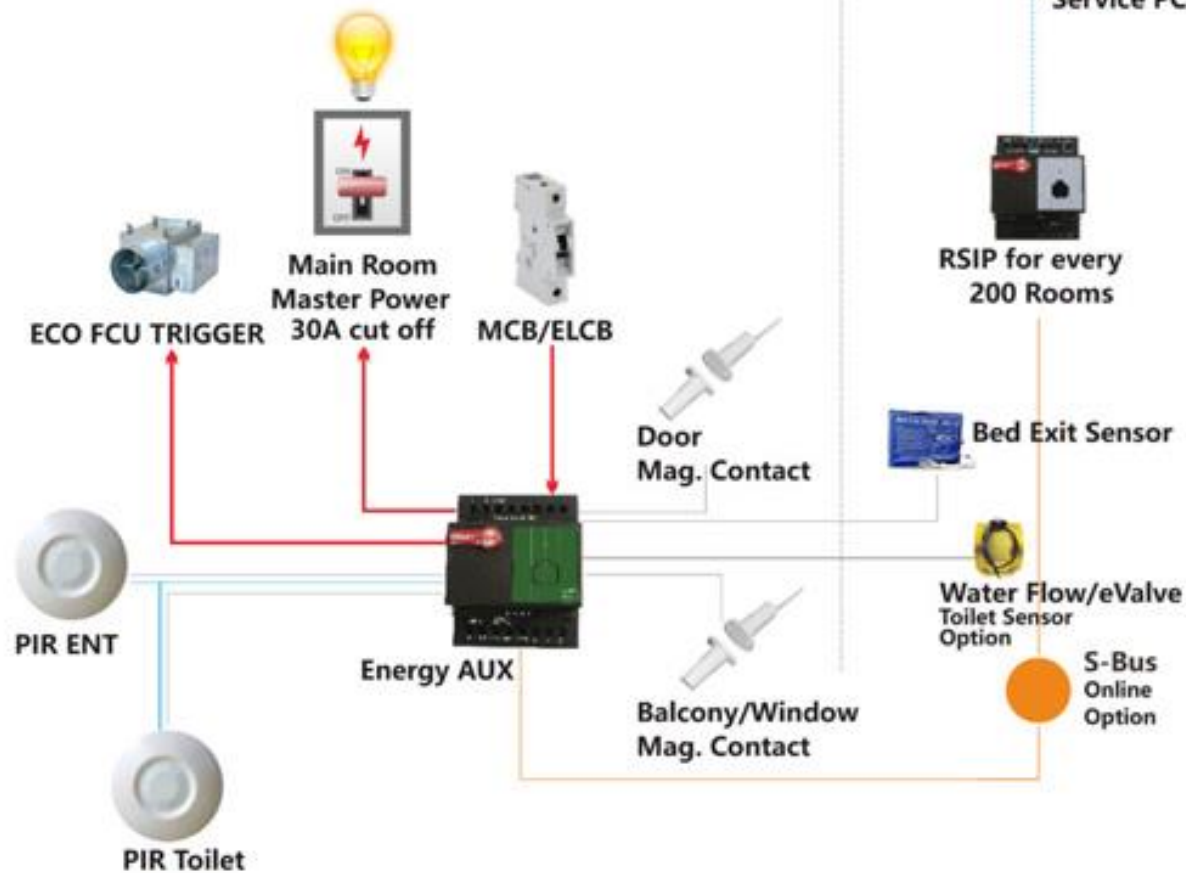


X2



X1

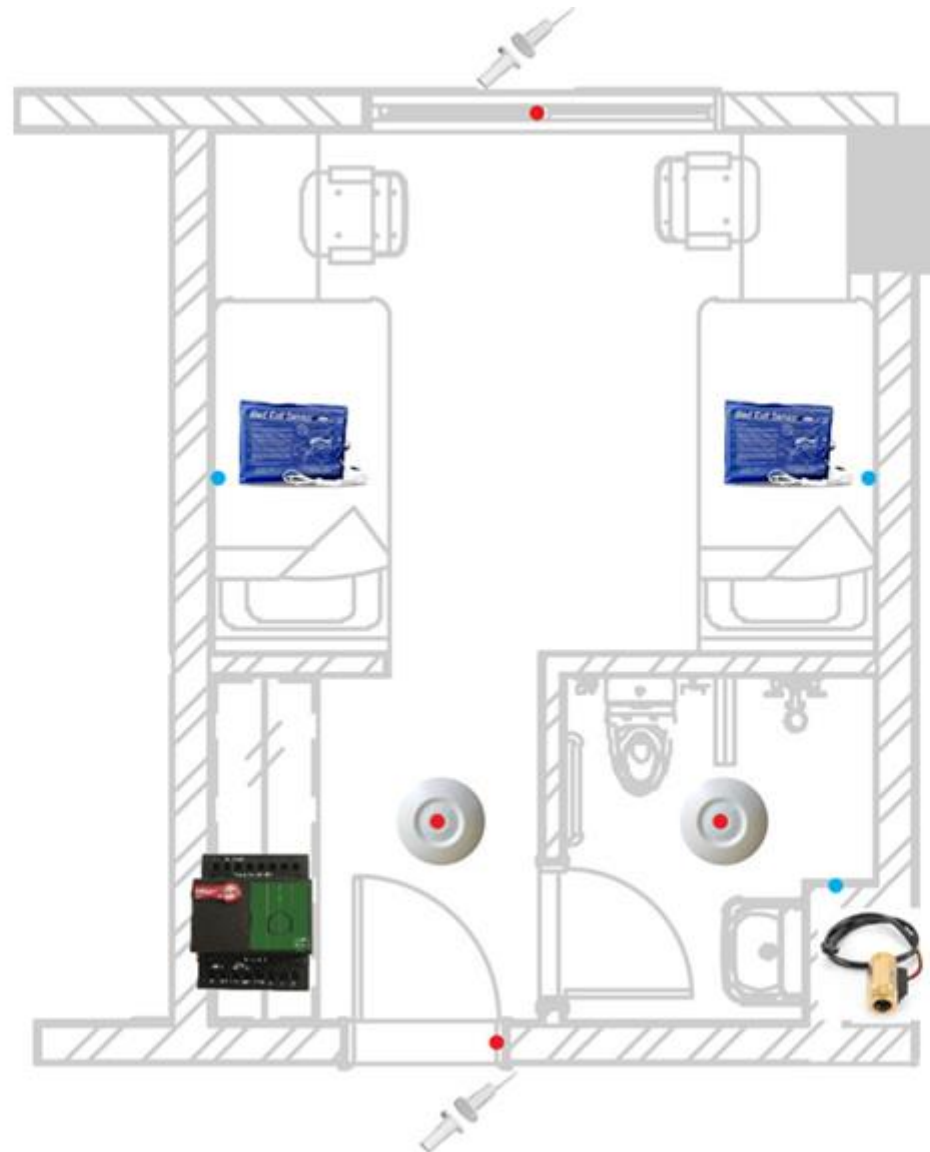
Diagram



Points Distribution



● Standard Sensors | ● Optional Sensors



PROPOSED ENERGY SAVING SYSTEM FOR HOUSING COMPLEX FOR STUDENTS & STAFF



FOR STAND ALONE / ONLINE ENERGY SAVING SYSTEM

- All Lights and power to be controlled
- FCU and PICV to be controlled or thermostat to be controlled
- Open windows signal to be taken for FCU control
- Movement to be used for controlling the switching of the lights/ power & FCU
- Water Flow option and Water Shut off Option
- Optional ability to add Occupancy Comfort Sensors (Exit Bed Type)

How does the Smart G4 Campus Room Energy Saving System Works?

Once Door has Opened and Closed, the smart Energy logic checks for any occupancy triggers like:

- * Motion In Room
- * Motion in Toilet
- * Water Usage in shower (Option)
- * Any Sleeping Person on Bed

PROPOSED ENERGY SAVING SYSTEM FOR HOUSING COMPLEX FOR STUDENTS & STAFF



The Smart System Keeps Checking for (XX time) until any occupancy trigger is registered in the device Analytics.

If No Occupancy is detected, the following action shall take place:

1. FCU Eco Trigger will be initiated (Note: Aircon must accept the preset function) (Otherwise FCU would be switched off)
2. Lights will be switched off
3. Allowed Power outlets shall be off except that dedicated to Fridge or PC outlet
4. Water Shall be shut off in Toilet area (Option)

If Device Analytics detects any occupancy while door is closed and after initiating the Energy saving Commands, automatically all utilities shall come back to life: Powering Back the Mains for Lights, Power outlets, FCU and enabling water

If Analytics detect Window status as open continuously for more than (Y) Time then AC shall be Automatically triggered off to save energy wastage

For online system (Option) can send Alert at central station once (YY) exceeded

This would help to decrease infiltration and protect in case of storm etc.



CUTTING EDGE

ELEGANT

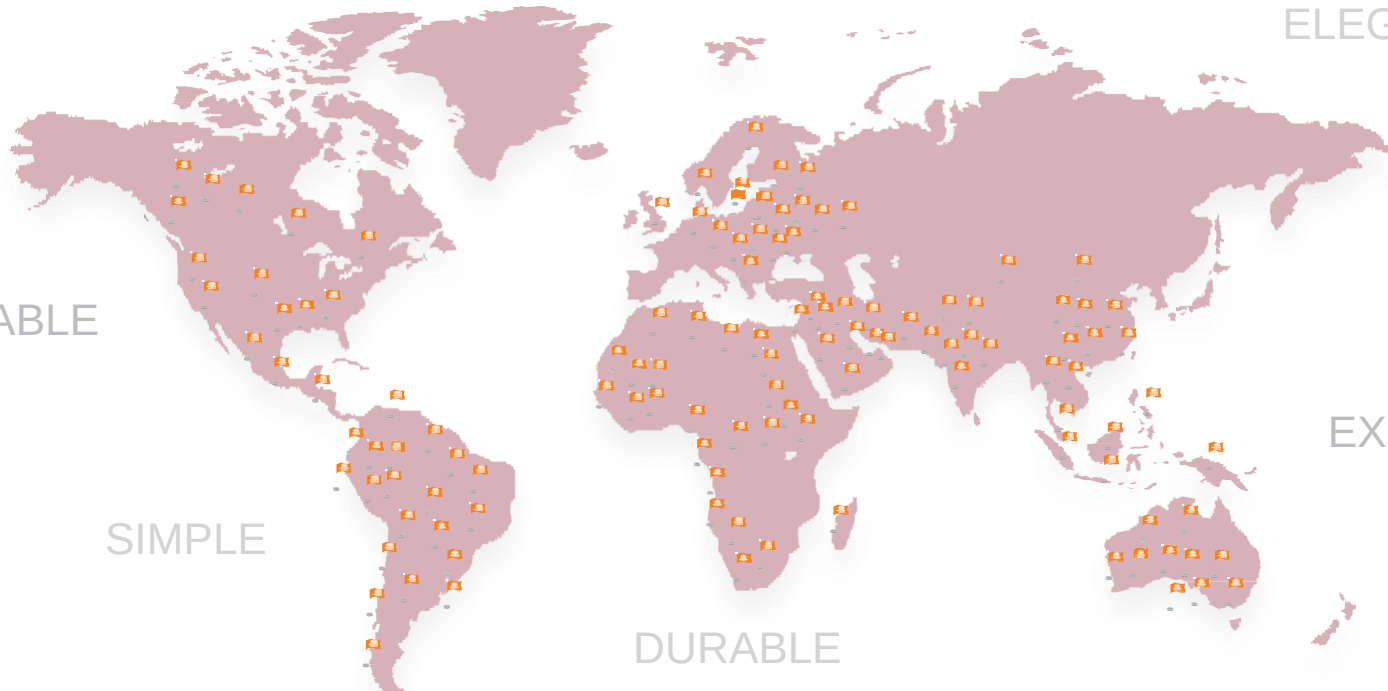
AFFORDABLE

EXPANDABLE

SIMPLE

DURABLE

SMART



www.smartg4.com



SMART Group Americas



Sweden

Nigeria

Canada

Hong Kong

Italy

Dubai