




now with **Siren Alarm** 



### Legal to use

SIRIM tested with MCMC approval certificate number



### 4G network

Reliable and flexible network with no communication limits



### Dedicated wireless frequency

433MHz, will not have interference from the common WiFi frequency of 2.4GHz



### Long transmission distance

Wide coverage with up to 1000m line of sight



### Future proof

Connects up to 64 wireless sensor modules, allows expansion to multiple departments



### Cloud server

For immediate access by PC, mobile phone or tablet



### Desktop & mobile app

For cloud data access & to receive alerts at PC & mobile phone



### SMS & email alert

Users will receive repeating SMS & email for alert events as long as it is in alarm



### Low cost of ownership

No cabling needed and sensor module battery can last for 2 years



### Siren Alarm

Audio & visual alert to reinforce protection for your equipment, site, and facilities

## Applications



Pharma Industry



Healthcare



Research Institute



F&B Manufacturer

### Online support

Traceable ticketing system for support & complaint via online portal: <http://helpdesk.fcbios.com.my>

# System Architecture



## Server Mode

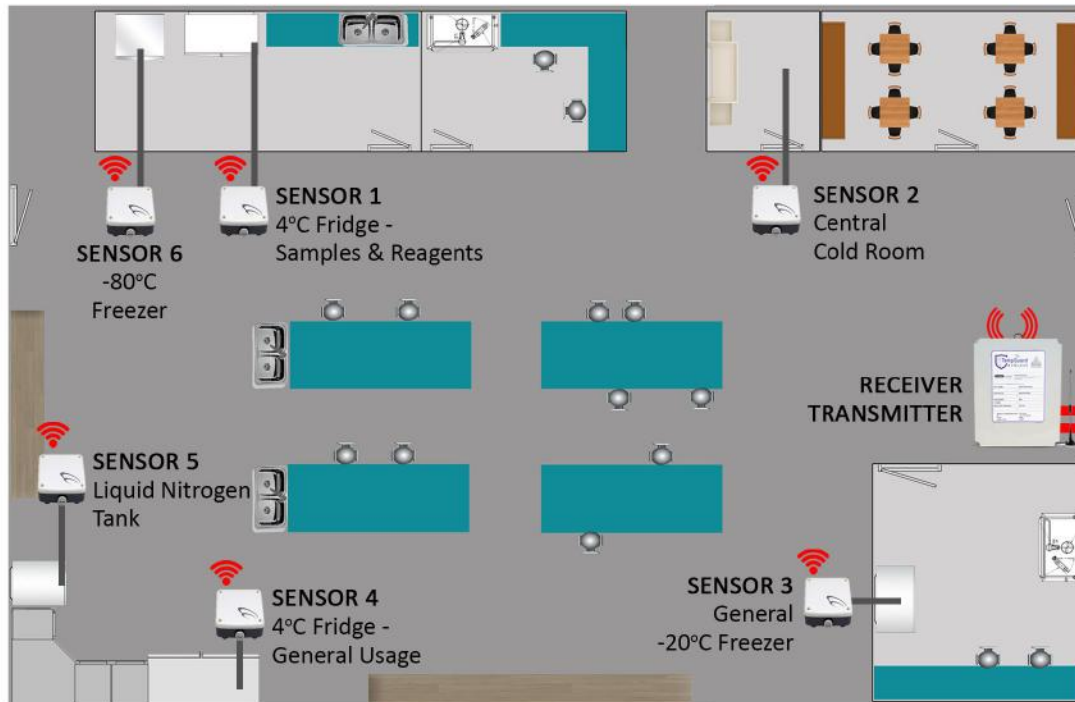
- Receives data from maximum 64 wireless sensors
- Uploads data to maximum 999 client users
- Each client user access to maximum 20 base stations data simultaneously
- G7 Server able to receive data from maximum 99999 base stations simultaneously

Alarm email & SMS from G7 Server

## Direct Mode

- Receives data from maximum 64 wireless sensors
- Uploads data to ONE single client user
- Single client user access to maximum 2 base stations data simultaneously

Alarm email from Client User PC



Wireless range up to 1000m line of sight

Maximum 64 wireless sensors

Receiver transmitter





**TempGuard Wireless Receiver Transmitter  
(Cat No: TGW-RT)**
**SPECIFICATION**

- Operates at legal and MCMC approved radio frequency of 433 MHz
- Legal use with SIRIM Approval Certificate No RBEB/02A/0516/S(16- 1433)
- High powered 500mW for up to 1000m wireless distance coverage
- Supports up to 64 wireless sensor modules
- Uploads data received to PC directly or to server via Internet or TCIP LAN
- Programmable upload interval 5 to 600 seconds
- External aerial up to 3m
- Power requirement : 5- 9 V DC
- Dimension: 38.5 x 30.5 x 17 cm


**TempGuard Wireless Client Software  
(Cat No: TGW-CLIENT)**
**SPECIFICATION**

- Win 7 and above OS
- Web based and able to operate in either direct or server mode
- Displays data in three modes: Live data and alarm, dashboard, site plan
- Report with minimum, maximum, and average temperature statistics by minute, hour, day, and month
- Data by minute, hour, day, and month downloadable in excel file format
- On-screen and PC siren alarm plus email alerts for: Temperature violations, data not received, low signal, low battery
- Multiple user simultaneous access via PC or laptop
- Free mobile app for multiple user simultaneous access via tablet or smart phone

**TempGuard Wireless Humidity and Temperature  
Sensor Module (Cat No: TGW-SENSE-C/RH-2)**
**SPECIFICATION**

- Digital embedded with unique serial number
- Measurement range: -55°C to +125°C
- Accuracy: +/- 0.5°C
- Submersible and water proof
- Operates at legal and MCMC approved radio frequency of 433 MHz
- Legal use with SIRIM approval certificate
- High powered 500mW for up to 1000m wireless distance coverage
- Programmable upload interval 5 to 600 seconds
- Gapless flat sensor cable for fridge door insertion
- Velcro mount for fast and easy removal and transfer
- Battery: 3.6V DC
- Battery life: over 12 months (10 min upload interval)
- Dimension: 8 x 8 x 2.8 cm


**TempGuard Wireless Temperature  
Sensor Module (Cat No: TGW-SENSE-C)**
**SPECIFICATION**

- Digital embedded with unique serial number
- Temperature range: -55°C to +125°C +/- 0.5°C
- Humidity range: 0 to 100% +/- 2%
- Operates at legal and MCMC approved radio frequency of 433 MHz
- Legal use with SIRIM approval certificate
- High powered 500mW for up to 1000m wireless distance coverage
- Programmable upload interval 5 to 600 seconds
- Velcro mount for fast and easy removal and transfer
- Battery: 3.6V DC
- Battery life: over 12 months (10min upload interval)
- Dimension: 8 x 8 x 2.8 cm


**TempGuard Wireless Other  
Sensor Module**
**SPECIFICATION**

- Parameters:
  - Power loss detection module
  - Gas detection module (O<sub>2</sub>, CO<sub>2</sub>, etc.)
  - Dry contact alarm relay module
  - Liquid level and pressure sensing module
  - Ultra low temperature sensor module (-200°C)
- Digital embedded with unique serial number
- Operates at legal and MCMC approved radio frequency of 433 MHz
- Legal use with SIRIM approval certificate